

Dragon Medical 360 | Network Edition

2.1

Administrator Feature Overview



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Nuance believes that data security is best maintained by limiting access to various types of information to authorized users only. Although no software product can completely guarantee against security failure, Dragon Medical 360 | Network Edition software contains configurable password features that, when used properly, provide a high degree of protection.

We strongly urge current owners of Nuance products that include optional system password features to verify that these features are enabled! You can call our support line if you need assistance in setting up passwords correctly or in verifying your existing security settings.

L-3692

L-3705

Published by Nuance Communications, Inc., Burlington, Massachusetts, USA Visit Nuance Communications, Inc. on the Web at <u>www.nuance.com</u>. Visit Nuance Healthcare on the Web at <u>www.nuance.com/healthcare</u>.

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Chapter 1: Introducing the Nuance Management Server

The Dragon Medical 360 | Network Edition with the *Nuance Management Server (NMS)* helps you meet your expanding medical organization's enterprise level needs. You use the *Nuance Management Console* to manage not only the *NMS Server*, but also multiple *Dragon Medical 360* | *Network Edition Clients* from a single central location. This chapter introduces you to the components of the Dragon Medical 360 | Network Edition network.

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What's new in Nuance Management Server

This section covers the newest release of the Nuance Management Server (NMS) and its web client, the Nuance Management Console. This release provides new features, updates, and enhancements for administrators that work with the NMS and the Nuance Management Console.

What's new in Nuance Management Server 4.1

All products

The following NMS 4.1 items are for all current products that use the Nuance Management Server and the Nuance Management Console, including DM360 Network Edition, DM360 Recorder, DM360 Mobile Recorder, Dragon Medical 360 | Direct, and 360 | SpeechAnywhere Services.

Feature	Description
Trend reporting	
View session usage for each client com- puter	You can track and view reports about session usage by client computer. When a Dragon sessions starts on a client computer, the NMS captures the computers name and starts capturing session information. In the Nuance Management Console, you can view information about the computer-specific session. For more details, see <u>Viewing client device usage infor- mation</u>
Managing auto-texts, commands, words, and	d command sets
Searching for auto-texts, commands, words, and command sets	NMS 4.1 makes it easier to find auto-texts, commands, words, and command sets. The Manage screens for each of these objects contains a tree like structure that organ- izes these objects by: -Organization -Sites -Groups -Users (if applicable) The tree structure in the Manage screens contains a 'Click here to search' item for searching for an object by name.
Information for auto-texts and commands	The Manage AutoText and Manage Commands screens display a new column called Spoken Phrase. This column contains the spoken phrase for the auto-text or command. If there is more than one phrase for the object, the column displays "{multiple}".
Organization data	

Feature	Description
Managing organization data	New enhancements help you find and manage items and data in an organization. For details, see <u>Finding and managing organization data</u> .
Sites	
Automatically generated site ID	When you create a site (Click Add in the Sites area in the Nuance Management Console ribbon), the Nuance Man- agement Console automatically creates a unique site ID and places it in the ID field in the General tab. The ID is equal to the highest site ID that exists in the organization plus one. You can edit the automatically generated site ID. For more details about creating a site, see <u>Configuring a</u> <u>site in your medical facility</u> .

DM360 Network Edition and vSync

The following items are for Dragon Medical 360 | Network Edition.

Feature	Description
Sites	
Working with Command Sets	You can create Command Sets that contain voice com- mands and lists. You apply Command Sets to a particular site or group. Command Sets can be managed, moved, or deleted just like auto-texts and custom words. For details, see the topics in <u>Working with Command Sets</u> .
Importing XML command sets	
Using square brackets to import XML com- mand sets	When you import an XML command set, square brackets [] are accepted and converted to angle brackets <>.
Messaging	
Managing a large number of messages	The Messages screen displays three button on the left side of the messages grid: Check All , Uncheck All , and Mark complete . You use these buttons to work with and manage a large number of NMS messages in the Nuance Management Console. For more details, see <u>Opening/viewing the list of mes</u> - <u>sages</u>
Usage metrics	
View usage metrics for DM360 Network Edi- tion in a grid or graph	You can view speech metrics for DM360 Network Edition in a grid or graph. For details, see <u>Viewing Speech Recognition Metrics for</u> <u>DM360 Network Edition</u> .
Support for edit controls	
Support for the Epic Hyperspace 2014 web edit control	Dragon Medical 360 Network Edition, version 2.1, pro- vides support for the Epic Hyperspace 2014 web edit con- trol. In the Nuance Management Console, you can set an option to enable Full Text Control with an Epic Hyperspace 2014 HTML edit control. When the option is enabled, a Dragon end-user can dictate into the edit control with Full Text Control functionality. For details, see Enable Full Text Control with a Hyperspace 2014 HTML edit control.
Local Support for the EpicTer81Class edit control	Dragon Medical 360 Network Edition, version 2.1, pro- vides local support for the EpicTer81Class edit control from Epic. You can use this edit control with FUII Text Con- trol functionality with a local application (running on the same computer as Dragon) For details, see Enable Full Text Control with a Hyperspace 2014 HTML edit control.
Plain text auto-texts	

Feature	Description
Support for plain text auto-texts	NMS 4.1 introduces support for plain text auto-texts. First, when you create an auto-text in the NMC, you can specify the format of the auto-text as plain text. In the New Auto-text screen, simply check the Plain Text option. The NMS stores the Auto-text in the format you specified (RTF or plain text). The same occurs when an end-user creates an auto-text in plain text format. Dragon retrieves the auto-text from the NMS in the initial format of the auto-text. For more details about creating an auto-text, see <u>Creating</u> <u>Text and Graphics/auto-texts</u> .
PowerMic II default settings	
PowerMic II default settings from the Nuance Management Server	The Dragon Client can obtain default group level PowerMic II settings from the Nuance Management Server (NMS). An administrator configures default PowerMic II button settings at the group level. When a new user is created, the user is given the default values from the NMS instead of the default settings from the Dragon Client. For details, see <u>Configuring default PowerMic II settings</u> for a group.
Language-specific settings	
Language-specific settings for DM360 Net- work Edition	You can set DM360 Network Edition settings for a specific language. Each language has it own complete set of DM360 Network Edition settings. You can only configure language-specific settings at the user and group level. For details, see Language-specific settings for DM360 Network .
Language accents	You can add 'Pakistani as a language accent for a user pro- file. For more details about user profile settings, see <u>View-</u> ing User Profile settings.
View language specific information for user profiles	The fields in the User Account Details > User Profile tab display language specific information for DM360 Net- work Edition US or DM360 Network Edition UK. For details, see <u>Viewing User Profile settings</u> .
User Profile types for Dragon clients	
Choose the profile version type for new users on a site	The "New User Accounts will use DMNE Version 1.0 speech profiles" option lets you set all new user accounts to use either: -version 10 profiles: for a site that has not yet upgraded to DM360 Network Edition, version 2.0 or higher -version 12 profiles: for a site that has upgraded to DM360 Network Edition, version 2.0 or higher For details, see <u>New User Accounts will use DMNE Version</u> <u>1.0 speech profiles</u> .
Auto-formatting options	
Updated Date format	In the Nuance Management Console, you can now select the Date format 'DD-Mon-YY'. For more details about avail-

Feature	Description
	able date formats in the Nuance Management Console, see <u>Date formats</u> .
Options removed from the Nuance Man- agement Console	The following options have been removed from the Nuance Management Console: -"Expect temperatures to be dictated in Celsius rather than Fahrenheit" -"Format common English abbreviations" -Remove hyphen from words starting with "re-", such as "re-create" -Remove hyphen from words ending with "-up", such as "close-up" -Treat "paragraph" as a paragraph break, not as the word Spell "disfluency" and related words with "dys"
NuanceLink messages	
Updates to NuanceLink messages	NuanceLink messages have been enhanced to include descriptive information for a wide range of messages. For more details, see <u>Security of NuanceLink Update Servers</u> .
Vertebra settings	
Updated Vertebra settings	NMS 4.1 provides updated Vertebra settings. The settings have also been moved from the Group and User Account Details pages and added to the Miscellaneous section. For details, see <u>Miscellaneous settings</u> .
Miscellaneous UI changes	
The DMNE Common tab has been removed from the Group and User settings	The Profile Optimizer Scheduler Settings button is now under the Network Edition US (Network Edition UK) tab. The Upload dictation data to Nuance for research purposes checkbox is now under the Network Edition
Auto-toxt spokon forms	US (Network Edition UK) tab.
Auto-text spoken forms	
Special characters in spoken forms of Auto- text	Auto-text spoken forms can contain numbers and special characters, except for EMEA using the Speech Magic engine with 360 SpeechAnywhere Services.

Dragon Medical 360 | Network Edition Overview

Nuance Management Console Help for Dragon Medical 360 | Network Edition and the *Nuance Management Server (NMS Server)* help you meet your expanding medical organization's enterprise level needs. You use the *NMS Server* to manage multiple *Dragon Medical Clients* from a single central server.

Network setup is now straightforward and efficient when you use the *NMS Server* to apply consistent settings to many workstations running *Dragon Medical Client* throughout the medical facility, changing multiple settings on the *NMS Server* with the click of a mouse on its *Nuance Management Console*.

For the first time, you can take cross-network action on Dragon clients from a central NMS Server:

- Create multiple sites where *Dragon Medical Clients* are installed and assign the same backup location, master user profile storage location, and amount of archive storage/playback space to all users on one site in a single stroke.
- Grant, revoke, and manage all dictating healthcare provider (**Physician Author** and **Non-Physician Author**) and administrator (**NMS Administrator**) licenses, including viewing the number/type of licenses used/still available.
- Create groups of users and then assign entire groups to one or more sites, all at one time.
- Search through groups of users for those associated with a particular site.
- View/access Dragon logs on every Dragon Medical Client workstation.
- Initiate, schedule, and monitor acoustic/language model adaptation processes—monitoring each process for active versus idle state, start time, completion time, duration, and priority.
- Audit session events across the entire network (who logged on when and other related events) for a particular slice of time or particular user.
- Display a complete list of all downloaded updates and approve or not approve installation of them—all from a single window.
- Create user accounts for healthcare providers, then use simple software tools provided to quickly upgrade old user profiles, then associate upgraded profiles with new user accounts.
- Receive messages for command updates, medication updates, software updates, notifications, and license expiration notifications in a single location.
- Approve command and medication updates for download.
- Choose to encrypt all patient data for all dictating users in your organization.
- Choose to upload speech data to Nuance's Research department for particular users or all users in your organization.

These features help you to readily manage a network of Dragon Medical Clients.

Dragon Medical 360 | Network Edition components

Dragon Medical 360 | Network Edition is made up of software modules that include clients, servers, databases, user profile directories, and web services that integrate with one another. The modules are in these groups:

- Nuance Management Server components
- Profile Optimizer components
- Dragon Medical Clients
- Master user profiles directory (on any server of the network or on its own machine)
- Nuance hosted servers

Nuance Management Server components

The Nuance Management Server (NMS Server) components are:

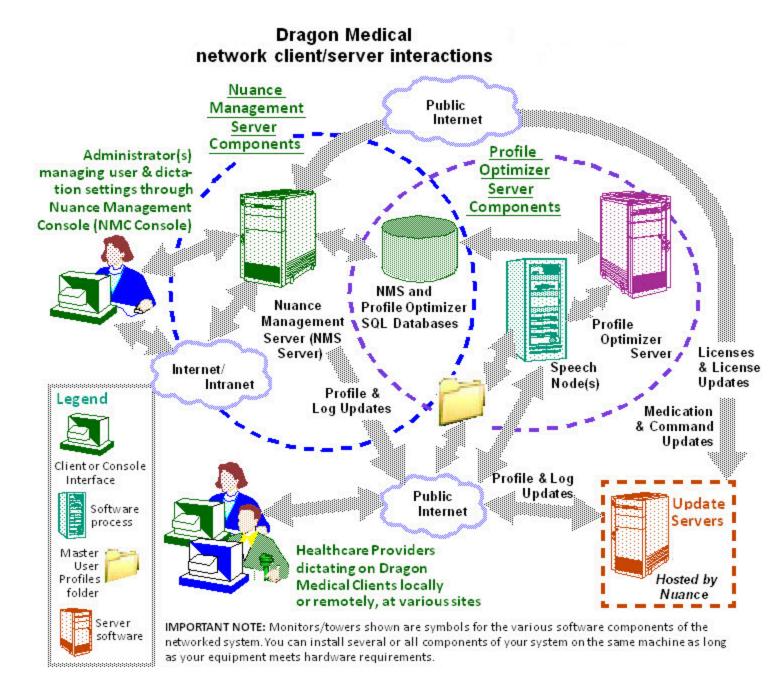
• Nuance Management Server (NMS Server) — Main Web service that drives DM360 Network Edition and helps it interact with external clients and servers by carrying out several vital tasks involving allowing user access, determining settings on servers and clients, and storing information about user preferences and transcription formatting. In addition, the *NMS Server* works with the *Profile Optimizer Server* to ensure utilization of information about a particular speaker's voice and language models. Nuance also interacts with your organization through this server, using your unique organization ID to identify your server and downloading licenses you have purchased to it.

The *NMS Server* also stores user identification and related administrative information centrally, keeping user profiles available at any site the user travels ("roams") to within the hospital and its affiliate facilities, whether the machines are located in different offices of the same site or at other sites in distant cities.

- Nuance Management Console An interface to not only the *Nuance Management Server* for managing set up of all *Dragon Medical Clients* on the network, but to many functions of the *Profile Optimizer Server* as well.
- **NMS SQL Database** Houses the SQL database that stores *Nuance Management Server* information about your organization, licenses, sites, users, groups, tasks in process, and messages/downloaded package approvals.

You install the *NMS Server* and the *Nuance Management Console* on the same machine; however, you have the option of installing the database on the same or a separate physical server on your network.

The following conceptual illustration shows the components in the Dragon Medical 360 | Network Edition .



Profile Optimizer components Dragon Medical Clients

Profile Optimizer components of the Nuance Management Console Help for Dragon Medical 360 | Network Edition (DM360 Network Edition) network include:

Profile Optimizer Server — Server that manages the iterative learning and integration of each user's unique speaking/pronunciation patterns by scheduling two processes, Acoustic Model Optimization (often referred to as simply *Acoustic Optimization* or ACO) and Language Model Optimization (LMO). The ACO process integrates information about how the individual dictating speaks and pronounces words while the LMO process integrates information about

words and phrases most likely to occur in the context of the particular user's speech/composition (writing) style and combines that information with known data about speakers of that user's language with the user's accent, if an accent is applicable.

- **Profile Optimizer Speech Nodes** Modules that carry out the Acoustic Optimization (ACO) and Language Model Optimization (LMO) for each dictating healthcare provider.
- **Profile Optimizer Database** Database that stores the schedules for the Acoustic Optimization (ACO) and Language Model Optimization (LMO) tasks. You usually place this database on the same machine where you created the *NMS SQL Database*.

Dragon Medical Client — Receives and interprets healthcare provider dictation, producing text corresponding to each physician's speech. The *Dragon Medical Client* sends the text into a target application, such as an electronic health record (EHR) system, and also preserves text and audio in the speech profiles so that the optimizer can process it.

Master user profiles directory

Master User Profile Directory — Central storage area for master user profiles for dictating providers. A single central storage location applies to a particular site in DM360 Network Edition. A master user profile contains the accumulated speech information for a particular healthcare provider from all the *Dragon Medical* client workstations where that person has dictated, enveloping the language the user speaks, the accent (if applicable) used, vocabulary or vocabularies, and microphone and/or dictation recording device. As the user dictates, over time, the *Profile Optimizer Server* and its *Speech Nodes* learn the particular user's speech patterns and integrate them into that individual user profile. These user profiles are called *roaming user profiles* in other editions of *Dragon Medical*, because their existence at a central location allows speakers to "roam" from location to location and work with the same profile. (These profiles are unrelated to Microsoft Windows user profiles.)

Nuance hosted servers

Nuance hosts servers and services at its headquarters that your DM360 Network Edition network interacts with:

• Update Server — Hosted by Nuance on the Internet. Automatically downloads various updates to the *NMS Server* over the Internet.

Behind the scenes web services on the *NMS Server* help it interact with all of these clients and servers as well as carry out its own processes to manage the entire DM360 Network Edition network.

Who works on the network

Two types of people work on the network:

- System Administrators Manage the entire system through the Nuance Management Console.
- Healthcare Providers Dictate using Dragon Medical Clients.

Planning your configuration

After you successfully install the Nuance Management Server (NMS Server) and the Nuance Management Console (see the DM360 Network Edition Deployment and Installation Guide), you can begin to enter information about your organization. The procedure below walks you through the tasks you take and the refers you to other sections for more detailed information on each step.

Before you begin to enter specifics into the *Nuance Management Console*, you need to gather required information delineated below. Having these lists available in advance saves time and provides a framework you can use to develop the configuration that works best for your facility.

- Names of all people who will administer the system
- Names of all healthcare providers who will dictate using the Dragon Medical Client
- Groupings of providers based on the Dragon Medical settings and options they will use
- Names of all locations within your organization where the system is deployed; a site in Dragon Medical 360 | Network Edition is one or more locations all storing provider master user profiles in the same directory folder
- Names/IP addresses of all the computers that will run the Dragon Medical Client
- Names of computers and full UNC paths to all locations where you expect to store the master user profiles for providers (formerly called *master roaming user profiles*)
- Names of computers and full paths to backup locations

Recommendations

Nuance recommends that you plan the naming of the components of your organization and the structure of your groups before you begin to configure *Dragon Medical* for your facility.

- Site names should reflect the set of master user profiles for providers associated with the site.
 For example, if you divide your user profiles by location, or by medical specialty, you should use that location or specialty in the name of the site, as it is more helpful than using Site 1, Site 2, and so on.
- Group names should reflect the user accounts that are members of each group. For example, you could use **Cardiology**, **Pediatrics**, or **Emergency Medicine**. However, if you have more than one of these types of groups, you should distinguish the group name by, for example, adding the location; for example, **Pediatrics-Longwood**, **Pediatrics-Northwest**.

For your convenience we have included a Provider Groups Worksheet at the end of this section to help you analyze the needs of the groups in your organization. See *Provider Groups Worksheet* on page 15

Configuring your organization

As part of the initial configuration, Nuance provides the following default components:

- Organization
- Site
- NMC Administration Group
- DM360 Network Edition Group
- NMC Administrator User Account

You will rename these components to meet the needs of your organization.

Prerequisites:

- Encrypted license key: Nuance sends this key by e-mail to your designated contact person.
- **Default login credentials:** Use the following information to log in to the *Nuance Management Console*:

User Login: Admin

Password: password



To configure your organization

- Log in to the Nuance Management Console using the credentials above.
 See Accessing NMS Server: Logging in through the Nuance Management Console on page 19.
- Rename the default organization to the name of your facility.
 See Accessing and adding to your organization data on page 24
- 3. Rename the default site.

See Viewing, modifying, and deleting sites on page 100.

- Rename the default administrator group.
 See *Viewing, modifying, and deleting groups* on page 119
- 5. Rename or delete the default administrator user account.

See Viewing, modifying, and deleting a user account on page 192.

6. On the menu bar click Licensing, and then click the Import License Key icon.

The Import License Key window opens.

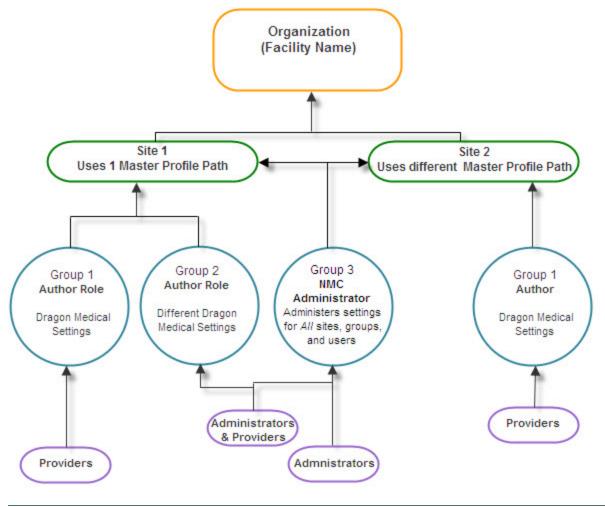
- 7. Copy and paste the encrypted license key from the e-mail into the License Key text box.
- 8. Click Show Information.
- 9. Click **Import**. The *NMS Server* decrypts the license key and generates the licenses on your system where they become available for use.

Steps to configuring other objects in your organization

When you have finished the steps above, you are ready to create and configure user accounts, groups, and, if necessary, sites required by your facility. The list below summarizes the configuration process and the references give you access to more detailed information on each step.

- 1. Configure system settings (see Changing global system settings on page 21).
- 2. Create and configure sites (see Configuring a site in your medical facility on page 80).
- 3. Create groups for individuals who will either administer the *NMS Server* or use *Dragon Medical* for dictation (see *Understanding groups* on page 105).
- 4. Create user accounts that assign each provider or server administrator in the *Dragon Medical* system a user name and password (see *Creating user accounts* on page 125).
- 5. Install *Dragon Medical* clients on local and remote workstations of your organization. For details, refer to the *DM360 Network Edition Installation Guide*.
- 6. Upgrade user profiles from previous versions of *Dragon Medical* (see *Upgrading a user profile to Version 10.5* on page 1).

Dragon Medical NMS Server Configuration



Notes:

- Nuance recommends that you place all master user profiles for a single site in the same subdirectory of the Master User Profiles directory.
- In most organizations, user accounts should only be added to more than one group if the same user will both dictate with *Dragon Medical* and administer the *NMS Server*.
- If a user account belongs to two groups, the settings for the group listed first under *Group Memberships* supersede the settings for the other groups the provider or administrator belongs to. Likewise, if a group belongs to more than one site, the settings for the site listed first for that group supersede the settings for other sites. For more information on relationships between settings for sites, groups, and user accounts, see *Understanding groups* on page 105.

Turne of	Action	Group usir or option:	ng same setti	ng
Type of setting or option	controlled by setting or option	Group 1	Group 2	Group 3
Vocabulary	Default vocabulary			
Administrative settings	Anchor dictation box			
	Mouse motion and speed			
Types of commands	Mouse motion and speed			
	Enable HTML support			
	Enable commands in HTML (web page) windows			
	Dictate "Click" to select hyperlinks			
	Recognition mode switching			
	Web search			
	Desktop search			
	Email/calendar			
	Cut shortcuts			
	Delete shortcuts			
	Copy shortcuts			
	Variable delimiters			
	Microsoft Word			
	Microsoft Excel			
	Microsoft PowerPoint			
	IBM Word Perfect			
Auto-Formatting	General			
	Capitalization			
	Numbers, Units, Dates			
	Abbreviations			
	Miscellaneous			
Schedules	LMO			
	ACO			

For information on all available settings, see *Setting Dragon voice command options for provider groups* on page 221.

Accessing the Nuance Management Console

The Nuance Management Console (NMC) is a web-browser based application that is part of the overall Nuance Management Server (NMS) system. The NMC supports many functions for Nuance Healthcare applications, including reporting for iChart/DESS, and eScription.

When you install the NMS, a default user account, called the admin account, is created automatically. The admin account has a license type of 'NMC Administrator'. The admin account includes elevated access to NMS features and services, including DM360 Mobile Recorder configuration.

Pre-requisites for accessing the Nuance Management Console

On the computer that will access the Nuance Management Console, make sure the following items are installed:

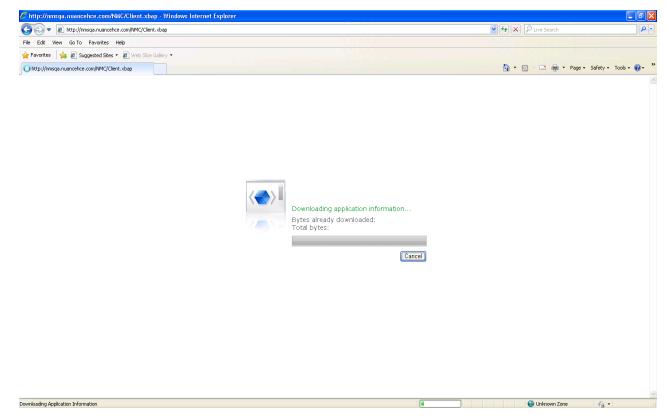
- Microsoft .NET framework 4 Client or the Microsoft .NET Framework 4 full install
- Full trust privileges
- Intranet or Trusted Web Site
- Internet Explorer version 7 or greater
- Nuance Software Certificate Installation

To allow the computer to communicate with the Nuance Management Server, open the following ports:

- **8731**
- **8051**
- **8**0
- **•** 443

Steps for accessing the Nuance Management Console

 Open Internet Explorer and type in the following address in the address bar <u>http://nms.nuancehdp.com/NMC/Client.xbap</u> The following screen appears: "Downloading application information" as required files are downloaded to the local computer.

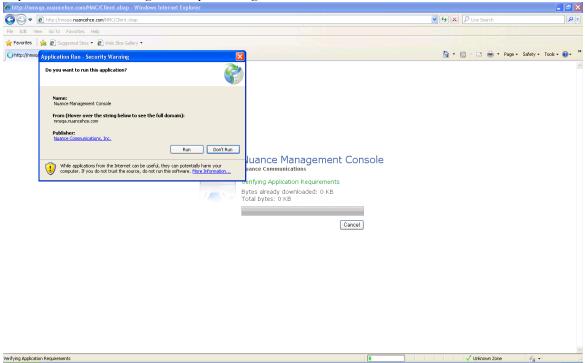


2. While files are downloading, if you see the message "Trust Not Granted", you must to either add the NMC URL as a 'Trusted site' or you need to install a digital certificate.

Adding the Nuance Management Console URL as a trusted site

- 1. In Internet explorer, Select Tools -> Internet options -> Security Tab -> Click on Trusted sites icon -> Sites.
- 2. Enter the Nuance Management Console URL
- 3. Click Add.
- 4. Uncheck the checkbox Require Server verification (https:) for all sites in this zone.

5. If you see the following security warning, click Run.



6. When the file downloads are complete, you will see the login screen. Enter your **User Login** and **Password** and click **Log in**.

User Login		
Password		
	Log in	

Accessing NMS Server: Logging in through the Nuance Management Console

Once the server is running, you use the IP address or name of the machine where the server was installed to access the server and configure it. After you have this required information, you can then access the server from any other machine on your network where you have installed Nuance certificates (see the *Dragon Medical 360* | *Network Edition Installation Guide*) by taking these steps:

- 1. Open a browser window.
- In the URL line of the browser, enter http://<IP address>/nmc/Client.xbap. Then click the Go or similar button in the browser. Or, if you know the server name, use its name instead of its IP address: http://<servername>/nmc/Client.xbap
- 3. When the Nuance Management Console log on box appears, enter **admin** as the user name and **password** as the password, then click **Log in**. (You should change the password before you exit the *Nuance Management Console*.
- 4. The **Home** page appears.

This page displays links to the various features of the server:

- 5. From here, you can view:
 - User Accounts—Each person who needs to use the *NMS Server* (**NMC Administrators**) or to use a *Dragon Medical Client* (healthcare providers who dictate) requires a user account with a user name and password to gain access. People who are **NMC Administrator** users interface with the *Nuance Management Console* only to manage the system and people who are **DM360 Author** users (healthcare providers) access only *Dragon Medical Clients* to dictate. As an **NMC Administrator**, you can add a user account, search for a particular user account, and/or change a provider's user account information and/or settings.
 - **Groups**—You can assign users to logical groups, such as **Cardiologists** or **Outpatient Clinic MDs**, that identify either the specialty, locale, or another unifying characteristic of the group members, but you usually group members together who are using the same *Dragon* settings and options, including formatting options for the results of dictation. Users in a group should also store their user profiles in the same location. Once users are in groups, you can change the user settings for all members of the group at once. Once you assign the same settings to all group members, you can later modify those settings for a single user in the group. You also use groups to assign levels of Nuance Management Console administrator access.
 - Licensing—You can view the number of NMC Administrator, Physician Author, and Non-Physician Author licenses that your organization has purchased from Nuance, how many are assigned, and how many are still available. In addition, you can grant and revoke those licenses.
 - Utilities—Use these utilities to take administrative actions on the DM360 Network Edition network and the *Dragon Medical Clients*, including viewing the status of the various server

and client components of the DM360 Network Edition, installing *Dragon Medical Clients* software on workstations, viewing messages, approving command and medication updates, and viewing dictation reports.

- Sites—Your organization can have multiple sites that you create. When you first run the product, Nuance provides you with a site called **Default site** that belongs to *the* **Default Organization**. You can create your own site and enter information about it that includes the groups associated with the site, miscellaneous *Dragon Medical Client* settings, master user profile location information, speech recognition settings, and data archive storage settings.
- 6. Before you proceed, if you are not planning to configure your *NMS Server* in Active Directory, you should change the password of the initial login account Nuance provides. To change the password, refer to *Changing global system settings* on page 21 and then return here.
- 7. To access and add to your organization information, proceed to *Accessing and adding to your organization data* on page 24.

Note:

A dictating healthcare provider who is affiliated with multiple independent practices will find that each practice has a distinct organization ID. In addition, each practice can assign that professional a different user name and password.

Changing global system settings

Any time after you first log on to the *Nuance Management Console*, you can configure global system settings for the entire Dragon Medical 360 | Network Edition network. Those global settings include:

- Initial log/password
- Number of SQL trace lines to display (limit the number to avoid them scrolling off the screen)
- Server location settings for the client installer and related manuals
- FTP path on the data collection server

Note: On the **System Settings** screen, the **Data Collection FTP** section is only visible if you have the 'Product – Manage DM360 Network Edition' group right.

To change these settings, you take these steps:

Caution:

If you are planning work in the Active Directory Services interface, do not change the password of the account Nuance supplies for initial login until after you have configured Active Directory. For more information, see *Setting up the Nuance Management Server to run Active Directory Services* on page 30.

1. In the upper left of the screen, click on the circle icon with the NMC logo



- System settings, with a wrench symbol above it
- Change password, with a person symbol
- Upload NMC Log file, with a wrench symbol above it

- Log out, with a back arrow above it
- 2. Select **Change Password** and the **Change Password** dialog box opens. After you have logged in for the first time, this dialog box is where you change the password of the **NMC Administrator** account that Nuance provides for initial login. The **User name** text box says **admin** and you cannot change the name unless you create another **NMC Administrator** account to replace the one provided (in the **User Accounts** tab). Enter your old password, then the new password. Then confirm the new password in the **Confirm password** text box and click **OK**).

User name	admin	
Old password	•••••	
New password	•••••	
Confirm password	•••••	Ĩ.,

3. Select System settings. The System Settings dialog box

You see headings for several types of settings that you can click to open and close the information under them:

- General
- Nuance Management Console
- Nuance Management Server
- SMTP
- Data Collection FTP
- Reports
- 4. If you do not see any settings below **General**, click that heading and set the settings (see preceding illustration):
 - **Disable scheduled NMS database backups** Select this option to turn off any scheduled back up operations for the NMS database.
 - LINQ to SQL trace output—Click/select this check if you want the *NMS Server* to use LINQ to SQL technology to send database messages that *NMS SQL Database* generates to a list, *tracing* the messages so that you can monitor them. If you have trouble with your system, Nuance Technical Support or Service personnel might need to look at these messages.
 - Cloud documentation root The default location in the 'cloud' that the NMS uses to download items from the Nuance data center. The format for the default cloud root is: http://serverlocation

If the value is empty in the system settings (For example, from an upgrade), the location value defaults to

http://nms.nuancehdp.com

6. If you do not see any settings below **Data Collection FTP**, click that heading and view the settings (see illustration below). Nuance sets these values for you and you normally do not change

them, except in rare circumstances when Nuance asks you to.

🖾 System Settings	
Data Collection FTP	<u>^</u>
Data collection FTP server path	
Data collection FTP server login	
Data collection FTP server password	
Confirm password	
Save Cancel	

- Data collection FTP server path—You should see the location of the Nuance Data Collection FTP server that the *NMS Server* uploads collected data to.
- Data collection FTP server login—Enter the login name that the *NMS Server* should use to log in to the Nuance Data Collection Server to upload collected data.
- Data collection FTP server password—Enter the password that the *NMS Server* should use to log in to the Nuance Data Collection Server to upload collected data.

Accessing and adding to your organization data

Once you have accessed the *Nuance Management Console*, you are in the **Home** tab. From here you can view your organization information and enter details about your organization by taking several steps.

Notes:

- In NMS 4.1, new enhancements help you find and manage items and data in an organization. For details, see <u>Finding and managing organization data</u>.
- Many organization level options are now located on the Organizations Details screen on the Product tab. For details, see <u>Configure product settings for an organization</u>.
- Typical enterprises have only one Nuance organization GUID, a single string of numbers and letters that Nuance assigns to you as a customer. That identifier is for your entire organization.
- Click Organization > Search > right click and choose Manage organization or double click an organization. The Nuance Management Console displays the Manage Organization screen which contains:
 - In the **Organization** text box the **Default** organization name. You change that name to match your organization.
 - A list of the organization's **Sites**. Initially, you see the **Default** site. You later change this site's name to match one of your sites and create additional sites as well.
 - To the left, you will see Groups that belong to the Site; Users are displayed on the right side of the screen.
 - To the right, a list of the organization's user **Groups**. Nuance supplies for you the **NMC Administration** group and the **DM360 Network Edition** group.

More About Nuance Supplied Groups and Licenses

- The NMC Administration group includes two initial user accounts, one the account you used to log in for the first time. Nuance gives you both of these user accounts with gratis NMC Administrator licenses, the type of licenses required to set up the network in the NMS Server through the Nuance Management Console.
- The DM360 Network Edition group does not include any initial user accounts. When you create user accounts for dictating providers, you can add them to this group, or to other groups you create, and assign each provider either a Physician Author or Non-Physician Author license. Nuance embeds the author licenses you have purchased in your license key.
- To import author licenses and any additional **NMC Administrator** licenses you purchased, refer to either *Obtaining and applying licenses* on page 204.
- 2. To view or modify the organization's information, click the Details icon in the **Organizations** ribbon.

Organization Details—General tab

General		
	Organization name	Adventist West
	Contact name	
	Email	praveen.ramanna@nuance.com
	Organization ID	c36d7c09-8708-427d-b51a-b4c3428a8b51
	Date Created	1/3/2013 4:18 PM

You need to fill in the following fields:

- **Organization name**: Change **Default** to the name of your organization.
- **Contact name**: Enter the name of the person Nuance should contact to interface with your organization.
- **Email**: Enter the email address of the person in your organization that Nuance should send email to.
- **Organization ID**: You see the organization identifier that Nuance assigned to you and that you entered during the installation process. You can always find this identifier here.
- **Date Created**: The date the organization was created.

Organization Details—Address tab

Street 1			
Street 2			
Street 3			
City		State	
7in	Country	United States	•

• Street 1, 2, and 3: Enter the address of your organization's headquarters. Individual sites of the organization show the address of its other particular facilities.

• City, State, Zip, Country: Fill in the City, the State (to the right of the City field), the Zip code (below the City field), and the Country of your organization's headquarters. Individual sites of the organization show the address of its other facilities.

Organization Details—**Products tab**

• Use the settings on this page to set organization level options for your products. For more details, see <u>Configure product settings for an organization</u>.

Organization Details—Organization Tokens tab

• Use the settings on this page to create a token for an organization. For more details, see <u>Creating Organization Tokens</u>.

Organization Details—Domains tab

• Use the settings on this page to add an Active Directory connection string. For more details, see <u>Set the Active Directory Connection String</u>.

Setting up the Nuance Management Server to run Active Directory Services

You can use Active Directory Services to manage your DM360 Network Edition network. Ideally, you should decide to use Active Directory Services before you install the DM360 Network Edition network because enabling Active Directory Services requires that you perform specific steps during the installation process. However, you can enable Active Directory Services before or after you have installed the DM360 Network Edition network.

Enabling Active Directory Services

- 1. Install SQL Server 2008.
- 2. Creating NMC Administrator Account in NMS Server for Active Directory Administrator: After you install the *NMS Server*:
 - Install the Nuance Certificates on any workstation where you want to log in through the *Nuance Management Console*. (Refer to the *Nuance Management Console Help.*)
 - Log in to NMS Server using the admin login Nuance provides.
 - Prepare to create user accounts by changing the name of the organization/site Nuance provides to match your organization and site.
 - Create an NMC Administrator user account for the Active Directory administrator.
 - If you would like, create all other user accounts now; or you can create user accounts later.
 - Create Single Sign-On User Accounts: If you want to set providers up to log in only once, you can set up Active Directory Single Sign-On user accounts (they are optional); see *Creating Single Sign-On user accounts* on page 36. You need to create these accounts before you can associate a user account with an already existing upgraded master user profile.
- 3. Set the Active Directory connection string.
- 4. Continue to configure the NMS Server as Active Directory Administrator
 - Follow instructions in the Nuance Management Console Help.

Creating an NMC Administrator account for Active Directory

To create the **NMC Administrator** account for the Active Directory administrator:

- 1. Install the NMS Server.
- 2. Log in to the NMS Server through the Nuance Management Console.
- 3. To prepare to set up user accounts required for Active Directory in *NMS Server*, you need to first:
 - Change the name of the default organization to your organization's name. For more details, see *Accessing and adding to your organization data* in the Nuance Management Console Help.

- Change the name of the default site in that organization to your site's name. For more details, see *Configuring siteConfiguring the EHRi system on page 1* in the Nuance Management Console Help.
- 4. Create an **NMC Administrator** user account for the Active Directory administrator to use when logging in to the *NMS Server*. Make sure the login you assign in *NMS Server* matches an existing login in Active Directory.
- 5. Assign an **NMC Administrator** license to the new account for the Active Directory administrator.
- 6. You can create other user accounts at this time, but if you are not ready to create them, you can create them later, as long as every *NMS Server* user account login you assign matches an existing login in Active Directory.
- 7. Proceed to the next subsection.

Set the Active Directory Connection String

Complete the following steps to add an Active Directory connection string:

1. Click the **Organizations** > **Details** icon for the site that you want to configure, then click the **Domains** tab:

Organization Details	
General Address Products Customer Tokens Domains	
Name Active directory connection strings	
	Mode
	Modify

- 2. Click Add. The Domain dialog box appears.
- 3. Enter the domain name in the **Name** field, and the Active Directory connection string for that domain in the **Active directory connection strings:** field:

Name:	
MyHospital	
Active directory connection str	rings:
LDAP://AD1.Myhospital.co	m

- 4. Click **Save** to save your changes.
- 5. Repeat steps 2-4 for every domain that you want to set up.

Once Active Directory is on, the *NMS Server* sends all authentication requests to the server you specified in the connection string value. You can then take actions to set up and manage your network using Active Directory Services. For information on using Active Directory Services, refer to the documentation Microsoft provides.

Restarting the Nuance Management Service

- Restart the NMS Server by restarting the service: In the Control Panel, double click Administrative Tools. Then double click Services. In the Services window, find the Nuance Management Service and restart it.
- 2. Log in to the *NMS Server* using the new **NMC administrator** user account you created for the Active Directory administrator.
- 3. Revoke the **NMC administrator** license of the original **admin** user account that Nuance provided, since that account does not work within Active Directory. You might want to grant that license to another user account.
- 4. If you would like dictating healthcare providers to be able to log in to Windows and then automatically be logged in to DM360 Network Edition on the same workstation without having to enter separate login credentials, see *Creating Single Sign-On user accounts* on page 36.
- 5. To continue to configure the *NMS Server* as Active Directory administrator account by following the remaining instructions in the Nuance Management Console Help.

Configuring LDAP

To configure LDAP, you must perform tasks with the Nuance Management Console and DM360 Network Edition. Complete the following steps to configure LDAP.

Note: For DM360 Network Edition, if you upgrade your LDAP from a pre-SP3 implementation to the SP3 or higher, your Nuance Management Console logins will change from being authenticated by the LDAP system to being authenticated by the Nuance Management Console. This means that users must log in to the Nuance Management Console using their Nuance Management Console credentials, not their LDAP credentials.

For the most current information on how to configure LDAP, see the <u>https://i-support.nuance.com</u> website.

Configure LDAP in the Nuance Management Console

Complete the following steps to configure LDAP in the Nuance Management Console.

Note: For DM360 Network Edition, if you are upgrading from DM360 Network Edition SP2 or earlier and already have single-domain LDAP configured and working, do **not** follow these steps. Pre Service Pack 3 single-domain LDAP will continue to work.

If you plan to upgrade from pre-SP3 single domain LDAP to multiple-domain LDAP, Setting up the Nuance Management Server to run Active Directory Services on page 30

See <u>Setting up the Nuance Management Server to run Active Directory Services</u> for more information.

Configure the Site

Note: Nuance does not recommend having workstations where users log in with credentials for more than one site, where those sites' LDAP settings are different. Imagine, for example, that your system is configured with two sites, Site One and Site Two. Site One has single domain LDAP enabled and Site Two has multiple domain LDAP enabled. A user who has login credentials for both Site One and Site Two should only log in to a given workstation with credentials for one of the sites—she cannot log in to Site One and Site Two on the same workstation.

For each site you are configuring to use LDAP:

- 1. Select the site that you want to configure for LDAP and click on the **DM360 Network Edi**tion tab.
- 2. Click the + to expand the Miscellaneous section of the tab:

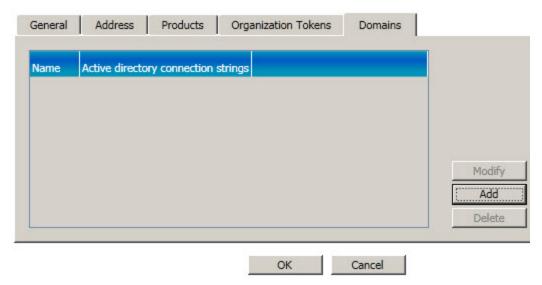
General Addres	DM360 Network Edition	
- Miscellaneous	•	
Prompt users to	log out after 30 minut	es
Log out users w	ho do not respond after 60	seconds
Insert Text & Gr	aphics command using Type	keys (Shift+Insert)
LDAP authentica	tion Disabled	•
🗌 Enable SSO au	uthentication	
Disable autom	atic switching of dictation sour	ce to an available default
Display vSync	Status Tray Icon	
VSync: Full Te	xt Control	
Restore Defa	ults	
+ Master user p	rofile	
+ Data		

- 3. In the LDAP authentication drop down, select Single Domain or Multi Domains.
- 4. Click **Save** to save your changes.

Configure the Domain(s)

Complete the following steps to add domains to your organization:

1. Click the **Organization** > **Details** icon for the site that you want to configure, then click the **Domains** tab:



- 2. Click Add. The Domain dialog box appears.
- 3. Enter the domain name in the Name field, and the Active Directory connection string for

that domain in the Active directory connection strings: field:

Name:		
MyHospital		
Active directory conr	ection strings:	
LDAP://AD1.Myho	spital.com	

- 4. Click **Save** to save your changes.
- 5. Repeat steps 2-4 for every domain that you want to set up.

Configure the User

Complete the following steps for each user you want to configure for LDAP.

Note: You can also import users and their LDAP domains and usernames in bulk. For details, see Import multiple users into the NMS server in the Nuance Management Console Help.

- 1. Open User Account Details and select the
- 2. On the **Credentials** tab, click the **NTLM** tab, click **Add** to add a new domain mapping. The **New Credential** dialog appears:

New Credential	X
User Name:	Jane Doe
Organization Name:	Buffalo General
Domain:	<none></none>
Login:	5
	Ok Cancel

- 3. The **User Name** and **Organization Name** are already filled out. Use the **Domain** drop down to choose the user's domain, and enter her LDAP login for that domain in the **Login** field.
- 4. Click **OK** to save your changes.
- 5. If you have enabled multi-domain LDAP, repeat steps 5-7 for each additional domain you want to configure for the user.

Note: If you are using multi-domain LDAP, be sure to provide your users with their usernames, domain(s) and the appropriate login syntax: <Domain Name>\<User Name>.

Install the client software with LDAP Enabled

Use the MSI installer to install the DM360 Network Edition client software with LDAP enabled. Be sure to set the MSI command line option to enable the type of LDAP that you are configuring; NAS_LDAP_SIGN_ON=1 for single-domain LDAP, and NAS_LDAP_SIGN_ON=2 for multi-domain LDAP. See the Nuance Management Console Help for more information about the MSI installer and MSI command line options.

Notes:

Be sure that LDAP is enabled or disabled with the same setting in **both** the Nuance Management Console **and** the DM360 Network Edition clients. If these settings are out of synch—for example, multi-domain LDAP is enabled in the Nuance Management Console, but single domain LDAP is enabled on the clients—unpredictable log in behavior results.

When installing an upgrade for DM360 NE on a client machine, you can enter values in the command line for the Active Directory and EHR single sign-on settings. However, be aware that your values will overwrite any the user already entered for these settings.

Creating Single Sign-On user accounts

Dragon Medical 360 | Network Edition supports two types of single sign-on accounts:

- Active Directory Single Sign-On, which allows users to log in using their Windows credentials.
- EHR Single Sign-On, which allows users to log in from their EHR.

The following sections describe how to configure both types of Single Sign-On accounts.

Note: For the most current information on how to configure Single Sign-On accounts, see the <u>https://isupport.nuance.com</u> website.

Implementing Active Directory Single Sign-On

When you implement Active Directory Single Sign-On, you set up providers to automatically log in when they have logged in to Windows. In this type of setup, providers avoid having to enter their login and password multiple times.

Steps

- You must configure your *NMS Server* to use Windows Active Directory Services. For more information see *Setting up the Nuance Management Server to run Active Directory Services* on page 30.
- You must set up Windows Domain user names and user account login names that are identical. For more information, see <u>To configure Active Directory Single Sign-On</u>.

If the login credentials for an existing user account do not match the user's Windows login, you must delete the user account and create a new one. Make sure the login credentials for the new account match the user's Windows login credentials. See the technical note: "Enabling Active Directory Single Sign-On for Dragon users after you install DM360 Network Edition", found at the https://isupport.nuance.com website, for details.

Note: For DM360 Network Edition, if you upgrade your Active Directory Single Sign-On from a pre-SP3 implementation to the SP3 implementation, your Nuance Management Console logins will change from being authenticated by the LDAP system to being authenticated by the Nuance Management Console. This means that users must log in to the Nuance Management Console using their NMS credentials, not their LDAP credentials.

To configure Active Directory Single Sign-On

1. During the process of creating provider user accounts in the *NMS Server*, be sure to assign a login name that matches the user name of the provider's Windows Domain login name (see the next illustration).

In the **Login** field, enter the user name of the provider's Windows Domain login name. The logins for DM360 Network Edition and Windows must be identical.

For example, if a provider's Windows Domain login name is one of the following:

- "Domain\John_Doe"
- "John_Doe@domain.example.com"

You enter "John_Doe" in the Login field.

Details		
Organization		
NPI	Auto fill	
First name	Last name	
Middle name	Prefix	
Login	Password	
	Confirm Password	
Location	Department	
Disable Auth	entication	

For DM360 Network Edition, for each Dragon client, perform the steps in <u>Enabling Dragon</u> <u>client computers for Active Directory Single Sign-On</u>.

Implementing EHR Single Sign-On

To implement EHR Single Sign-On, you create the log in and log out code for DM360 Network Edition. You then configure your EHR to call that code; allowing providers to log in and out of DM360 Network Edition from the EHR.

While the steps for configuring this in the EHR differ depending on which EHR your providers use, the steps on the DM360 Network Edition side are the same regardless of the EHR.

Steps

- (Optional) Ensure that vSync is installed on both the Citrix client and server
- Enable EHR Single Sign-On
- Generate a Client ID
- (Optional) Map the User's EHR log in to their DM360 Network Edition log in credentials
- Write the log in/log out code
- Configure your EHR to call the log in/log out code
- For DM360 Network Edition, install the Dragon Clients with EHR Single Sign-On enabled

(Optional) Ensure that vSync is installed on the Citrix server

For DM360 Network Edition,, if your EHR is running on Citrix, EHR Single Sign-On requires that vSync be installed on the Citrix server and Citrix Support components be installed on the client machine. Visit <u>https://isupport.nuance.com</u> and view "L-3431 - Using Dragon with Citrix clients and servers Administrator Guide" for more information about vSync.

Enable EHR Single Sign-On in the Nuance Management Console

Complete the following steps for each site that you want to use EHR Single Sign-on:

- 1. Open the site in the Nuance Management Console.
- 2. On the ribbon, select **Organization Overview**.
- 3. In the **Organizations** screen, double-click a site.
- 4. In the Site screen, click the DM360 Network Edition tab.
- 5. Expand the **Miscellaneous** section.
- 6. Check the **Enable SSO authentication** checkbox to enable EHR Single Sign-on for the site.
- 7. Click **Save** to save your changes.

Generate a Client ID

Generate a client ID for each site that you want to use EHR Single Sign-on. For information about how to generate a Client ID, see <u>Creating Organization Tokens</u>. Your log in script for DM360 Network Edition will use this ID as a parameter.

(Optional) Map the EHR User Names to the log in credentials for DM360 Network Edition

If your users ' EHR usernames and user account usernames are the same, you can skip this step.

If your users 'EHR usernames and user account usernames are **not** the same, complete the following steps:

- 1. Open the user you want to configure.
- 2. Go to User Account Details > Credentials > Token:
- 3. Click Add. The New Credential dialog box appears:

User Name:	Jane Doe
Organization Name:	Buffalo General
Login:	
	OK Cancel

- 4. Enter the user's EHR user name in the Login field.
- 5. Click **OK** to save your changes.

Write commands for logging in and out of DM360 Network Edition

You use command line parameters to log in and out of DM360 Network Edition using EHR Single Sign-on. You can integrate these commands with your EHR in a number of ways including:

- using a third party product
- using functionality that is built in to your EHR
- using an external scripting language.

Logging into the local machine

If you are going to run the log in command on the same machine where DM360 Network Editionare installed, use the following syntax to login a user:

<Path to the product executable>\<product exe file>/SSOUser <Username> <Client ID>

where:

- <Path to the product executable> is the path to the directory that contains the product exe file.
- <product exe file> is the name of the exe file that launches the product.
 - For DM360 Network Edition, the exe file is called natspeak.exe.
- <Username> is an EHR username.
- <Client ID> is the ID that you created. See <u>Creating Organization Tokens</u>.

For example: (use 'Program files (x86)' for x64 bit systems)

C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe /SSOUser jdoe eacd17e4-f0fb-4a2b-9b20-03a80231e9a0

Logging out of the local machine

If you are going to run the log out command on the same machine where DM360 Network Edition are installed, use the following syntax to log out the currently loaded user:

C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe /Logout

Logging in when running DM360 Network Edition on a Citrix server

Use the following command to log users into DM360 Network Edition:

<Path to the product SSO executable>\<product SSO exe file>/SSOUser <Username> <Customer Token>

where:

- <Path to the product SSO executable> is the path to the directory that contains the product SSO exe file.
- - For DM360 Network Edition, the exe file is called natspeakSSO.exe.
- <Username> is an EHR username.
- <Customer Token> is the organization token that you created. For details, see <u>Creating</u> Organization Tokens.

For example: (use 'Program files (x86)' for x64 bit systems)

```
C:\Program Files\Nuance\EHR Synchronizer\Program\natspeakSSO.exe
/SSOUser jdoe eacd17e4-f0fb-4a2b-9b20-03a80231e9a0
```

Logging out when running DM360 Network Edition on a Citrix server

Use the following command to log out the currently loaded user:

```
<Path to the product SSO executable>\product SSO exe file> /Logout
```

where:

- <Path to the product SSO executable> is the path to the directory that contains the product SSO exe file.
- <product SSO exe file> is the name of the SSO exe file for the product.
 - For DM360 Network Edition, the exe file is called natspeakSSO.exe.

For example: (use 'Program files (x86)' for x64 bit systems)

```
C:\Program Files\Nuance\EHR Synchronizer\Program\natspeakSSO.exe /Lo-
gout
```

Configure your EHR to call the log in/log out code

Follow the instructions provided in your EHR documentation to configure the EHR to call the log in and log out code that you created in the *Write Dragon log in/log out commands* topic in the Nuance Management Console Help..

Install the client software with EHR SSO Enabled

Use the MSI installer to install the DM360 Network Edition client software - with EHR Single Sign-On enabled Set the MSI command line option to enable EHR Single Sign-On by passing in

NAS_SINGLE_SIGN_ON=1. See the Nuance Management Console Help for more information about the MSI installer and MSI command line options.

Notes:

Be sure that EHR Single-Sign On is enabled or disabled in **both** the Nuance Management Console **and** the client software for DM360 Network Edition. If these settings are out of synch—for example, EHR Single Sign-On is enabled in the Nuance Management Console but not on the clients—unpredictable log in behavior results.

When installing an upgrade for DM360 NE on a client machine, you can enter values in the command line for the Active Directory and EHR single sign-on settings. However, be aware that your values will overwrite any the user already entered for these settings.

Enabling Dragon client computers for Active Directory Single Sign-On

To enable the Active Directory Single Sign-on feature for Dragon users, perform the following actions on each Dragon client computer.

Create a new Dragon shortcut

- 1. Create a desktop shortcut to the natspeak.exe file. The location of the natspeak.exe file depends on the version of Microsoft Windows that is on the Dragon workstation.
- 2. Select the **Shortcut** tab.
- 3. In the Target field, enter the path to the natspeak.exe file, followed by /trusted. For example, enter "C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe" /trusted.
- 4. Click **OK**.

Modify the nssytem.ini file

Find and open the *nssystem.ini* file.
 On Microsoft Windows XP*, the file is located here:
 C:\Documents and Settings\All Users\Application Data\N-uance\NaturallySpeaking12\nssystem.ini

On Microsoft Windows Vista, Windows 7, Windows 8, and Windows 8.1, the file is located here:

C:\ProgramData\Nuance\NaturallySpeaking12\nssystem.ini

- 2. In the *nssystem.ini* file, find the following line: Default NAS Address=
- 3. To the right of Default NAS Address=, append the actual hostname or IP address of the NMS server.
- 4. Save the nssystem.ini file. You do not need to restart Dragon.

To make sure providers use the correct Dragon shortcut, you or a provider may wish to delete the original Dragon shortcut (not the one created in the previous steps).

Once you have set up the user accounts this way, and the servers and workstations are running, providers do not have to enter their login credentials to run *Dragon Medical Client*. After the provider logs in to the Windows desktop and clicks the Dragon short cut, the *Dragon Medical Client* opens and establishes contact with the *NMS Server*.

* The 2.x versions of DM360 Network Edition will be the last versions of the product to support Windows XP. DM360 Network Edition 2.1 continues to support Windows XP.

Sending speech data to Nuance

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. No personal information is ever sent to Nuance and participation in data collection is completely voluntary.

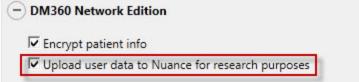
The process of accruing the speech data that Nuance can use is called *data collection*. When you turn on data collection, you let the *Dragon* clients collect up to 500 MB of text and data per user about optimizations performed and send it to the *Nuance Management Server* to be stored.

The *Nuance Management Server* then uploads the data every night at 2:00 AM. Only Nuance can change this schedule.

Turning on data collection for your site

To turn on data collection for your entire site, take these steps:

- 1. On the menu bar, click **Organizations** > **Search**.
- 2. Enter search criteria and click the magnifying glass.
- 3. To see your organization's information and add details to it, click the **Organization** > **Details** icon in the ribbon.
- 4. Select the **Products** tab.
- 5. Expand the DM360 Network Edition section.
- 6. Select the Upload user data to Nuance for research purposes option.



7. Click **OK** to save the change.

Turning on data collection for individual providers

You can also turn on data collection for individual healthcare providers in the **User Account Details** tab under the **Network Edition US** sub-tab:

- 1. On the menu bar, click the **User Accounts** ribbon, then click the **Search** icon in the ribbon under **User Accounts**.
- 2. When the name of the provider appears in the **User Accounts** screen, double click the name to open the **User Account Details** for that healthcare provider.
- 3. Click the Network Edition US tab.
- 4. Expand the User Account Options section.
- 5. Go to the bottom of the **User account** options section and click the **Upload dictation data to Nuance for research purposes** check box.
- 6. Click Save to save the change to the user account settings.
- 7. You can repeat these steps for selected individual user accounts in the NMS Server.

Privacy of your healthcare data and Nuance data collection

When you implement Data Collection it is for sending recognition data to Nuance to improve the accuracy of this and future products. Nuance works with collected data because our software can learn from experience about the language you, and your fellow professionals, use. We track the vocabulary, syntax, and pronunciation used by professionals in practice, and our experience makes our products more accurate and easier to use for you and others.

Nuance will never pass your recognition data on to anyone else or use it for any other purpose other than as set out in this notice.

Nuance will only collect recognition data (on behalf of your organization), and will collate and combine it with recognition data collected from other health professionals using Data Collection. We will not store the recognition data under your name, the medical practice or hospital or an individual's name, although the database will contain a search function enabling such terms to be searchable within the database.

Nuance will use the recognition data in accordance with your organization's instructions. We use it to conduct research in order to enhance and improve the accuracy of this and future products. Nuance recognizes that the data may include medical information about patients and your professional opinion in relation to those patients.

The only people with access to this data will be our employees, permitted agents, sub-contractors, etc. on a need to know basis, all of whom are bound by obligations of confidentiality to keep the data strictly confidential.

Nuance will transfer the personal data to its Data Collection sites that may be located outside of the EEA. However, Nuance shall ensure that any such transfer is compliant with the EU Data Protection Directive.

Our corporate policies and practices, and our contractual commitments to your organization, require us to take appropriate technical and organizational measures against unauthorized or unlawful processing of any personal data that you have provided to us and against accidental loss or destruction of, or damage to, that personal data.

Chapter 2: Overview of NMS in the cloud

This chapter discusses NMS in the cloud; how it works, how it differs from hosting an on-premise NMS, and how to upgrade to NMS in the cloud.

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Overview of NMS in the cloud

Starting with the Nuance Management Server (NMS) 3.1, you can optionally upgrade to the Nuance Management Server in the cloud. If you purchase and install the NMS upgrade and migrate your system to the cloud, data objects are stored in the Nuance Management Server (NMS) in the cloud (in the Nuance data center) instead of an on-premise NMS. These objects include the following profile customizations:

- User account
- Text and Graphics/auto-texts
- Custom words
- Custom Command Sets

Storing objects in NMS in the cloud allows organizations that have more than one Nuance product to share data across multiple Nuance applications. For example, if an administrator at an organization creates an auto-text in the Nuance Management Console, that organization's users can see and use that object with Dragon Medical 360 | Network Edition, Dragon Medical 360 | Direct as well as any application that uses Speech Anywhere Services.

Note: Migrating to Nuance in the cloud is optional and only required if you plan on sharing profile customizations with Nuance cloud based products.

What will be different when you migrate to NMS in the cloud?

This section describes what you can expect when moving or upgrading to the NMS in the cloud configuration.

Note: Text and Graphics and DragonTemplates are supported. Text and Graphics with Lists are not supported.

- NMS is hosted in the Nuance Data Center instead of being hosted in your organization.
- The cloud NMS stores all the Dragon user settings.
- Management Your administrators access the cloud Nuance Management Console to configure and manage users. This provides the administrators with one place where they can view and manage all product licenses for NMS supported products.
- Shared content (profile sharing) with other Nuance Healthcare products. Text and Graphics/auto-texts and custom words can be shared between DM360 Network Edition and Dragon Medical 360 | Direct 1.4, and, SpeechAnywhere Services powered third party applications like Cerner PowerChart Touch[™] and EPIC Haiku/Canto.
- Single and centralized cloud management of products.
- You no longer need to install and maintain the NMS database and the SQL database. You still need to install the Profile Optimizer Server and speech nodes on-premise. When you upgrade

the Profile Optimizer to NMS in the cloud, the server is configured to communicate directly with the NMS cloud server.

- Management of cloud Text and Graphics/auto-texts using the cloud Nuance Management Console.
- Management of Dragon and NMS settings that was previously accomplished using the onpremise Nuance Management Console is now done using the cloud/hosted Nuance Management Console.
- User profiles are enhanced with customizations; auto-texts and custom words that are defined at the Site or Group level.
- Importing, exporting, and deletion of user profiles is not available in the cloud NMS. These features have been moved to the Dragon client for Dragon Medical 360 | Network Edition.
- After you upgrade to NMS in the cloud, the on-premise NMS is uninstalled.
- The Profile Optimizer and its speech nodes are still hosted in your organization.
- All calls between the PO Server and the cloud NMS are one way from the PO Server to the cloud NMS.
- Calls from the PO Server to the cloud NMS use service to service token security. The PO Server installs with an organization token for an organization and passes this token as a credential to the NMS. There is no need to configure the PO Server with a login or password to make service to service calls to the cloud NMS. The NMS uses the token to limit the information it returns to the PO Server for an organization.
- An administrator can back up and restore a user account from the User Accounts screen.
- In some cases, you may need to install and configure an NMS "call forwarder" when on-premise LDAP or Active Directory support is required.
- For Text and Graphics/auto-texts, the Meta Data tab is visible if you log in to Nuance Management Console with the Dragon Medical 360 | Direct license. The tab is not visible if you only log in with the DM360 Network Edition license.
- Speech node collections are defined at the organization level.
- NMS download packages are distributed to individual organizations instead of to everyone on the system.
- You can add comments to organization tokens
- The **Organization Tokens** tab (a client ID for each site that you want to use EHR Single Sign-on) and **Credentials** tab are visible to all administrators.

Upgrading and moving data to the cloud

When you upgrade to NMS in the cloud, you use the Cloud migration tool to move the data from an on-premise NMS server to the NMS server in the cloud.

After you migrate the data, you can uninstall the NMS server from your site.

If you are using LDAP integration, a local call forwarder must be installed on-premise. The call forwarder maintains your local LDAP integration while forwarding all other NMS calls to NMS in the cloud..

For details and steps, see Upgrade to NMS in the cloud.

Managing user logins

User logins in the cloud must be unique. If an on-premise NMS user's login is being used by a user in another organization in the cloud NMS, this is a user login conflict that needs to be resolved before the on-premise user can be migrated to the cloud NMS. Two users cannot have the same login id in the cloud NMS.

For example, if you are upgrading "Bob" to NMS in the cloud, and user login "Bob" already exists in the cloud NMS, this is a naming conflict. For more details, see <u>Move data from an existing on-</u><u>premise NMS server to the cloud NMS server</u>.

Organizations using LDAP/AD

If you are using LDAP or Active Directory to authenticate users, there should be no conflicts when moving to the cloud. The NMS uses a "domain" along with the login which maps to a unique organization.

- 1. Install and configure the NMS call forwarder.
- 2. Minor configuration of the NMS call forwarder is required which basically consists of setting a domain name and the LDAP address where non-trusted LDAP/AD functionality is required. For details, see Install the NMS Call Forwarder.

Organizations using NMS native credentials

If you are using NMS native logins to authenticate users, when you move to the cloud, the NMS native logins may conflict with existing user accounts. For example, if your organization has a user login called "bob" and a user login called "bob" is already in use in the cloud system, you must change the user login before you can move that user account to NMS in the cloud.

The call forwarder is not required.

Upgrading from Dragon Enterprise Edition to DM360 Network Edition using the Profile Association Tool

The Profile Association tool is only required for US customers that are upgrading from Dragon Medical US Enterprise Edition.

The following applies to organizations that migrate from Dragon Enterprise Edition to NMS in the cloud and use an on-premise NMS server.

The profile association tool that currently resides in the Nuance Management Console will no longer reside in the Nuance Management Console. Instead, administrators can run a separately installable tool that contains the exact same functionality. The new tool:

- Requires access to the profile store
- Communicates with the NMS server in the cloud

The workflow for using the profile association tool is the same as before. If you are running a pre-NMS version of the Dragon client:

- Nuance sets up an Organization for your organization in the cloud NMS server .
- Your administrator uses the cloud Nuance Management Console to create user accounts in the cloud NMS server
- Your administrator runs the standalone Profile Association Tool to:
 - Search the local user profile store for available user profiles that require user accounts
 - Search the cloud NMS server for user accounts that need user profiles
 - Allows the administrator to map the user profiles to the user accounts.

Authentication

After you upgrade a user account or a Dragon client to Nuance Management Server (NMS) in the cloud, users must log into the system using the Dragon client in connected mode. This action authenticates the user with the NMS and allows them to later use Dragon in disconnected mode.

The user cannot use Dragon in disconnected mode until they first login to Dragon in connected mode.

The following only applies to organizations that are using LDAP/AD for authentication. NMS native credential users do not require the call forwarder.

Since the NMS is no longer on-premise, you must install and configure the "NMS call forwarder" to query your LDAP/AD store and validate user credentials. You install the "NMS call forwarder" at your site in place of the on-premise NMS server. On premise Dragon clients must be configured to point to the call forwarder. The call forwarder tests the user credentials and sends authentication requests to the cloud NMS to retrieve data.

Profile importing, exporting, and deleting

Since the NMS in the cloud does not have access to the profile store, this functionality is no longer available in the Nuance Management Console. Instead, it is available and performed through the Dragon Client.

If an administrative task requires the importing, exporting, or deletion of user profile(s), someone must perform these actions on the Dragon workstations. For details, see the Dragon Help or the Dragon user guide.

Upgrade to NMS in the cloud

To move your on-premise Dragon Medical 360 | Network Edition to the Nuance cloud, you must perform an upgrade and migration process. This process is described below.

Preconditions

- You have an on-premise NMS installation of Dragon Medical 360 | Network Edition.
- The NMS server is version 2.0.XXX or greater (should be 2.0.535, but earlier versions may be compatible).
- The cloud NMS server is version NMS 3.0 or greater.
- Dragon client Dragon Medical version 10.1 Service Pack 3 or higher.

Note:

If you are upgrading from a version of DM360 Network Edition that is not Service Pack 3 or higher, you must first upgrade to Service Pack 3. See the *DM360 Network Edition SP 3 Installation Guide* for more information.

Upgrading Dragon Medical 360 | Network Edition to NMS in the cloud involves the following ordered steps:

- 1. Create an organization in the NMS cloud
- 2. Move data from the on-premise NMS server to the cloud NMS server
- 3. Upgrade the Profile Optimizer Server to the cloud
- 4. Install the NMS Call Forwarder (Optional)
- 5. Upgrade Dragon clients
- 6. Configure Dragon clients to communicate with NMS in the cloud
- 7. Configure Dragon clients to communicate with the new Call Fowarder server (Optional)
- 8. Uninstall the on-premise NMS server

Create an organization in the NMS cloud

A Nuance employee creates an Organization in the Nuance cloud NMS server for your organization.

What the Nuance employee requires before performing this task:

- The Organization Id of your on-premise NMS Organization obtainable from Order Management or the customer. The id is required to create licenses.
- The login and password you will use to manage your cloud NMS configuration. Unique logins are required; something unique such as an email address can be used as a login.

The Nuance employee performs the following steps in the cloud Nuance Management Console

To perform the following steps, work with Nuance technical support or your Nuance sales contact.

- 1. Creates a new organization in the cloud NMS with the same Organization Id as the on-premise NMS.
- 2. Use the login and password from the organization to create a user account in the new cloud organization.
- 3. Assign the user account to the "NMC Administrators" group.
- 4. Modify the "NMC Administrators" group to include the following necessary rights:
 - Product Manage DM360 Network Edition
 - Dragon Able to run DM360 Network tools
- 5. Create and import a single NMC license for this new organization and assign it to the user account created earlier.
- 6. On the **Organization Details** screen, in the **Customer Tokens** tab, create an organization token for the new organization. The customer enters this organization token when they install the Profile Optimizer and the Call Fowarder (if required).

Move data from the on-premise NMS server to the cloud NMS server

In this stage, an administrator uses the cloud migration tool to move your data from the on-premise NMS server to the cloud NMS server.

What the administrator requires before performing this task:

- The URL of the cloud Nuance Management Console.
- Login and password of user account created for your organization in the cloud.
- On-premise NMS server coordinates:
 - Server name
 - Login and password to the cloud NMS that has an NMS license and appropriate rights.
- On-premise NMS SQL server coordinates:
 - Server name
 - Login and password to the NMS SQL Server which provides full access to the NMS database (NuanceMC): Either the "sa" login and password, or Windows authentication which has full access to the NMS database.
- To be on a computer where:
 - You have rights to install an application.
 - The computer is on the same network with the Nuance Management Server.
 - The computer is on the same network with the NMS SQL Server
 - Ports 8051 and 8731 must be open for outbound traffic
 - Your organization has already been created in the cloud NMS with an organization ID that is the same as the organization ID for the organization on the on-premise NMS.
 - Your account has access rights to the Dragon user profile store(s).

Using the cloud NMC, perform the following steps:

1. Perform the steps in <u>Migrate data from an existing on-premise NMS server to the cloud NMS server</u>.

- 2. Once the migration is complete, the cloud migration tool informs you of any issues that need to be resolved. A common issue is that there is a conflict between the on-premise login and a cloud login for a user. You must change the user login for the user. The migration tool will give you the opportunity to change the user name.
- 3. Once you change the login user name, you must inform the user of the name change or they will not be able to log into DM360 Network Edition after the data migration.

After you upgrade a user account or a Dragon client to Nuance Management Server (NMS) in the cloud, users must log into the system using the Dragon client in connected mode. This action authenticates the user with the NMS and allows them to later use Dragon in disconnected mode.

The user cannot use Dragon in disconnected mode until they first login to Dragon in connected mode.

Upgrade the Profile Optimizer Server to the cloud

What you require before you begin:

• The organization token created in your cloud Organization. The token is required during the Profile Optimizer installation.

Upgrade by uninstalling (Add/Remove Programs) and re-installing the Profile Optimizer.

Note: Uninstalling does not remove the database. Upgrade all speech nodes. For details, see the following sections in the DM360 Network Edition Installation guide:

- 1. Determining whether Speech Nodes are busy running optimizations
- 2. Halting Speech Nodes
- 3. Uninstalling Profile Optimizer Server and Speech Nodes
- 4. Uninstalling the old and installing the new Dragon SDK Client
- 5. Installing new version of Profile Optimizer Server and Speech Nodes

Install the NMS Call Forwarder (Optional)

If you want to use LDAP or Active Directory Single Sign On for your authentication, you must install the NMS Call Forwarder on a server that is accessible to both the cloud NMS and your Dragon Clients. If you want to use Dragon's native authentication, you can skip this step.

The cloud NMS cannot test LDAP credentials inside your organization. The NMS forwarder fills this gap by testing LDAP credentials. If they pass verification, the forwarder sends the credentials to NMS in the cloud for processing. All requests from DM360 Network Edition go through the call forwarder.

The NMS call forwarder is installed on premise. No SQL Server or configuration is required.

Deciding where to Install the Call Forwarder

You install the Call Forwarder on a server that is accessible to both the NMS and to the Dragon Clients. You can either re-purpose your existing NMS server for this or use another server.

If you install the Call Forwarder on your existing NMS server:

- Advantages: You will not need to change the Call Forwarder server address in all the Dragon clients, because they are already configured to point to the NMS server.
- Disadvantages: Possibly using a server just for the call forwarder.

If you install Call Forwarder on a separate server:

- Advantages: You don't need to use a whole server just for the call forwarder.
- Disadvantages: Dragon clients will need to be reconfigured to point to the new server as a target.

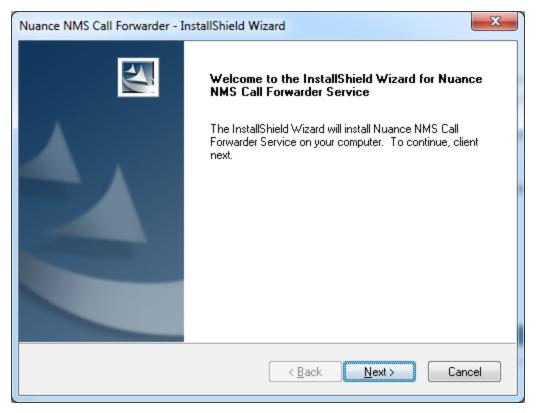
Installing the Call Forwarder

What you require before you begin:

• The organization token created in your cloud organization, and used to install the Profile Optimizer. You need to enter it during the Call Forwarder installation.

After you have your organization token, complete the following steps to install the Call Forwarder:

1. Find the **NMSCallForwarder.EXE** file, which ships with the NMS software, and run it on the machine where you are installing the Call Forwarder. The Install Shield Wizard opens. Click **Next** to continue:



2. Set the location where the Call Forwarder will be installed, then click **Next** to continue:

Nuance NMS Call Forwarder - InstallShield Wizard	X
Choose Destination Location Select folder where setup will install files.	4
Setup will install Nuance NMS Call Forwarder Service in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
Destination Folder	_
C:\\Nuance\NuanceNMSCallForwarder\	
InstallShield	
< <u>B</u> ack Next > Canc	el

3. The Service Logon Options dialog appears. If your network requires a domain account for authentication tests, select the **Other Accounts** radio button and specify the domain, otherwise accept the default: **Local System Account**.

If you specify a domain account, you can reinstall the Profile Optimizer at a later time to change this value, or to use the local system account.

Click **Next** to continue:

Nuance NMS Call Forwarder - InstallShield Wizard	×
Service Logon Options Select the Service Logon type under which the service runs.	
Select from the options below.	
Local System Account	
Other Account	
InstallShield	
< <u>B</u> ack <u>N</u> e:	kt > Cancel

4. Enter the organization token in the NMS Customer Token field and click Next to con-

NMS Customer Token			
Please enter the NMS Custom	er Token		
NMS Customer Token	l		
InstallShield			
		< <u>B</u> ack N	ext > Canc

5. Click **Install** to install the Call Forwarder:

N	Juance NMS Call Forwarder - InstallShield Wizard	
	Ready to Install the Program The wizard is ready to begin installation.	
	Click Install to begin the installation.	
	If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
ſ	nstallShield <u>Ancel</u> Cancel	

Upgrade Dragon clients

You can keep your Dragon clients at Dragon Medical version 10.1 Service Pack 3 and they will still work with Dragon Medical 360 | Network Edition.

However, to utilize the newest features, enhancements, and fixes, you eventually must upgrade the Dragon clients to Dragon Medical 360 | Network Edition.

1. Upgrade vSync on a Citrix server to Dragon Medical 360 | Network Edition without uninstalling the previous vSync software. You can upgrade vSync on a Citrix server without having to upgrade all the Dragon clients in your network.

The vSync plug-in for Citrix Servers in Dragon Medical 360 | Network Edition is compatible with the following versions of the Dragon client: Service Pack 3 and Service Pack 3.5. However, to utilize the newest features, enhancements, and fixes, you eventually must upgrade the Dragon clients to Dragon Medical 360 | Network Edition.

Before you upgrade the Dragon client, you must upgrade vSync on your Citrix servers.

2. Upgrade the Dragon Client to Dragon Medical 360 | Network Edition without uninstalling the previous Dragon Client software. See chapter 7 in the DM360 Network Edition Installation Guide for more information.

Configure Dragon clients to communicate with NMS in the cloud

To perform these steps, your Dragon clients must be Dragon Medical version 10.1 Service Pack 3 or higher.

Change the Dragon Client configurations to point to the cloud NMS server instead of the local NMS server.

- 1. Start the Dragon client.
- 2. On the Dragon Login window, click **Options**.
- 3. On the **Options** window, in the **Address** field, type the IP address or network name of the Nuance Management Server in the cloud.
- 4. Click **OK**.

If issues are being experienced with a user profile, you can check the **Delete my profile and create new** checkbox to have the system delete your user profile from the Nuance Management Server and delete the local cache user profile from the client computer.

Configure Dragon clients to communicate with the new Call Fowarder server

To perform these steps, your Dragon clients must be Service Pack 3 or higher.

If you installed the call forwarder, you must configure the Dragon Client to point to the new server you installed the Call Fowarder on.

- 1. Start the Dragon client.
- 2. On the Dragon Login window, click **Options**.
- 3. On the **Options** window, in the **Address** field, type the IP address or network name of the server that the call forwarder is installed on.
- 4. Click **OK**.

Uninstall the on-premise NMS server

Note: After you uninstall the on-premise NMS server, you cannot re-migrate users to the cloud. Be sure that Dragon in the cloud is working, and that all of your users have been migrated before uninstalling the on-premise NMS server.

Once you have confirmed you are able to use Dragon in the cloud, you can uninstall the on-premise NMS Server. Use Add/Remove Programs to uninstall Nuance Management Server.

- 1. Click Start > Control Panel and open Add/Remove Programs.
- 2. Find *NMS Server* in the list and click the **Remove** button.

Setting the NMS download location

- 1. In the Nuance Management Console, in the **Organizations** section, click **Organization Overview**.
- 2. In the **Organizations** section of the ribbon, click **Details**.
- 3. On the **Products** tab, expand the **DM360 Network Edition** section.
- 4. In the **Downloads** section, select **Download from cloud**.
- 5. Click **OK**.

Move data from an existing onpremise NMS server to the cloud NMS server

You use the cloud migration tool to move data from your on-site NMS server to the NMS server in the cloud. This data includes:

- Organization data
- Sites data
- Groups data
- Users data
- Licenses (and assignments)
- All object settings

An administrator runs the tool as the last step in migrating data to the Cloud NMS.

After you upgrade a user account or a Dragon client to Nuance Management Server (NMS) in the cloud, users must log into the system using the Dragon client in connected mode. This action authenticates the user with the NMS and allows them to later use Dragon in disconnected mode.

The user cannot use Dragon in disconnected mode until they first login to Dragon in connected mode.

Notes:

- If the NMC detects that the tool is not installed, you are prompted to install it.
- If the NMC detects that the tool is not current, you are prompted to update it.
- Once the tool installation or upgrade is complete, the NMS launches the tool

Preconditions for using the tool:

- Microsoft .NET 4.0 or higher on the client workstation where you will run the tool
- An existing on premise NMS configuration.
- An Organization in the NMS cloud, created by Nuance, with:
 - The same Organization Id as the on-premise NMS server.
 - A user credential that has the rights to add all the data to NMS in the cloud.
- 1. In the Nuance Management Console, click **Utilities** > **Tools**.
- 2. On the Tools screen, click Launch cloud migration tool.
- 3. You are prompted to install the tool. Click **Yes** and follow the steps in the wizard to install the tool.

4. On the **On-Premise Server** screen, enter the following information and click **Next**:

Reference in the second	
	Welcome to the On-Premise Cloud Migration Tool
Enter the authentication details for C	On-Premise Server In-Premise Server.
On-Premise Server Credent Login ID Password Server Name	als
	<u>N</u> ext <u>Cancel</u>

- Login ID: The login id for the on-premise NMS server.
- **Password**: The password for the on-premise NMS server.
- Server Name: The address of the on-premise NMS server.
- 5. On the **On-Premise SQL Server** screen, enter the following information and click **Next**. Note, if you are running the Cloud Migration tool on the on-premise NMS, the tool auto-

matically fills these fields:	
Reference in the second	
	Welcome to the On-Premise Cloud Migration Tool
Enter the authentication details for C	On-Premise SQL Server On-Premise SQL Server
SQL Server Credentials	
Server Name	
Authentication	
Login	
Password	
	Back Next Cancel

- Server Name: The address of the on-premise SQL server.
- Authentication: The authentication method to use to login to the SQL server.
- Login: The login for the on-premise SQL server.
- **Password**: The password for the on-premise SQL server.
- 6. On the **Cloud Server** screen, enter the following information and click **Next**. Note, the Cloud Migration tool will auto-populate the **Login ID** field and the **Server Name** field. You must provide the password information.

		Welcome to	the On-Premise C	loud Migratio	n Tool
Enter the authe	ntication details for Cl		Server		
c	Cloud Server Credentials Login ID Password Server Name				
			<u>B</u> ack	<u>N</u> ext	Cancel

- Login ID: The login id for the cloud NMS server.
- **Password**: The password for the cloud NMS server.
- Server Name: The address of the cloud NMS server. This is usually something in the following format: nms.nuancehdp.com.
- 7. On the **Confirmation** screen, verify that the displayed information is correct and click **Migrate**. The tool runs and moves data to NMS in the cloud
- 8. If there are conflicts between user Login IDs on the on-premise NMS and NMS in the cloud, the Cloud Migration tool does the following:
 - Opens a summary page that contains the user Login ID conflicts. The summary page displays a list of all user Login IDs that are in conflict with the same login ID in the cloud. Only on premise users are listed.
 - If the user is a Nuance Management Console administrator, they must update their NMS native login. All login resolutions should be done to the on premise user account that is migrated to the cloud. The administrator uses the cloud migration tool to change their NMS native user login.
 - You can use UI buttons in the cloud migration tool to add either a prefix or suffix to all login IDs in conflict.

Logging existing and new users into NMS in the cloud

When a user logs into the Dragon client, Dragon queries NMS to get the user login information for the user. Dragon uses the login to find the user profile folder for the user.

In all versions of NMS, user logins must be unique. When moving a user from an on-premise NMS (on-premise, private system) to NMS in the cloud (system shared with other Nuance customers), the user's login may already exist in the cloud.

NMS introduces changes that make it easier to move users to NMS in the cloud. When you move a user to NMS in the cloud, and the user login already exists in the cloud, that user login will have to be changed as a part of the migration process. To avoid having to rename the user profile folder, NMS provides Dragon with the user profile folder name (instead of the user login). Dragon uses this information to find the profile folder for the user and log them into the system.

For a new user, the NMS generates a folder name using the format login_GUID and returns this to Dragon. Dragon uses this value to create the profile folder for the new user. NMS only appends the GUID to the profile folder name, not to the user profile.

For example, for a new user profile "bob", the NMS generates the folder name: "bob_ 35B5CB9B-922B-47FB-AA20-AE2E515D9802".

"bob' is the name of the profile and is stored in the folder "bob_ 35B5CB9B-922B-47FB-AA20-AE2E515D9802".

When the user logs into Dragon, NMS authenticates the user's credentials and returns a unique name for Dragon to use to create the user's profile location.

After you upgrade a user account or a Dragon client to Nuance Management Server (NMS) in the cloud, users must log into the system using the Dragon client in connected mode. This action authenticates the user with the NMS and allows them to later use Dragon in disconnected mode.

The user cannot use Dragon in disconnected mode until they first login to Dragon in connected mode.

Chapter 3: Configuring sites

You can create and configure sites for your organization. Each site represents a location on a server where you store user profiles. Typically, each site corresponds to a physical location in your organization, such as a hospital, clinic, or data center. Often you need only one site for your entire organization. Sites help you define the structure of your *DM360 Network Edition Network*. The options that you choose for a site affect all of the user profiles stored in that location.

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Searching for an organization

The **Search Organizations** screen allows you to search for an organization by name, Organization ID, NPI, institution code, and/or license type.

To view and use the **Search Organizations** screen, you must have the rights to view more than one organization in the Nuance Management Console.

- 1. In the Nuance Management Console, click **Organizations**.
- 2. In the **Organizations** area, click **Search**.
- 3. On the Search Organizations screen, one or more of the following fields:
 - Name: The name of the organization.
 - Organization Id: An identifier that Nuance assigns to you as a customer.
 - Status: One of All, Enabled, or Disabled.
 - Institution code: The code for the transcription system used by the organization.
 - License type: A license type that the organization uses.
 - NPI: The unique National Provider Identifier for the organization.
- 4. Click the magnifying glass. The **Search Organizations** screen displays the search results with the following information:
 - Name: The name of the organization.
 - Organization Id: An identifier that Nuance assigns to you as a customer.
 - Institution code: The code for the transcription system used by the organization.
 - Status: One of All, Enabled, or Disabled.
 - Users: The number of users in the organization.
- 5. To view and modify sites, groups, and settings for an organization, select the organization and click **Manage** (the bottom right of the screen). Clicking **Manage** makes the selected organization the 'current' organization in the Nuance Management Console. All organization fields in the Nuance Management Console will use the selected organization as the default value.
- 6. To view details about an organization, select the organization and click **Details**. This action displays the **Organization Details** screen.

Finding and managing organization data

NMS introduces changes to the **Manage Organization** screen to help you manage an organization's data.

When you first open the **Manage Organization** screen, the **Organization** field displays the name of the currently managed organization. You can change the value in this field. Changing the value will change the data that the **Manage Organization** screen displays.

The left side of the **Manage Organization** screen displays a tree-like representation of the current organization:

- The first element in the tree is the current organization.
- The second element in the tree is the sites element. To view the sites in the current organization, expand the sites level.
- The third element in the tree is the groups element. To view the groups in the current organization, expand the groups level.

To view information about users that are part of a site in the organization, or part of a group in the organization, in the tree, select the site or group. The Nuance Management Console displays the following information about the users at that level:

- First Name: The first name of the user.
- Last Name: The last name of the user.
- Login Id: The login name of the user.
- Licenses: The licenses that the user has.
- **NPI**: The National Provider Identifier (NPI).number (a unique number that identifies the organization) associated with the user.

Searching for sites, groups, and users in an organization

The tree structure on the left side of the **Manage Organization** screen contains an element called 'Click here to search'. This item is at the same level as the organization element in the tree. Use the 'Click here to search' item to search for sites, groups, and users in an organization.

- 1. Click the 'Click here to search' item. A search field appears to the right of this item.
- 2. In the search field, enter search criteria. Search for sites and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
- 3. After you enter the search criteria, click the magnifying glass.
- 4. The **Manage Organization** screen displays the search results under the 'Click here to search' item as follows, where x is the number of matched items for that object:

- Sites (x)
- Groups (x)
- Users (x)
- 5. To view sites, groups, or users that matched the search criteria, under the 'Click here to search' item, expand the Sites, Groups, or Users level.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Using right-click actions to find and manage organization data

In the **Manage Organization** screen, you can use right-click actions to find and manage objects in the organization tree.

Organization level

- To view details about an organization, right-click the organization and select **Details**.
- To set an organization as the default organization, right-click the organization and select **Set as default**.
- To add a site to an organization, right-click the organization and select Add Site.
- To add a group to an organization, right-click the organization and select Add Group.

Site level

- To view details about a site, right-click the site and select **Details**.
- To add a site to an organization, right-click a site and select Add.
- To delete a site, right-click the site and select **Delete**.
- To add a group to an organization, right-click a site and select Add Group.

Group level

- To view details about a group, right-click the group and select **Details**.
- To copy a group, right-click a group and select **Copy**.
- To add a group to an organization, right-click a group and select Add
- To delete a group, right-click a group and select **Delete**.
- To add a user account to a group, right-click the group and select Add User Account.

User level

- To view details about a user, right-click the user and select **Details**.
- To add a user, right-click and select Add.
- To delete a user, right-click the user and select **Delete**.
- To create back up copies of one or more user profiles, right-click a user and select **Backup** user profiles.
- To restore one or more use profiles, right-click a user and select **Restore user profiles**.
- To request Dragon logs for a user, right-click the user and select **Request Dragon logs**.
- To view client logs for a user, right-click the user and select **Client Logs**.

Configure product settings for an organization

An administrator sets many product settings at the organization level. On the **Organizations Details** screen, the **Products** tab contains expandable areas that contain settings for different products that use the Nuance Management Server and the Nuance Management Console.

The settings for a product are only visible if the administrator has the "Manage" right for the particular product.

- 1. In the Nuance Management Console, click **Organizations** > **Search**.
- 2. In the Organizations area, click Details.
- 3. On the Organizations Details screen, click Products.
- 4. Set one or more of the following settings.

DM360 Network Edition

These settings replace the settings in the DM360 Network Edition Settings tab.

You must have the 'Manage DM360 Network Edition' right to view and modify these settings.

Encrypt patient info: By default, this option is automatically checked. You can click the box to uncheck the option. When healthcare providers dictate, *Dragon Medical Clients* automatically save interim Dragon Recorded Audio (**.DRA**) files it creates so that the *Profile Optimizer* can process dictated audio and transcribed text. If the provider corrects any of the dictated text, the *Dragon Medical Client* automatically stores interim files related to these corrections in **.enwv** files.

If you have enabled this option, *Dragon Medical* encrypts these interim .**DRA** and .**enwv** files before storing them in the local or master user profile directories to help ensure patient privacy. Due to the restrictions mandated by privacy regulations (such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and EC 95/46 Directive in Europe), only *Dragon Medical* can open these encrypted .**DRA** and .**enwv** files and only for its internal use. **Dragon Pad**, even within the *Dragon Medical Client*, can never open these encrypted interim .**DRA** and .**enwv** files.

You might choose not to encrypt these files if you already have safeguards in place to protect your data. For example, if your client workstations are running an application that encrypts all data written to the local hard drive, you could choose not to encrypt patient data.

For more information on encrypting patient data, see *Encryption of patient health information* on page 224.

Upload user data to Nuance for research purposes: Click/select this check box to upload data from your dictation and user profiles to Nuance so that the company can improve future versions of the product and further enhance speech recognition technology. The data transferred is encrypted.

Deployed Version: The version of the Dragon client that your organization is using. The NMS downloads items that are specific to the version of the Dragon client that you specify in this field.

Download from cloud: Check this option to enable the NMS to download from the cloud (Nuance data center).

Download locally: Check this option to enable the NMS to download the DragonMSI installation file and documentation from the local computer.

Admin manual URL: The path where the Nuance Management Server Administrator Guide PDF file is located on the NMS Server. The default path to the guide is IISROOT\NMC\links.

Client installation URL: The path to where the .msi installation file for the Dragon Medical Client is located on the NMS Server. The NMS maps the **Install DM360 Network Edition** icon to location.

Client user guide URL: The path to where the Dragon Medical User Guide PDF file is located on the NMS Server.

Enable US Settings: Set this option to manage US settings in the Nuance Management Console.

Enable UK Settings: Set this option to manage UK settings in the Nuance Management Console.

Nuance Management Server

These settings replace the settings in the **NMC Settings** tab.

You must have the 'Manage NMS' right to view and modify these settings.

Retain audit events for <u>days</u>: When an event occurs that appears in the list of events under the **Audit Events** tab (under **Utilities**), Nuance recommends you keep that event in the list until you have taken any action its occurrence necessitates. In this text box, enter the number of days you want the event to remain in the list before NMS Server should automatically delete the event.

Retain message events for <u>days</u>: When a message appears in the list of messages under the **Messages** tab (under **Utilities**), Nuance recommends you keep that message in the list until you have taken any action you'd like to take in response to it. In this text box, enter the number of days you want the message to remain in the list before NMS Server should automatically delete the message.

Retain dictation upload history for <u>days</u>: In this text box, enter the number of days to keep upload tracking data before the NMS server deletes the history.

Notify administrator on incomplete dictation uploads after ____ minutes: In this text box, enter the number of minutes to that occur before the NMS server notifies the NMS administrator about an incomplete dictation upload.

NMC Inactivity timeout in ____ minutes: The number of minutes the NMS waits before logging out an inactive user.

360 | SpeechAnywhere Services (SAS)

You must have the 'Manage Speech Anywhere' right to view and modify these settings.

NMS on-premise server URL: The URL address for the server (NMS call forwarder) that Dragon Medical 360 | Direct uses to query the NMS for an on-premise call redirector when utilizing LDAP/AD authentication.

In the Topic/ConText Mapping section:

Language: The language for a topic.

Add Language field: Press this button to add a language from the Add Language drop-down list to the Language field.

Add Language drop down list: A list of languages you can select for a topic.

In the User Auto-provisioning section:

Enable auto-provisioning for this product: Check this option to have the NMS to automatically place a user into a group when the user is created.

Place users in group: If 'Enable auto-provisioning for this product' is checked, the NMS automatically places a new user in the group you specify in 'Place users in group'. The default value is Generated.

DM360 Recorders (Common)

You must have the 'Manage DM360 Mobile Recorder' or 'Manage DM360 Recorder.' right to view and modify these settings.

Default System: displays the name of the transcription system the organization works with. If the organization is not set to work with a transcription system, the field value is **None**.

NMS On Premise server URL (DM360 Recorders): the URL of the NMS server (on-premise).

DM360 Mobile Recorder

You must have the 'Manage DM360 Mobile Recorder' right to view and modify these settings.

For details about inpatient support, see "Inpatient support." in the NMC Help.

In the User Auto-Provisioning section:

Enable auto-provisioning for this product: Check this option to have the NMS to automatically place a user into a group when the user is created.

Place users in group: If 'Enable auto-provisioning for this product' is checked, the NMS automatically places a new user in the group you specify in 'Place users in group'. The default value is "Generated".

DM360 Recorder

You must have the 'Manage DM360 Mobile Recorder' right to view and modify these settings.

In the User Auto-Provisioning section:

Enable auto-provisioning for this product: Check this option to have the NMS to automatically place a user into a group when the user is created.

Place users in group: If 'Enable auto-provisioning for this product' is checked, the NMS automatically places a new user in the group you specify in 'Place users in group'. The default value is "Generated".

EHRI

You must have the 'Manage EHRI' right to view and modify these settings.

For more information about the settings in this section, see Overview of EHR and EHRi settings.

In the EHR Settings area:

Type – (default value = None): The brand of EHR that EHRi is interfacing with. The option is a pull down list of EHR options that EHRi can interact with. You should set this option first and before you set any other EHRi options as it affects the options that are configured for the particular feature. All features supported by EHRi require this option to be set properly.

Interface – (default value = empty drop-down): The interface to use with the selected EHR type. The drop-down is populated with all the interfaces that are supported by the EHR type that you selected with the Type drop-down.

Application – (default value = empty string): The name of the EHR application that EHRi connects to.

User name and **Password** – (default value = blank): User credentials for the EHR application. These two fields contain the username and password that EHRi must provide to the EHR. Some EHRs require unique credentials for each login session. For those EHRs, the client of the EHRi component (Dragon) supplies the EHR credentials and these settings are ignored.

For more information about how to configure these fields, see the 'Adaptor Settings' section of 'Configuring the EHRi service' in the NMC Help.

Config EHR Interface: Press this button to open the EHRi Hyperspace Adaptor dialog box and set options for the EHRi.

On the dialog box, with the exception of the **Hyperspace Environment ID** setting, only change the default values at the request of Nuance support or engineering.

- EHR Heartbeat Interval (seconds) (default value = 120 seconds): Indicates how often the adaptor should send a request to the EHR during idle periods. A request for a patient identifier is made to the EHR if the connection between the EHRi adaptor and the EHR application has not been checked or exercised within the time period determined by this option. The request message is a ping to test the health of the connection between the adaptor and the EHR. Valid values are 30 to 300 seconds.
- Outstanding EHR Request Timeout (seconds) (default value = 20): Set how long the EHRi services waits for a response for an outstanding request to the EHR. In communication with a client of the EHR, only one request can be outstanding at any given time. When there is an outstanding request, the EHRi service queues requests to the EHR. As soon as a response is

received to the current request, the next request in the queue is sent to the EHR.

Set this value to the number of seconds that the EHRi service waits for a response from the EHR for an outstanding request. If a request response is not received within this time, the EHRi service cancels the request and sends the next request in the queue to the EHR. This provides a method for freeing up requests in the request queue. Allowable values for this setting are 1 to 60 seconds.

• Hyperspace Environment Id (default value = empty string): All sessions established with the EHR must be associated with one of Epics defined environments. The environment ID is established by Epics configuration settings. When a client attempts to open a session with the EHR, it can specify this environment ID. If the client does not specify an ID, a dialog appears, allowing the user to enter an ID.

Since EHRi is an automated application that can establish sessions without user interaction, an environment ID must be specified to avoid the display of the dialog. Environment IDs are unique to each customer. The appropriate environment ID must be specified in this setting in order for EHRi to work correctly with the Epic EHR. Consult with your EHR administrator to obtain the correct environment ID to enter in the **Hyperspace Environment Id** field.

- EHR continues running after client disconnect (default value = true): If this value is set to true, Hyperspace keeps running when the EHRi host application closes. If this value is set to false, Hyperspace stops running when the EHRi host application closes. This value should be set to true and only modified at the direction of Nuance engineering.
- Patient Info Schema URN (default value =urn:epicsystems-com:PatientAccess.2004-8.Custom.DemographicsAndAppointments): Represents a string that is used to identify the schema to apply to patient information requests on Epic Hyperspace systems. This string is used to obtain the latest patient information from Hyperspace.
- **Patient Info Error Schema URN** (default value = urn:epicsystems-com:PatientAccess.2004-8.Custom.DemographicsAndAppointments.Error): Contains the string that is used to identify the schema to apply to patient information errors reported on requests for patient information. If an error occurs during the retrieval of patient information, an error message is returned instead of patient information.

In the EHRi Settings - Subscription Service area:

Heartbeat Interval (sec) (default value = 120): EHRi clients establish a session with the subscription service to publish or subscribe to data. This session must be exercised periodically to assure both ends of the session are still present. This value indicates the maximum number of seconds a session can remain idle before a heartbeat message is sent to the subscription service. The subscription service uses a default 5 minute (300 seconds) timeout. The allowable range is between 30 and 300 seconds.

Value	Description
IPAddress	Default value for the F1 drop-down. The client IP address. You should not need to change this default in most cases.
ClientName	Client machine name.
SessionType	Type of terminal service session the application is executing in.
SessionID	Citrix session ID.
User	Client user name.

Currently, only DM360 Network Edition uses the client IP Address as a key, though at some sites, you may need to include one or more of the additional key fields to uniquely match the desk-top client to a Citrix session.

If you need to use multiple key fields to match a client to a Citrix session, be sure that the fields you choose are used on both the client and the Citrix server. For example, if the desktop client user ID is not used to launch the Citrix session hosting the EHR, you can't use User as a key field.

Publish/Subscribe Matching Keys: These values are used to connect a desktop client to a server-side component that publishes EHR information. These fields are populated with session information that is available on both publisher and subscriber components. At least one field (F1) must be configured for these matches to work. Use the F1, F2, and F3 drop-downs to choose key fields.

Setup Communication: Click this button to display the Communication Setup dialog. The dialog contains the following fields:

Field	Description
Server Name (default=empty string)	The name of the server where the subscription service is executing. This server name is added to a string, making up a URL that identifies where the subscription service is listening for requests. Note: Clients that access the subscription service must be able to resolve the server name to the appropriate IP address. This means a DNS (Domain Name Server) must be configured for clients to resolve the subscription services server name. If the customer does not provide a name server for their environment, the IP address of the subscription service host can be used in place of the server's name. The IP address that you assign must be static.
Protocol/Security (default= Tcp_Win- dowsSecurity)	The protocol the EHRi Subscription service (ESS) uses for client com- munications. This setting must reflect the corresponding values in the ESS configuration file.
	All clients of the ESS use this protocol to establish a connection to the ESS. Currently, clients residing on the intranet are a requirement for using EHRi services. Most customer environments will require secure communications with the ESS as messages may contain sensitive data. The unsecure options are provided mainly for diagnostic purposes or in rare cases where data secu- rity is not required.
	Valid values are:
	 Tcp_WindowsSecurity – The default option and the easiest of the secure protocol options to install. It requires that clients of the ESS use authentication credentials that are part of the same Windows domain. This includes all desktops that will have Nuance client applications that use EHRi services. Generally, this requires all clients and ESS reside in the same Windows domain. For customers with Citrix environments, servers in the Citrix farm that host an EHR application must also be included as part of the Windows domain. Tcp_CertificateSecurity – This option uses a separate (customer supplied) certificate that is installed on the server hosting the ESS. The certificate must be obtained and installed prior to installation of the ESS application. This option is the least preferable of all options as the per-
	 Tcp_NoSecurity – This option is the preferred unsecured protocol to use if the customer will allow unsecured communication of EHR data.

Field	Description
	 Http_CertificateSecurity – This option uses a separate (customer supplied) certificate that is installed on the server hosting the ESS. The certificate must be installed and registered with the port selected prior to installation of the ESS application. It is the next preferred secured protocol (after Tcp_WindowsSecurity), and should be used where Windows authentication/security is not available. Http_NoSecurity - This option can be used if the customer will allow unsecured communication of EHR data. It may be necessary in cases where some EHRi components are located outside the company firewall.
Port (default=906)	 TCP port number the subscription service is listening on for client requests. This value is set by default based upon selection of the Protocol/Security setting but can be modified to a value in the range of (0 to 50000). Modification from the default setting should be made only after it is determined that there is a conflict with another application using the same port. If you change the port number after installation of the subscription service, you will need to assure the new port number is exposed externally on the ESS host. This can be accomplished through Windows Firewall configuration by modifying the Inbound Rule under Advanced Settings. Use the following port numbers with each protocol you set in the preceding field: Protocol/Security Port Tcp_WindowsSecurity 906 Tcp_CertificateSecurity 907 Http_CertificateSecurity 8750 Http_NoSecurity 8751

In the EHRi Settings - Diagnostics area:

These settings control the level of detail and the history of logging activity for an EHRi component.

Each of these options allows you to select a trace level that indicates the level of detail that is logged to a given log component. You should normally use the default values for each Diagnostic setting.

Log file (default value = Information) – Specify the level of detail to include in a log file. Higher levels increase the amount of logging data but reduce the overall history of logging information. Allowable values are (in order of increasing details): Off, Critical, Error, Warning, Information, Verbose.

Console (default value = Information) – The level of detail to log to the hosts console window. This option only applies to EHRi components hosted in a Windows Console type of application. This is usually identified as a black window with a block cursor in single text-only display. Allowable values are (in order of increasing details): Off, Critical, Error, Warning, Information, Verbose.

Client events (default value = Information) – The level of detail to send to clients that subscribe to EHRi log events. Allowable values are (in order of increasing details): Off, Critical, Error, Warning, Information, Verbose.

MS event log (default value = Warning) – The level of detail to send to the Microsoft application event log. Allowable values are (in order of increasing details): Off, Critical, Error, Warning, Information, Verbose.

In the EHRi Settings - Log File Settings area:

The log file options use a rolling set of log files. Logs are written to a file until it the log file reaches a maximum size. At that point, the file closes and another is log file opens for writing. This process continues until a maximum number of log files are reached.

When the number of log files reaches the maximum level, the EHRi deletes the oldest log file opens a new. This prevents the EHRi from exhausting the disk space of the host computer.

Desktop Environment

Log file size (KB) (default value = 1000000) (10Mbytes) – The maximum length or size, in bytes, that a log file can reach. When this size is reached, the file closes and another file opens for logging. This setting applies to EHRi components deployed outside of a virtual machine host session (such as Citrix).

Max log files (default value = 50) – The maximum number of log files allowed on the EHRi host computer. When this limit is reached, the EHRi service removes the oldest file and creates a new one. This setting applies to EHRi components deployed outside of a virtual machine host session (such as Citrix).

Citrix environment

Log file size (KB) (default value = 100000) (100Kbytes) – The maximum length or size, in bytes, that a log file can reach. When this size is reached, the file closes and another file opens for logging. This setting applies to EHRi components deployed in a Citrix environment. These log files are generally smaller and more numerous than the logs files in a desktop environment.

Max log files (default value = 500) – The maximum number of log files allowed on the EHRi host computer. When this limit is reached, the EHRi service removes the oldest file and creates a new one. This setting applies to EHRi components deployed in a Citrix environment. These log files are generally smaller and more numerous than the logs files in a desktop environment.

In the EHRi Settings - EHR Feature Applications area:

The settings for EHR Feature Applications describe options that are specific to Computer Assisted Physician Documentation.

In Computer Assisted Physician Documentation, Dragon retrieves text from an edit control in an EHR and passes the text on to other components for natural language processing.

Only certain types of EHR edit controls can be processed. These controls are called Allowable Edit Controls (AECs). Each EHR type has a list of the AECs it supports for Computer Assisted Physician Documentation.

For a given EHR type selected under EHR Settings above, the following list of AECs are displayed (by default):

Allowable Edit Controls for CAPD: specify additional AEC classes or change existing ones. The default values for each EHR type should generally suffice, however.

New AEC Class - Name: The name of the edit control to support for an EHR type.

Clintegrity 360 | CAPD section

You must have the 'Manage CAPD' right to view and modify these settings.

Secret key: the key provided by Nuance

Base Clintegrity 360 | CAPD URL: the URL for the environment that Computer Assisted Physician Documentation will connect to. The URL uses the following format:

- Test environment: https://www.escriptiontest.com/CUSTOMERNAME/
- Production environment: https://CUSTOMERNAME.escriptionasp.com/

CLU

You must have the 'Manage CLU' right to view and modify these settings.

In the User Auto-Provisioning section:

Enable auto-provisioning for this product: Check this option to have the NMS to automatically place a user into a group when the user is created.

Place users in group: If 'Enable auto-provisioning for this product' is checked, the NMS automatically places a new user in the group you specify in 'Place users in group'. The default value is "Generated".

Reporting

You must have the 'Manage Reporting' right to view and modify these settings.

Entity type: The type of the entity, for example 'Customer'.

PS360 Mobile

You do not require a specific right to view and modify these settings.

NMS On Premise server URL (PS360 only): The URL for the NMS server (on-premise).

Configuring a site in your medical facility

A site represents a location on a server where you store user profiles. It typically corresponds to a physical location in your organization, such as a hospital, clinic, or data center. An organization can contain multiple sites. The options that you choose for a site affect all user profiles stored in that location. See *Setting site Data storage settings* on page 98.

To add a site to an organization

- 1. In the Sites area, click Add. The Nuance Management Console displays the Site screen.
- 2. Use the **General** tab to configure or view the following:
 - **Organization**: View the name of the account associated with the site.
 - **NPI**: The National Provider Identifier a unique number that identifies your organization.
 - **ID**: Enter the unique identification number that you want to associate with the site. This field is required. When you create a site (Click **Add** in the **Sites** area), the Nuance Management Console automatically creates a unique site ID and places it in the **ID** field. The ID is equal to the highest site ID that exists in the organization plus one. You can edit the automatically generated site ID.
 - Name: Enter the name of the site. This field is required.
 - System Site Id: The system id for the site.
- 3. Use the Address tab to configure the following:
 - **Street 1**: The first street address for the site.
 - Street 2: A second street address for the site.
 - Street 3: A third street address for the site.
 - **City**: The City associated with the site.
 - State: The state associated with the site.
 - Zip: The zip code associated with the site.
 - **Country**: The country associated with the site.
- 4. Use the DM360 Network Edition tab to configure the following:
 - Miscellaneous settings For details, see Setting miscellaneous site settings on page 81
 - Master user profile settings For details, see <u>Setting general site settings for master user</u> profiles (used to be **Roaming** settings).
 - Data settings For details, see Setting site Data storage settings on page 98.
- 6. Click **Save** to save the settings for this site. When you save the settings, the **Groups** list becomes visible on the **General** tab. It is empty until you add groups as members of the site. See <u>Creating groups</u>.

Setting miscellaneous site settings

General	Address	DM360 Network Edition
- Misce	llaneous	
Promp	t users to log	out after 30 minutes
Log ou	it users who d	lo not respond after 60 seconds
Insert 7	Text & Graphi	cs command using Type keys (Shift+Insert)
LDAP a	authentication	Disabled 🔹
🗆 Enab	le SSO auther	ntication
Disal	ble automatic	switching of dictation source to an available default
✓ Displ	lay vSync Stat	us Tray Icon
□ vSyn	c: Full Text Co	ntrol
Rest	ore Defaults	

On the DM360 Network Edition tab, click Miscellaneous to view or hide these settings:

• **Prompt users to log out after** <u>minutes</u>: The default is 30 minutes, the minimum is 5 minutes.

You can enter any value between 1 and 1440 minutes, but it should be long enough that *Dragon Medical* will not think that the users have finished dictating when they are only pausing. When dictating, users should be warned not to pause for more than the number of seconds you configure here. At the end of their dictation, users must record silence for at least that number of seconds.

• Log out users who do not respond after _____ seconds: By default enabled, set to a value of 60 seconds, and applied to all providers associated with the site that this user account is associated with.

The option instructs *Dragon Medical Client* to log out this provider after the client has been idle and the provider has been prompted to respond, but the number of seconds you indicate here elapses without a response.

The **Log out users who do not respond after** <u>seconds</u>: field accepts a numeric value (seconds) up to three characters in length.

• Insert Text & Graphics command using ___: The default value is Type keys (SHIFT + INSERT). The correct setting depends on the EHR system that the user is dictating into. In most cases the default setting is sufficient.

This option enables the user to insert Text & Graphics command contents into the dictated document using one of the following:

- Type keys (Shift + Insert)
- Hook Paste
- Simulate Keystrokes

- Type keys (CTRL+V)
- Type keys (Ctrl+V) SDK
- Use Windows Paste Command
- LDAP Authentication This is disabled by default. Use the drop-down to enable, Single Domain, or Multi Domain LDAP. See *Configuring LDAP* on page 33
- Enable SSO authentication: This is disabled by default. Check this box to enable EHR Single Sign- on. For more information about configuring EHR Single Sign-on, see *Creating Single Sign-On user accounts* on page 36.
- **Disable automatic switching dictation source to an available default:** This is deselected by default.

If you select this option, the user will not automatically be switched to an available default dictation source if the currently configured source is unavailable.

- Display vSync Status Tray Icon: Show the vSync status graphic in the tray area.
- vSync: Full Text Control: This is left empty by default. Supports the *Dragon* Full text control functionality in applications running on a Citrix server. For more information see the *Dragon in a Citrix Environment Administration Guide*.

Choosing a network location for master user profiles

At any installation of Dragon Medical 360 | Network Edition, you must determine where on the network the master user profiles for each site should be located.

Dragon Medical 360 | Network Edition lets you store master user profiles on a networked machine that is not a server, on a Windows server, or on a web server with or without SSL—allow-ing healthcare providers to access their master user profiles over the Internet.

Caution:

To control the volume of traffic attempting to access the same location at once on your Dragon Medical 360 | Network Edition network, Nuance advises that each subdirectory representing a particular site inside that master user profiles storage location contain a maximum of 200 master user profiles.

1. If you choose to use a networked machine or Windows server, you should determine the path to where the master user profiles will reside. You can create multiple network storage locations, each location corresponding to a different site.

You can access your master user profiles through these types of connections:

- Mapped Drive—Connects to a shared network folder with a drive letter assigned to it.
- UNC Path—Connects to a shared network folder using the Universal Naming Convention (UNC). The UNC is a way to identify a shared file on a computer or network without having to know the storage device it is on. Format is: \\<servername>\<sharename>\<filename>.

- HTTP (http:)—Connects to machine on the Internet or your local intranet running a web server. Format is: http://<myserver.com>/<webdav>
- HTTP with SSL (https:)—Connects to machine on the Internet or your local intranet running a secure socket layer (SSL) web server. Format is: https://<myserver.com>/<webdav>
- 2. The location(s) you select must be accessible to all computers where healthcare providers dictate. Each location must have adequate storage space for the master user profiles.
- 3. The *NMS Server* itself must be able to access each user profile location using a UNC path.
- 4. If you choose to use an HTTP server, choose one of the supported web servers:

Supported Web Servers

- Microsoft Internet Information Services (IIS) 6.0 (on 2003), or 7.0 or 7.5 (on 2008)
- Apache HTTP Server 2.0.54 or higher (on 2003) or 2..16 or higher (on 2008)
- 5. Be sure you have information about how Dragon Medical Clients should access the web server:
 - Network location: The URL address of your HTTP server.
 - **HTTP settings:** For your **http** (or **https**) connection you need to know authentication, firewall, and proxy server information.

Notes:

- You must install the WebDAV web server application before you can set up an HTTP or SSL WebDAV server.
- Using Internet Information Server 7.0 or 7.5
 - You should use Basic authentication, as Dragon Medical 360 | Network Edition does not support Digest authentication with the Internet Information Server.
- Using Apache HTTP Server 2.0.54 and higher:
 - Internet Master User Profiles—You must turn on redirects when using Digest authentication with Apache.
 - Be sure that the server has Web-based Distributed Authoring and Versioning (WebDAV) turned on. The WebDAV Apache module is available free of charge at http://www-webdav.org/mod_dav/.

Setting general site settings for master user profiles

In the **DM360 Network Edition** tab, under **Master user profile**, you enter information about where on the Dragon Medical 360 | Network Edition *Network* the servers and client workstations can find the master user profiles, stored at a central location on the network, whether on the *Nuance Management Server*, on the *Profile Optimizer Server*, or on a separate workstation or server of their own.

Each master user profile initially contains information about only the user's language, vocabulary, accent, and audio input device—all data that comes from the *Dragon* client. Then, every time the provider dictates, these profiles gather information about the provider's unique pronunciation and speech patterns. The Nuance speech recognition processes collect and integrate this information into individual acoustic and language models. By integrating new data into acoustic and language models, the *Profile Optimizer Server's Speech Nodes* make the results of the speech recognition process more accurate.

By storing the master user profiles at a network location accessible to all DM360 Network Edition components, including both servers and *Dragon* clients, Dragon Medical 360 | Network Edition allows each healthcare provider to dictate on any client in the network using the same user profile at every location. You can achieve consistently high quality speech recognition with Dragon.

Choosing master user profile settings

Miscellaneous				
Master user profile	e			
Master user profile dir	rectories Default	Configure		
Initiate Speech	Profile Upgrade to DMNE Version 2.0			
Local cache directory	Directory		P	
<u></u>	mode			
Allow disconnected	mode to saves local acoustics			
Allow disconnected		ork traffic)		
Allow disconnected Saving the user als Access network at	o saves local acoustics	ork traffic)		
Allow disconnected Saving the user als Access network at Ask before breaking	o saves local acoustics user open/close only (Minimizes netwo g lock on network users	ork traffic)		
 Allow disconnected Saving the user als Access network at Ask before breaking Set audio levels on 	o saves local acoustics user open/close only (Minimizes netwo g lock on network users	ork traffic)		
 Allow disconnected Saving the user als Access network at Ask before breaking Set audio levels on Copy DM360 Network 	o saves local acoustics user open/close only (Minimizes netwo g lock on network users each machine	ork traffic)		
 Allow disconnected Saving the user als Access network at Ask before breaking Set audio levels on Copy DM360 Network Always copy acoust 	io saves local acoustics user open/close only (Minimizes netwo g lock on network users each machine ork Edition log to network			
 Allow disconnected Saving the user als Access network at Ask before breaking Set audio levels on Copy DM360 Network Always copy acoust 	io saves local acoustics user open/close only (Minimizes netwo g lock on network users each machine ork Edition log to network tic information to network			

Master user profile directories

Master user profiles directories were called "Roaming user" directories in earlier editions of Dragon Medical.

Click the **Configure** button to set the information each machine in the DM360 Network Edition network that needs to locate the master user profiles on the network. The **Master User Profile Directory Settings** appears. This dialog box is similar to the **Roaming Directory Settings** in other editions of *Dragon Medical*.

In the dialog box, you see three tabs:

- The General tab on page 85
- The HTTP Settings tab on page 86
- The SSL Settings tabs on page 87

The General tab

General HT	TP Settings	SSL Settings	
		Name	Default
DMN	IE Version 1.x	Speech Profile Location	Directory P
DMNE Version 2	.0 (or higher)	Speech Profile Location	Directory
	use to a	coss the User Profiles T	his setting will need to equate to the same location
			ng in the Speech Node collection identified below.)
	as the U		
	as the U	NC Path to Profiles settin I network drive	ng in the Speech Node collection identified below.)
	as the U Mapped	NC Path to Profiles settin I network drive	ng in the Speech Node collection identified below.) S:\ or S:\Profiles
	as the U Mapped UNC Pa	NC Path to Profiles settin I network drive	ng in the Speech Node collection identified below.) S:\ or S:\Profiles \\DFSName\Profiles
	as the U Mappec UNC Pa HTTP HTTPS	NC Path to Profiles settin I network drive	ng in the Speech Node collection identified below.) S:\ or S:\Profiles \\DFSName\Profiles http://ProfilesServer.com/webdav

Under the **General** tab, you indicate the location where *Dragon Medical Client* workstations will later find the master user profiles:

Name—(Required) Name that you want dictating healthcare providers to see in the *Dragon Medical Client* GUI when it refers to the master user profiles location.

DMNE Version 1.x Speech Profile Location— Enter the location of the version 10.5 user profile. This is the user profile location that is used with DM360 Network Editionversion 1.0 (SP3 or earlier). The *Dragon Medical Client* uses this path to access the master user profiles from the workstation. You can click the magnifying glass to the far right in this text box to browse to where the user profiles are located. Or you can explicitly enter the path.

The location must be accessible to all server machines and workstations on the network and can be either a mapped drive, a UNC location, or a web server URL (http:// or https:// for a secure web server). If you cannot browse to the location, when you explicitly enter the path, be sure it is in the format shown below based on the way servers on your network will access the master user profiles location:

- Mapped network drive—Use this format:
 drive letter>:\<folder name>. For example,
 Y:\Profiles.
- UNC Path—Use this format: \\servername\sharename\path\filename. For example, \\MyServer\Profiles
- **HTTP**—Use this format: http://myserver.com/webDAV. For example, http://Profiles/MasterUserProfilesDir
- **HTTPS**—The format is: https://myserver.com/WebDAV. For example, https://Profiles/UserProfilesDir

DMNE Version 2.0 (or higher) Speech Profile Location— enter the location of the version 12 user profile. This is the user profile location that is used with DM360 Network Edition, version 2.0 or higher. The *Dragon Medical Client* uses this path to access the master user profiles from the workstation. You can click the magnifying glass to the far right in this text box to browse to where the user profiles are located. Or you can explicitly enter the path.

The location must be accessible to all server machines and workstations on the network and can be either a mapped drive, a UNC location, or a web server URL (http:// or https:// for a secure web server). If you cannot browse to the location, when you explicitly enter the path, be sure it is in the format shown below based on the way servers on your network will access the master user profiles location:

- Mapped network drive—Use this format:
 drive letter>:\<folder name>. For example, Y:\Profiles.
- UNC Path—Use this format: *servername\sharename\path\filename*. For example, \\MyServer\Profiles
- **HTTP**—Use this format: http://myserver.com/webDAV. For example, http://Profiles/MasterUserProfilesDir
- **HTTPS**—The format is: https://myserver.com/WebDAV. For example, https://Profiles/UserProfilesDir

Speech Node Collection— Use this drop-down list to select the speech node collection for the master user profile location. See <u>Configuring Speech Node Groups</u> for more details.

DMNE v1.x (UNC)— Enter the UNC path for the Speech Node Collection for the version 10.5 user profile.

DMNE v2.0 or higher (UNC)— Enter the UNC path for the Speech Node Collection for the version 12 user profile.

The HTTP Settings tab

If Master User Profiles Are Located on a Web Server

If you have set up a web server (http) to house your master user profiles, then under the **HTTP Settings** tab, you set up access to that web server. For more information see *Setting site HTTP connection settings for master user profiles* on page 91.

The SSL Settings tabs

If Master User Profiles Are Located on an SSL Web Server

If you have set up a secure socket layer (SSL) web server (https) to house your master user profiles, then under the **SSL Settings** tab, you set up access to that secure web server. For more information see *Setting site SSL connection settings for master user profiles* on page 95.

Note: You must install a third-party web server application called WebDAV to set up a compatible WebDAV HTTP or SSL server. WebDAV software is required in order to access and secure master user profiles on the Internet location. The WebDAV application is available free of charge at <u>www.webdav.org</u>.

Configuring Dragon Settings

You check the options to indicate how each healthcare provider works with master and local user profiles when dictating at a *Dragon Medical Client* workstation:

Local cache directory

Caution:

Nuance recommends that you never change this directory, but retain the default location.

- If you allow users to dictate in **Disconnected** mode, you should not change this directory because it could lead to data loss and other unpredictable results.
- Remember that this setting applies to every client on the network; if you have workstations with different versions of Windows (XP, Vista, 7, 8, and 8.1), the same path might not exist on all those workstations.

In a rare instance where Nuance advises you change this directory, you can click the **Browse** button to find or create a new location or explicitly enter the path into the text box.

When a healthcare provider logs in to the network, *Dragon* transfers a copy of the master user profile for that provider from the machine hosting the profiles on the network to the local machine. That local copy is called the *local user cache profile*. In this text box, you see the location where the copies of the user profiles are stored on the workstation where the *Dragon Medical Client* resides. This location, always called **<Master Local>** (equivalent to **<Roaming Local>** in earlier editions of *Dragon Medical*) is:

\Documents and settings\All Users\ Application Data\NaturallySpeaking12\Roaming Users*display name\username*

- The *display name* is the name of the site that the master user profiles location corresponds to. You can have multiple network locations for master user profiles, usually a distinct location for each site.
- The *username* is the name of an individual healthcare provider's user account, used to identify the corresponding master user profile. A separate directory exists for each dictating healthcare provider. You cannot change the name.

Allow disconnected mode

For Dragon users that work off the network. Permits providers to log on to a *Dragon Medical Client* even when the workstation is not connected to the network, such as when the healthcare provider is working off-site on a laptop, the network is down, or for some reason the master user profiles directory (where the master user profiles are stored) is unavailable.

If your providers never dictate on a laptop, you might want to set this option temporarily before you convert local user profiles to master user profiles on the network, and then clear it when you are finished.

If you choose to allow providers to dictate in **Disconnected** mode, do not enable the **Remove local cache data after usage** option in the **Data** settings for the site. If you enable both set-

tings, when the provider logs out after dictating in **Disconnected** mode, the results of the provider's dictation end up being deleted from the local cache and all the work lost.

Saving the user also saves local acoustics

Select this box to have the client send both the acoustic model updates and the language model updates to the server.

If you do **not** select this option, the clients sends only the language model updates (changes to words and writing styles related changes) back to the server, not the acoustic model updates (changes based on the provider's correction of recognized text). Under these circumstances, since the acoustic model changes from the client are not saved, only the updates resulting from the ACO process on the profile optimizer are incorporated into the master user profile to avoid profile degradation.

Access network at user open/close only (Minimizes network traffic)

Integrates changes made in the local user cache profile into the master user profile only when a user logs out and not while the healthcare provider is dictating. If you do not select this box, then local changes to user configurable options are immediately transferred to the master user profile.

Ask before breaking lock on network users

Recommended for UNC and mapped drives. Select to keep the option of maintaining or breaking a network lock when opening a master user profile. Normally, network locks prevent a provider from opening a master user profile at the same time another provider is opening that profile. While this process does not take a long time, network problems can cause a lock to become "stuck" and not release when the opening process is completed. When this happens, the next time a provider tries to open his or her profile, the *Dragon Medical Client* displays a message stating that the profile is locked and offering the option of overriding the lock. If you do not want this message to appear and instead always want to break a network lock in this situation, you can clear this option to prevent the message from appearing. Because the presence of a lock can indicate a problem that needs to be addressed, Nuance recommends that you enable this option.

Notes:

- This option is valid for *Dragon Medical Clients* connecting to the master user profiles location using a mapped drive or UNC drive, but is not supported for users connecting over HTTP.
- Providers should be careful when in breaking a locked master user profile, because if the provider breaks a lock on one workstation when a provider on another workstation is writing to the master user profile, breaking the lock may corrupt the profile.

Set audio levels on each machine

Select this box to run the **Check your audio settings** option from the **Accuracy Center** window before your first session with a master user profile. This includes the **Volume Check** and the microphone **Quality Check**. Check this option if your providers are dictating on different machines or on a single machine, like a laptop, in many different locations. When a provider changes machines or locations, the audio setup data can vary depending on differences in the microphone and sound card, as well as differences in ambient sound levels of each master user profile location. In situations where *Dragon* detects a significant difference between operating systems, sound cards, microphones, or other hardware, the program will prompt you to run **Check your audio settings** even if you do not have this option selected.

Copy DM360 Network Edition log to network

Select this box to copy the **Dragon.log** file from the local workstation to the master user profile location whenever the program synchronizes the local and master user profiles. **Dragon.log** contains information that can help diagnose problems that your providers might encounter dictating with *Dragon Medical Clients*.

Note: The **Dragon.log** file will not be copied once the maximum size in the **Disk space** reserved for network archive option is reached.

Selecting this option can increase how long it takes the provider to log out. It can also limit the usefulness of acoustic and language model optimizations because it reduces the amount of acoustic data that can be stored in the network archive.

Always copy acoustic information to network

Select to copy the user's acoustic model to the master user profile location.

If you chose not to copy the user's acoustic information to the network, updates to the acoustic model that you make on one machine (for example, by correcting dictation and training words) are not available on other machines used by that particular provider until the *Profile Optimizer* has optimized that provider's profile. Therefore, if you do not optimize the master user profiles at least monthly, you should set this option. By always copying the acoustic information to the master user profiles location, you ensure these accuracy improvements are available when the healthcare provider logs in from another location. However, setting this option can increase the amount of time it takes to log out of a *Dragon Medical Client*.

The transfer of acoustic information based on this option's setting is not limited by setting the **Disk space reserved for network archive** option. For more information on this option, refer to *Setting site Data storage settings* on page 98.

New User Accounts will use DMNE Version 1.0 speech profiles

Select to have all new user accounts use version 10 profiles. This is for Sites that use NMS 4.1 or higher but have not yet upgraded Dragon clients to 2.0 or higher.

This option does not affect existing user accounts.

The option is disabled by default.

Setting site HTTP connection settings for master user profiles

Caution:

If you have never set up a web server before, do not attempt to do so; these instructions assume you have already installed the web server and have experience setting up a web server. Appropriate settings vary.

In the **Site** tab, under the **DM360 Network Edition** tab, you enter information about where you store master user profiles for the site. If you are storing the profiles on a web server, to set up the HTTP settings:

- 1. Click Master user profile.
- 2. Click Configure...
- 3. In the Master User Profile Directory Settings dialog box, click HTTP Settings.
- 4. In the **HTTP Settings** tab, you define and configure the connection to your web (HTTP) server.

General HTTP Settin	ngs SSL Settings		
Authentication		- 98	
Default user		Pro	mpt for user and password
Password			
Password			
Authentication type	Basic 🗸		
Firewall and Proxy Serve Use proxy server	rs		
	- 4		
Type Tun	inel Y		
Server		Port	0
User		Password	
		T dasmord	
Firewall data			
Miscellaneous			
Follow redirects	Never	Keep connection alive	
			-
Lock timeout	0 seconds ((0= use server default)	
Connection timeout	0 seconds	Timeout of inactive	
	1.5. I and the second		

Enter information about your connection in the text boxes under the sections in the dialog box:

- Authentication on page 92
- Firewall and Proxy Servers on page 92
- Miscellaneous on page 93

Authentication

Prompt for user and password

Select if users will be prompted for a username/password when they connect to the HTTP server.

Default user/Password

Set to the default username/password needed to connect to the HTTP server. Be sure to put the domain name followed by a backslash in front of the user login name; for example:

Nuance \JWyman. This is not a local login.

Authentication type

Set the type of authentication used on the HTTP server you specified as the **Address** in the **Master user profile location** dialog box. Select the type that indicates how your server is configured:

- **Basic**—Choose if the server is configured for Basic authentication, where the username and password are passed over the network as clear text.
- **Digest**—Choose if the server is configured for Digest authentication, where the passwords are never transmitted across the Internet in unencrypted form.

Note: For security reasons, be sure that anonymous logins are disabled on the HTTP or HTTPS server.

Firewall and Proxy Servers

Use proxy server

Select **Use proxy server** if *Dragon Medical Client* workstations are connecting to the **http**server through a proxy server.

Туре

Select the type of firewall used on the HTTP server from the drop-down list:

- HTTP —Select for a proxy server that specializes in HTML (web page) transactions.
- **Tunnel**—Select if client workstations are connecting to the server with tunneling software.
- Socks 4—Select for a SOCKS4 protocol that relays TCP sessions at a firewall host to allow application users transparent access across the firewall. SOCKS4 does not support authentication, UDP proxy. SOCKS4 clients require full Domain Name Service (DNS).
- Socks 5—Select for a SOCKS 5 protocol that relays TCP sessions at a firewall host to allow *Nuance Management Console* users transparent access across the firewall. SOCKS 5 supports

multiple authentication methods. SOCKS 5 clients use the SOCKS 5 server to perform the Domain Name Service (DNS) lookup.

Server

Enter the server name provided by your server administrator.

Port

Enter the port number accessed to connect to the proxy server or firewall.

User

Enter any username needed to log on to the proxy server or firewall.

Password

Enter any password needed to log on to the proxy server or firewall.

Firewall data

Enter any special authentication string provided by your server administrator.

Miscellaneous

Follow redirects

If you are storing the master user profiles on a server that redirects incoming connections to another location, you can define how the *Dragon Medical Client* handles these redirects by selecting one of the check boxes. Nuance recommends that you set redirects to either **Always** or **Same Scheme Only**, but always follow them.

- Never—Never follow redirects; ignores them.
- Always—Always follow redirects.
- Same Scheme Only—Permit only redirects using the same scheme as the client request.

Keep Connection Alive

Selecting this check box tells the client and server to keep the connection alive after the current session ends. If you have **Follow Redirects** set to **Always** or **Same Scheme Only**, you should not select this check box.

Lock timeout

Set to the number of seconds the server should wait before breaking the lock on any the master user profiles for the logged on provider. Setting the lock to **0** uses the default setting from the server. Specifying another time overrides the server default.

A network lock prevents a provider from using a master user profile that another provider already has in use. While this process does not take a long time, network problems can cause a lock to become *stuck* and not release when the login process is completed. When this happens, the next time the provider tries to log on with that user account, the provider sees a message informing him or her of the lock.

Setting the "Lock timeout" option to a value greater than 255 will cause issues with Dragon clients from Service Pack 3 or earlier. The older Dragon clients only accept a value less than 255 for the "Lock timeout" the option.

Connection timeout

Set to number of seconds before the *NMS Server* should close the *Dragon Medical Client* connection to the server either when the connection is idle or after the connection has been open for that duration.

Setting the "Connection timeout" option to a value greater than 255 will cause issues with Dragon clients from Service Pack 3 or earlier. The older Dragon clients only accept a value less than 255 for the "Connection timeout" the option.

Timeout of inactive

Check if the connection timeout in the previous text box applies when the logged in user has been inactive for the specified time period. Leave unchecked if the timeout applies after time elapses, regardless of activity of the logged in user. Leave the option unchecked only with great caution, as it could close the connection while the *Dragon Medical Client* is accessing the master user profile and corrupt the profile.

Recommended settings for web servers

For selections DM360 Network Edition requires you make while installing a particular type of web server, refer to the instructions for installing that web server in the *Dragon Medical 360* | *Network Edition Installation Guide*.

Setting site SSL connection settings for master user profiles

Caution:

If you have never set up a secure web server before, do not attempt to do so; these instructions assume you have already installed the secure web server and have experience setting up a secure web server. Appropriate settings vary.

Be sure that you install an SSL certificate that is trusted for directory on every workstation. You push install the SSL certificate as Trusted Root Certificate Authorities.

In the **Site** tab, under the **DM360 Network Edition** tab, you enter information about where you store master user profiles. If you are storing the user profiles on a secure web server (HTTPS) to set up the SSL settings:

- 1. Click Master user profile.
- 2. Click Configure....
- 3. Click SSL Settings.

General	HTTP Settings	SSL Settings	
Certificate : Cert	store tificate store type	User store (default)	
CC.	Certificate store		
Certificat	e store password		
SSL Protoco	ols		
	neral SSL protocols S1 「SSL3 「		
C Use Op	en SSL		
	Cipher list	t	
Cert	ificate authority file	File P	
	CA directory	, Directory P	

- 4. In the **SSL Settings** tab, you define and configure the connection to your secure web (HTTPS) server. Enter information about your connection in the text boxes under these sections in the dialog box:
 - Certificate store on page 96
 - Setting site SSL connection settings for master user profiles on page 95

Certificate store

In this section, you indicate the type of certificate that provides server identity, certificate, and public key information to clients that try to establish a connection:

Certificate store type

Select the certificate store type used for the client certificate on the local machine:

- User store (default)—Choose if the certificate store is a certificate store owned by the current user. For Java, choose if the certificate store is the name of a JKS (Java Key Store) file. If the provider is OpenSSL, choose if the certificate store is a file that contains the PEM encoded certificate and private key.
- Machine store—Choose if the certificate store is a machine store (not available in Java or when provider is OpenSSL).
- **PFX file**—Choose if the certificate store is the name of a Private Key Server or PFX (PKCS12) file containing certificates. If the provider is OpenSSL, the file may contain only one certificate and private key.
- **PFX Blob**—Choose if the certificate store is a string (binary or base64 encoded) representing a certificate store in PFX (PKCS12) format.
- **PEM Key**—Choose if the certificate store is a string or file name that contains a Privacy Enhanced Mail (PEM) encoded certificate and private key. This store type is currently not supported in Java.

Certificate store

Enter the name of the certificate store for the client certificate on the local machine:

The storage location is called the *certificate store*. A certificate store will often have numerous certificates, possibly issued from a number of a different certification authorities:

- MY—A certificate store holding personal certificates with their associated private keys.
- CA—A certificate store holding Certifying Authority (CA) certificates.
- **ROOT**—A certificate store holding ROOT certificates.
- SPC—A certificate store holding Software Publisher Certificate (SPC) certificates.

Notes:

- If you select **PFX file** for the **Certificate Store Type**, for the **Certificate Store** select **Other** and enter the name of the file in the associated text box below it.
- If you select **PFX Blob** for the **Certificate Store Type**, for the **Certificate Store** select **Other** and enter the binary contents of a PFX file (for example, the PKCS12) in the associated text box below it.

Certificate store password

Enter the password for the **Certificate Store** on the local machine if one is required.

SSL Protocols

Use general SSL protocols

Use this section to enable/disable the supported security protocols on the HTTPS server.

- TLS1—Version 1 of the Transport Layer Security (TLS) protocol.
- SSL3—Version 3 of the Secure Sockets Layer (SSL) protocol.
- SSL2—Version 2 of the Secure Sockets Layer (SSL) protocol.
- PCT1—Version 1 of the Private Communications Transport (PCT) protocol.

Notes:

- Although a number of sites still support SSL2, Nuance recommends that you disable it because of potential security vulnerabilities.
- If you select Using OpenSSL, this functionality is provided by the Cipher List.

Use Open SSL

Select **Using OpenSSL** if the HTTPS server uses **OpenSSL** as a Certificate Authority. OpenSSL is a free non-commercial implementation of SSL.

When you select Using OpenSSL, you must provide:

- **Cipher List**—A string that controls the ciphers to be used by SSL. The cipher list consists of one or more cipher strings separated by colons.
- Certificate Authority File—Name of the file containing the list of certificate authorities (CAs) trusted by your application. The file set by this property should contain a list of CA certificates in PEM format.
- **CA Directory**—Path to a directory containing CA certificates. The path set by this property should point to a directory on the server machine containing CA certificates in PEM format.

Recommended settings for SSL web servers

For selections that Dragon Medical 360 | Network Edition requires you to make while installing a particular type of secure web server, refer to the instructions for installing that secure web server in the *Dragon Medical 360* | *Network Edition Installation Guide*.

Setting site Data storage settings

On the **DM360 Network Edition** tab, under **Data** you can configure local and server data storage settings.

Entering Data Storage Space and Logging Settings

Store	correction in archive	
180	(minutes) archive size	
100	MB disk space reserved for playback	
Create	usability log	
Remo	ve local cache data after usage	
Server Conse	rve server archive size	
50	0 MB disk space reserved for network archive	

Click **Data** to view or hide these settings:

Local settings

• Store correction in archive: Enabled by default.

When you elect this option, *Dragon Medical* stores a list of corrections that the Acoustic and Language Model Optimizer uses in a local archive. If you do not select this option before you run the Acoustic Model Optimizer, you may see a message that there is not enough data for the Acoustic Model Optimizer to process. Be sure to select this option whenever you use *Dragon Medical* for an extended period of time.

- Set the **archive size** to control how many minutes of information is stored. The default setting is 180 minutes.
- **MB disk space reserved for playback:** Adjusts the amount of disk cache space set aside for any overflow of dictation from a user's computer's memory (RAM). Increase the amount of disk space if you want to save more dictation data. If you do not want to keep any dictation (to conserve disk space) set the amount to 0 MB. The default is 100 MB.
- **Create usability log:** Instructs the software to create a log of all the menu commands, toolbar buttons, and voice commands that the providers use during a *Dragon Medical* session. This log can help technical support personnel solve software problems and should only be enabled if they instruct you to enable it. The *Dragon Medical Client* creates the usability log in:

C:\Documents and Settings\<username>\Application Data\Nuance\NaturallySpeaking12\DgnUsability.log

• **Remove local cache data after usage:** By default, disabled at site level.

Deletes the contents of the local cache when the provider logs out.

Note: If you want to enable this option, you must disable the **Allow disconnected mode** option in the **Master User Profile** settings to allow it to work. Conversely, if you want to enable the **Allow disconnected mode** option, then you must disable this option to allow it to work. The effects of one setting cancel out the effects of the other.

Server settings

• Conserve server archive size: Off by default.

Select this option to prevent the copying of Dragon Recorded Audio (**.DRA**) files (files that contain the acoustic data from the latest dictation session) to the *Master User Profile* location when the program synchronizes the local cache user profile with the master user profile. If you leave this box unchecked, *Dragon* integrates the local **.DRA** files with the master user profile when synchronizing it with local cache, making the **.DRA** files available to the *Profile Optimizer* when it next instructs a *Speech Node* to optimize the master user profile, ultimately increasing dictation accuracy.

However, because **.DRA** files can be large, if you experience excessive network slowdowns, selecting this option may solve the problem by eliminating the copying of these files each time the master and local cache user profiles synchronize. You can still run the *Profile Optimizer* on the master user profile, but since it does not have the **.DRA** files to process, the accuracy gains are reduced.

The **.DRA** files are not copied once they grow to the maximum size you set in the **Disk** space reserved for network archive option (see below).

Viewing, modifying, and deleting sites

Once you have created and configured a site, you can return to it at any time and perform the tasks below: To refresh the data on the **Organizations** screen, press **Refresh** at the bottom right of the screen.

Note: You must have appropriate NMC Administrator security rights to perform these tasks.

Finding and viewing a site

- 1. Select **Organizations** > **Search**.
- 2. Search for an organization.
- 3. Select an organization and click **Manage**.
- 4. In the left-side panel, select a site.
- 5. In the **Site** area, click **Details**.
- 6. To view the site details you can double-click the name of the site on the list.
- 7. The **Site** tab opens and displays all of the settings for the site on the **General** and **Address** and **DM360 Network Edition** tabs.

Deleting a site

In the Nuance Management Console:

- 1. Remove any groups that are associated with the Site you will delete. See <u>Viewing, modifying,</u> <u>and deleting groups</u> for details.
- 2. Remove the users that are associated with the groups you deleted. See <u>Viewing, modifying, and</u> <u>deleting user accounts</u> for details.
- 3. On the menu bar, **Organizations** > **Search**.
- 4. Search for and select an organization, and click Manage.
- 5. In the left-side panel, select a site.
- 6. On the ribbon, select **Delete**.
- 7. On the **Confirm Site Deletion** dialog box, click **Yes**.

Modifying a site

- 1. Find the site that you want to modify, using the procedure in **Finding and viewing a site** above.
- 2. You can make changes depending on your security rights, detailed in *Setting Security Rights for NMC Administrator groups* on page 116.

Text boxes containing data that you cannot modify are gray to show they are inactive.

3. On the **General** tab, modify the **ID** and the **Name**.

o add groups to or remove groups from a site, see <u>Creating groups</u>.

- 4. Use the **Address** tab to configure the following:
 - Street 1: The first street address for the site.
 - Street 2: A second street address for the site.
 - Street 3: A third street address for the site.
 - **City**: The City associated with the site.
 - State: The state associated with the site.
 - Zip: The zip code associated with the site.
 - Country: The country associated with the site.
- 5. Use the DM360 Network Edition tab to configure the following:
 - Setting miscellaneous site settings on page 81
 - Setting general site settings for master user profiles (used to be Roaming settings)
 - Setting site Data storage settings on page 98
- Click Save to save the settings for this site. When you save the settings, the Groups list becomes visible on the General tab. It is empty until you add groups as members of the site. See <u>Creating groups</u>.

Creating Organization Tokens

Complete the following steps to create an organization token:

- 1. In the Nuance Management Console, go to **Organizations** > **Search**.
- 2. Search for and select an organization.
- 3. In the Organizations area, click the Details icon. The Organization Details screen appears.
- 4. In the **Organization Tokens** tab, click **Add** to generate a new organization token. The **Token** field is pre-filled. Optionally, enter a value in the **Comment** field. Click **Save**.
- 5. The new token appears in the **Token** table. Copy or make a note of this value; you will need it to configure EHR Single Sign-On.

Organ	izatio	n Details		
General	Address	Products	Organization Tokens	Domains
Token		Comment		

See *Creating Single Sign-On user accounts* on page 36 for information on using the tokens to configure EHR Single Sign-On.

Chapter 4: Configuring groups and user accounts

In the *Nuance Management Console* you can create groups of user accounts and associate them with the sites that you have created within your organization. This chapter describes how to set up and work with groups and user accounts, and explains how they work together.

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Understanding groups

In the *Nuance Management Console* you can create groups of providers or administrator and associate them with the sites within your organization. Setting up groups makes it easier for you to manage the settings for large numbers of similar users. For instance, if you have a large group of Dragon Medical Client users or 360 | SpeechAnywhere Services users, you can change a setting for one member of the group and quickly apply that change to all members of the group, rather than changing that settings for each provider one at a time.

You use the Groups ribbon to:

- Create (add) and delete a group.
- Search for a group.
- Add a user account to a group.
- Access Group Details to configure, edit, copy, and delete a group.

When you first log in to the *Nuance Management Console*, it already contains two groups that Nuance provides:

- DM360 Author
- 360 | SpeechAnywhere Services group (if the user logs into a 360 | SpeechAnywhere Services client).
- NMC Administration

When you first logged in after installing *NMS Server*, you used the default **Admin** user account, a member of the **NMC Administration** group.

Generating Types of Groups

All groups that you can create fall into two broad categories:

- **DM360 Author** groups—Medical practitioners who plan to dictate. Members of this type of group have access to the *Dragon Medical Client* to dictate but do not need access to the *Nuance Management Console* to make changes to the settings configured there.
- NMC Administration groups—Network/system administrators who plan to configure the NMS Server and Dragon Medical Clients for your sites. Members of this type of group have access to the Nuance Management Console to configure particular settings based on the Security Rights you assign them, but do not need access to the Dragon Medical Client because they are not dictating. (For more on administrator Security Rights, see Setting Security Rights for NMC Administrator groups on page 116

Nuance recommends that you have at least two groups, one of each of these two types.

Depending on the needs of your organization you might want to create more groups, for example, a clinic might choose to create these groups:

• Two groups with the role of **DM360 Author**, each medical practitioners with different specialties that need different vocabularies and distinct formatting options. For instance, a group of cardiologists might need one format and a group of dermatologists might need a totally different one.

• Two groups with the role of **NMC Administrator**, the first a small group who can change all options in the *Nuance Management Console* and the second a larger group of administrators who can change only group settings.

Your organization can have more than one type of administrator group. For instance, administrator level user groups that Nuance recommends you create:

- Super users—Who can take all types of actions in the *NMS Server*.
- License administrators—Who create and grant/revoke licenses.
- Group administrators—Who help decide on settings providers in their particular group need.
- **Help desk**—Who might have only view access to the information in *NMS Server* to help them answer questions that arise.

Determining site or group settings for members of more than one site or group

Providers or users can be members of multiple groups and groups can belong to multiple sites. Providers who are in more than one group can, logically, be subject to settings from several sites if each group they are a member of belongs to multiple sites.

This situation raises the question of which site's or group's settings take precedence over those of the other sites or groups for the individual providers.

When site settings supersede those of other sites

• If a group belongs to more than one site, the site listed first in the **Members** tab > **Sites** list for that group controls the settings that take effect for members of the group

You can reorganize the order of the sites in the list to put the correct site at the top. For details on how to change the order of the groups in the list, see <u>Creating groups</u>.

When group settings supersede those of other groups

- If a provider's user account is a member of more than one group, the group that appears first in the **User Account Details > Group Memberships > Selected Groups** list for that user account controls the settings that take effect for that provider. (See the illustration below.)
- You can reorganize the order of the groups in the list to put the correct group at the top.

User Acco	ount Details						
Details Addres	s Group Memberships Messaging	Network Edition US User Profile	Creder	ntials			
Site filter							
Default Site		<u>_</u>	-				
Available Groups				Selected Groups			
Organization	Group Site			Organization	Group	Site	
West	NMC Administration Default Site		- >	West	Reporting	Default Site	
			<				
			v				
				200 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100			
	Save Cancel						

Changes to Group roles

NMS 3.0 introduces some changes to Group roles.

A new role called "User"

This is a role for groups that contain users that have user accounts but do not have rights/ privileges.

It is a catch-all role to be used for defaults and auto-setup of groups by the NMS.

For example, for a product that uses the NMS only for authentication and licensing, such as CLU, users can be placed in a group that is associated with the User role. These users have user accounts but do not have rights in the NMS.

The User role is visible to all administrative users.

The "DM360 Mobile Recorder" and the "DM360 Recorder" roles have been combined and are now the "DM360 Recorders" role

The "DM360 Mobile Recorder" role is now the "DM360 Recorders" role. This allows the role to be shared between DM360 Mobile Recorder and DM360 Recorder when implementing an inpatient list.

When the NMS creates a new group for DM360 Mobile Recorder or DM360 Recorder, the group is now called "DM360 Recorders".

The NMS does not change or rename existing DM360 Mobile Recorder or DM360 Recorder groups.

The CLU role has been removed.

When upgrading to NMS 3.0 or NMS 3.1, any groups that currently use the CLU role will be associated to the new User role.

Since the CLU role does not have rights, when the NMS updates groups that used the CLU role to the User role, the 'rights' of users in those groups do not change.

When the NMS creates a new group for CLU, the group is now called "Users".

The NMS does not change or rename existing CLU groups.

Creating groups

When you create a group, you configure the identifying information for the group and specify the group type.

You can only configure **Security Rights** for the group if you are using the **NMC Administrator** role. For information on Security Rights, see *Setting Security Rights for NMC Administrator groups* on page 116.

Creating a group

To create a group, you configure settings on the following tabs:

Details tab

- 1. On the menu bar, click **Groups** and then click the **Add** icon on the **Groups** ribbon. The **Base group** dialog opens. The **Base new group on what existing group?** field lists all available groups for the current site.
- 2. In the **Base new group on what existing group?** field, select a group.
- 3. Press Select.
- 4. On the Group Details page, in the Details tab, in the Site field, select a site.
- 5. In the **Group Name** field, enter the name you want to assign to the group. The name is required. You must choose a unique name and Nuance recommends that you choose one that is immediately recognizable.
- 6. Select the **Role** for the group. The role is required. NMS 3.0 introduces changes that impact Group roles and names, including changes to the DM360 Mobile Recorder role and the CLU

Details Memb	ers Access	
Group Name	Walden Admins	
Organization	Organization Buffalo General	
Site	Default Site	
Role	NMC Administrator	
Security Rights	 Organization - View organizations Organization - Able to edit an existing organization Organization - Able to delete organizations Organization - View Dictation Status Organization - Create system Organization - Modify system Organization - Delete system Organization - Create domain Organization - Modify domain Organization - Delete domain Site - View sites Site - Able to create new sites Site - Able to modify existing sites 	Check All Uncheck All

role, plus a new 'User' role. For details, see Changes to Group roles.

Members tab

On the Members tab under Group Details, you can:

• Select individual user accounts to make those users members of the group. You can assign users to more than one group.

To add or remove users as group members:

If a user is a member of only one group, you cannot delete the user from that group, because a user must belong to at least one group.

- 1. On the Group Details screen, click the Members tab.
- 2. A list of current group members (users) is displayed. The list of available users is constrained to users created manually or users that logged into DM360 Mobile Recorder and were assigned to the DM360 Recorder Group

3. In the list of **Group members**, click on and highlight a user account, then click the **Add/Re-move** button below the list. The **Group Membership - User Accounts** window opens.

Coup Membership - User Accounts - Cardioligists		<u>- 🗆 x</u>
Group Name		
Cardioligists		
Available User Accounts	Selected User Accounts	
Last Name First Name Location Department	Last Name First Name Location Department	
	>	
	<	
OK Cancel		

- In the Group membership User Accounts window, click on one or more user accounts in the Available User Accounts list to the left, then click > to move them to the Selected User Accounts list to the right.
- 5. Click **OK** to save the changes and return to the **Members** tab, where you should now see the additional users in the **Group members** list.
- 6. Proceed to the Access tab section.

Access tab

You can only configure access control rules for a group if you are using the **NMC Administrator** role. For information on Security Rights, see *Setting Security Rights for NMC Administrator groups* on page 116. The **Access** tab displays the following information for all access rules for a group:

- **Super-User**: A rule that is set as a super user rule can only be changed by a user that has the appropriate rights. If a rule is not set as a super user rule, it can be modified by an NMC Administrator if their user account has the appropriate rights and access rules.
- **Rule**: The name of the rule, including the level the rule applies to, such "Organization In List".
- **Data**: Rule specific data about the rule.

To create a rule:

- 1. Click the **Access** tab.
- 2. Click Add Rule.
- 3. In the **Rule** drop-down list, select the level that the rule applies to.
 - Sites: all
 - Sites: in list In the grid that appears in the Access Rule dialog box, select the sites that the rule applies to
 - Sites: all from this group's organization
 - Sites: all from a specific organization In the Organization field, select the organization with the sites to apply the rule to.

- Sites: with line of business In the Line of Business area, select one of the following items: iChart, eScription, CAPD. Note: this is only for Reporting.
- Groups: all
- **Groups: in list** In the grid that appears in the **Access Rule** dialog box, select the groups that the rule applies to.
- Groups: all from this group's organization
- **Groups: all from a specific organization** In the **Organization** field, select the organization with the groups to apply the rule to.
- Groups: only this group
- **Groups: of a specific role** In the **Role** field, select a role. The rule is assigned to all groups with that role.
- 4. Click **OK**.
- 5. On the **Group Details** screen, click **Save**. The Nuance Management Console saves the rules when you save the Group.

To modify a rule:

- 1. Click the **Access** tab.
- 2. Select a rule.
- 3. Click Modify Rule.
- 4. In the Access Rule dialog box, modify the data for the rule.
- 5. Click **OK**.
- 6. On the **Group Details** screen, click **Save**. The Nuance Management Console saves the rules when you save the Group.

To delete a rule:

- 1. Click the **Access** tab.
- 2. Select a rule.
- 3. Click Delete Rule.
- 4. On the **Group Details** screen, click **Save**. The Nuance Management Console saves the rules when you save the Group.

Network Edition US tab (only for the DM360 Network Edition product)

The following instructions only apply to the DM360 Network Edition product.

1. Select a medical vocabulary that you want this group to use. See *Selecting a medical vocabulary for a medical specialty* on page 290.

Later, providers dictating with the *Dragon Medical Client* are still able to select other vocabularies from the list, but the one you choose here becomes the default vocabulary for each new user account you create.

- 2. Configure the Administrative settings:
 - Disable the use of Advanced scripting commands: Prevents group members from accessing *Dragon Medical*'s Advanced scripting tools. For more information, see the *Dragon*

Medical Client Help.

• Anchor dictation box to application: Selecting the Anchor dictation box to application option causes the Dictation Box to start in Anchored mode, where the Dictation Box is anchored to a particular application.

When the **Anchor dictation box to application** option is unchecked (default), the Dictation Box is not linked to any particular application or window and can also be run in Hidden Mode. For more information, see the *Dragon Medical Client Help*.

- 3. Select the voice **Commands** that you want to be available to the members of this group. For more information, see *Setting Dragon voice command options for provider groups* on page 221
- 4. Select the **Auto Formatting** settings for the group to select the way that certain words spoken by any member of the group should be formatted. This includes general, capitalization rules, numbers, units, dates, abbreviations, miscellaneous, and other settings that you want rendered consistently in documents generated by the group. See *Setting Auto-Formatting Dragon options* on page 161

Note: Selecting the correct auto formatting settings for the group is very important because these settings control the appearance of the documents produced when the medical practitioners dictate into *Dragon Medical. Nuance* recommends that you work closely with representatives of the group during the initial configuration to ensure that you select the appropriate options. In DM360 Network Edition, providers can change only **General** auto formatting settings. Providers cannot change the medical formatting settings configured in the *Nuance Management Console*.

Saving a group

After you have finished entering all the information necessary to define the group:

- 1. Click Save to save your settings and complete the configuration of the group.
- 2. You can later return to the group at any time to modify any settings, change sites the group belongs to, or add and remove user accounts from the group.

Setting Security Rights for NMC Administrator groups

When you create a group and select the role of **NMC Administrator** for members of the group to give those members access to the *Nuance Management Console*, the **Security Rights** list becomes available.

You now give security rights to the members of the group to further delineate exactly what the group members can do when they access the console.

The group's rights can restrict members to only viewing information created by others, or can extend right to add and delete some types of information but not fir other types, and—at the other end of the spectrum—can cover taking virtually any action in the console.

Group rights determine what an administrator can see and do in the Nuance Management Console. When you log into the NMS, the NMS sends the Nuance Management Console a set of flags that are based on your group rights. These flags determine the actions you can perform and the Nuance Management Console UI elements you can see and interact with. This applies to working with Accounts, groups, and sites. You can now assign Access rules to the members of the group to further delineate exactly what organizations, sites and groups they can access through the console. By default, a group has access to all sites and groups in their organization.

As you plan your network configuration, you need to plan out the group security rights assignments. Before you proceed, decide which security rights to assign to each group, using the security rights options for members of **NMC Administrator** groups described in the table that follows.

Security Rights	Group members can:
Organization - View organ- izations	View only the organization where the administrator's own user account was created.
Organization - Able to edit an existing organization	Edit an existing organization.
Organization - Able to delete organizations	Delete an organization.
Organization - Create system	Create a system.

Security Rights	Group members can:
Organization - Modify system	Modify a system.
Organization - Delete system	Delete a system.
Organization - Create domain	Create a domain.
Organization - Modify domain	Modify a domain.
Organization - Delete domain	Delete a domain.
Site - View sites	View the sites that have groups the administrator belongs to as a member.
Site - Able to create new sites	Create new sites for all organizations that the administrator can access.
Site - Able to modify existing sites	Modify sites for any organization that the administrator can access.
Site - Able to delete sites	Delete sites for any organization that the administrator can access.
Group - View groups	View all groups that the administrator has been assigned to as a member.
Group - Able to create new groups	Create new groups in the <i>NMS Server</i> organization that the admin-istrator has access to.
Group - Able to edit existing groups	Edit groups that already exist in the <i>NMS Server</i> organization that the administrator has access to.
Group - Able to delete groups	Delete groups from the <i>NMS Server</i> organization that the admin-istrator has access to.
User Account - View user accounts	View accounts for all users who are in the same groups as the admin- istrator.
User Account - Able to create a new user account	Create a new user account.
User Account - Able to edit an existing user account	Edit an existing user account.
User Account - Able to enroll user accounts in groups	Create group members by placing user accounts in groups.
User Account - Able to delete user accounts	Delete an existing user account.
Licensing - Able to view licenses	View existing licenses.
Licensing - Able to grant licenses	Grant licenses to users.
Licensing - Able to revoke licenses	Revoke licenses from users.
Licensing - Notified when licenses are expiring	Receive notifications when licenses are about to expire.
Dragon - Resync user words exist	(Only for the DM360 Network Edition product) - Resync end-user words.
Dragon - Able to view Profile Optimizer status	(Only for the DM360 Network Edition product) - View <i>Profile Opti-</i> <i>mizer Speech Node</i> status using the Profile Optimizer Status util- ity.
Dragon - Able to view Profile	(Only for the DM360 Network Edition product) - View information

Security Rights	Group members can:
Optimizer task failure.	about task failures in the Profile Optimizer Tasks screen.
Dragon - Able to view Profile Optimizer tasks	(Only for the DM360 Network Edition product) - Access the Profile Optimizer Tasks utility.
Dragon - Able to execute ACO/LMO for a user	(Only for the DM360 Network Edition product) - Use the User Pro- file Association utility.
Miscellaneous - Notified when new product updates are avail- able	(Only for the DM360 Network Edition product) - Receive notifications from Nuance when product updates are available.
Miscellaneous - Able to view messages	(Only for the DM360 Network Edition product) - Review messages in the Messages utility
Miscellaneous - Able to view sys- tem audit entries	(Only for the DM360 Network Edition product) - Use the Audit Events .
Miscellaneous - Able to modify system settings	Access System settings in the Nuance Management Console.
Miscellaneous - Able to view downloaded packages	(Only for the DM360 Network Edition product) - View update pack- ages downloaded from the <i>Update Server</i> using the Messages util- ity.
Miscellaneous - Able to approve downloaded packages	(Only for the DM360 Network Edition product) - <i>NMS Server</i> auto- matically downloads periodic medication and command updates for <i>Dragon Medical Client</i> and sends a message that the package has been downloaded but requires approval to install. Once users with this right approve this package in the Approval utility, the <i>NMS Server</i> initiates the process of adding the medication or com- mand update to the appropriate language models. The integration and distribution of changes is actually handled by the <i>Profile Optimizer</i> and its <i>Speech Nodes</i> .

Viewing, modifying, and deleting groups

Once you have created and configured a group you can return to it at any time and perform the tasks below.

Note: You must have the appropriate NMC Administrator security rights to perform these tasks.

Finding and viewing a group

- 1. On the menu bar, click **Groups** and then click the **Search** icon. The **Groups** screen opens, allowing you to search by **Group name**, **Organization**, or **Role**.
- 2. Enter a group name in the **Group name** field, and/or select an organization or role to search on, then click the magnifying glass.
- 3. The search results appear on the **Groups** screen.
- 4. Click on the name of the group that you want to view.

The **Group Details** window opens and displays all of the settings for the group on various tabs.

Deleting a group

1. On the menu bar, click **Groups** and then click the **Search** icon.

The **Groups** screen opens. To refresh the data on the **Groups** screen, press **Refresh** at the bottom right of the screen.

- 2. Use the procedure in Finding and viewing a Group to find the group you want to delete.
- 3. Select the group that you want to delete from the list and then click **Delete** on the **Groups** ribbon.

A message asks you to confirm that you want to delete the group.

4. Click Yes.

The group is removed from the system. User accounts associated with the group are not deleted. However, you should make sure to reassign the user accounts to other groups.

Modifying a group

- 1. Use the procedure in **Finding and viewing a Group** to find the group you want to modify.
- 2. The changes you can make to a group depend on your security rights.

Fields that you cannot modify are shaded gray and are inactive.

- 3. On the **Members** tab, you can:
 - Add or remove group members (user accounts)
- 4. (Only for the DM360 Network Edition product) On the Network Edition US tab you can:
 - Change the default vocabulary for all new users, see *Selecting a medical vocabulary for a medical specialty* on page 290
 - Modify the Administrative settings, see *Setting Security Rights for NMC Administrator groups* on page 116
 - Modify which commands are enabled for group members, see *Setting Dragon voice command* options for provider groups on page 221
 - Modify the auto formatting settings, see *Setting Auto-Formatting Dragon options* on page 161*Setting Auto-Formatting Dragon options* on page 161*Setting Auto-Formatting Dragon options* on page 161
- 5. Modify the PowerMicII settings.
- 6. Configure profile optimizer scheduler settings.
- 7. When your modifications are complete, click **Save** to apply them to the group.

Setting Dragon voice command options for provider groups

The **Network Edition US** tab for a group includes a list of voice command options under **Commands** that control how the *Dragon Medical Client* interprets voice commands.

Once you configure commands for a group, the command settings then apply to all healthcare providers in the group.

- Enable mouse motion commands: By default, this feature is enabled. Allows the user to use mouse motion commands such as "Move Mouse left," "Faster," and "Slower." Use the **Mouse movement** slider to control how quickly the mouse pointer moves across the screen.
- Enable HTML Support: By default the group level setting applies.

Enabling this setting makes available a set of *Dragon Medical* commands designed to help providers surf the web by voice in Internet Explorer and Mozilla FireFox 2.x web browsers. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

• Enable commands in HTML windows: By default the group level setting applies.

Enabling this option makes available a set of voice commands designed for providers to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes. These dialog boxes appear with the Internet Explorer symbol (a small document icon with the letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

- Require click to select hyperlinks in HTML windows: By default, this feature is enabled and the group level setting applies.
 Requires that provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com."
- Enable HTML custom API: Enable Full Text Control in a Hyperspace 2014 HTML edit control for a group of users.
- Enable recognition mode switching commands: Enabling recognition mode switching allows users in the group to dictate and say the mode switching commands interchangeably. Turning off recognition mode switching disables the ability to switch between modes For example:
 - Dictation Mode: In Dictation Mode *Dragon Medical* interprets everything you say as dictation and nothing is interpreted as a command. Say "Start Dictation Mode" or "Switch to Dictation Mode."
 - **Command Mode**: In Command Mode *Dragon Medical* interprets everything you say as a command and nothing is interpreted as dictated text. Say "Start Command Mode" or "Switch to Command Mode."
 - **Spell Mode**: In Spell Mode *Dragon Medical* allows you to say any combination of letters, digits, or symbols as you might need to do dictating license plate or parts numbers. Say "Start Spell Mode" or "Switch to Spell Mode."

- Numbers Mode: In Numbers Mode *Dragon Medical* interprets your dictation as numbers. Say "Start Numbers Mode" or "Switch to Numbers Mode."
- Normal Mode: The most flexible mode in *Dragon Medical* is Normal Mode. In Normal Mode, *Dragon* distinguishes dictation from commands by analyzing what you say between pauses. Say "Start Normal Mode" or "Switch to Normal Mode."

For more information on modes, see Using Recognition Modes in the *Dragon Medical Client* Help.

- Enable Web search commands: Select this option to make available Web search commands that let providers in the group search the Internet using commands that are patterned on their natural speech. See Voice Shortcuts for Web Search in the *Dragon Medical Client* Help for more information.
- Enable desktop search commands: Select this option to make available Desktop search commands that let providers in the group search their Windows desktops using commands that are patterned on their natural speech. See Voice Shortcuts for Desktop Search in the *Dragon Medical Client* Help for more information.
- Enable Email and Calendar commands: Select this option to make available Voice Shortcuts for Email and Calendar that let providers in the group control Outlook's email and calendar functions using commands that are patterned on their normal speech. See the *Dragon Medical Client* Help for more information.
- Enable cut shortcut commands, Enable delete shortcut commands, Enable Copy shortcut commands: Select these options to enable the Cut, Copy and Delete Quick Voice Formatting Commands. Delete and Copy are enabled by default.

In versions 9 and earlier of the *Dragon Medical Client*, cutting, copying, or deleting was a twostep operation: you first had to select the text before you could operate on it. The Quick Formatting Commands let you perform many of these tasks with a single command.

If you turn off these commands, you can still cut, copy, and delete, but you have to first select the text with the "Select <text>" command and then issue a second command to perform the operation you want; for example, "delete that".

For more information, see the Dragon Medical Client Help.

• Variable delimiters: By default the group level setting applies.

The variable delimiters are used by Text and Graphics/auto-texts commands that incorporate Voice (variable) Fields. Voice Fields are variable fields where the provider can later type or dictate a specific value.

By default, Text and Graphics/auto-texts Voice commands use the square bracket [] characters to indicate the presence of a variable field. To change the variable delimiting characters, specify a character for the left and right delimiters.

The delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, the *Dragon Medical Client* displays a message that they are not valid.

Caution: Nuance recommends you set the delimiting characters once and never change them, because if, for instance, you use square brackets in several Text and Graphics/auto-texts commands, then change the delimiting characters to */ and /*, the Text and Graphics/auto-texts commands that are using the square brackets then fail because the *Dragon Medical Client* looks for variables only between */ and /*, not between [and].

For more information about using variables with Text and Graphics/auto-texts commands, see Using Voice Fields with Text and Graphics/auto-texts commands in the *Dragon Medical Client* Help.

• Enable Natural Language Commands: This series of four options enables the users in the group to use Natural Language commands with the applications Microsoft Word, WordPerfect, Microsoft Excel, and Microsoft PowerPoint. This feature uses an additional 8 MB of memory and requires that you restart your computer before it takes effect. Natural Language Commands are available by default only in Microsoft Word.

For more information, see the Dragon Medical Client Help.

Configuring user accounts

Before medical professionals at your facility can begin using *Dragon Medical Client*, you must create a user account for each professional in the *NMS Server*, through the *Nuance Management Console*. When one of these healthcare providers opens the *Dragon Medical Client*, the server checks to make sure that the provider has an account and a license associated with the account. After verifying the account and license, the server checks the *Master User Profiles Server* to find a user profile for that provider (for more information, see *Creating a user profile* on page 234

A user profile stores acoustic information about the voice of the individual provider. *Dragon Medical Client* uses this vocal data to help it recognize what the provider is saying. This profile also stores any changes that providers or the *Profile Optimizer Speech Nodes* make to the standard *Dragon Medical* vocabulary, such as specialized words, names, acronyms, and abbreviations.

If the provider does not have a user profile, *Dragon Medical Client* opens the **New Profile Wizard**, where the provider enters basic data, selects a medical vocabulary, and presses a button to have the client create a user profile. If a user profile exists, the *Dragon Medical Client* accesses that profile and the provider can begin dictating. If the provider's user profile is not associated with a valid account or the account does not have a license assigned to it, the provider cannot use that profile to dictate.

The *NMS Server* lets you select the default language and accent that apply to providers creating a user profile, though the provider can change these settings in the wizard.

You can add or delete user accounts on the **User Accounts** ribbon. You can use this ribbon to modify existing user accounts and to edit their settings at any time. If you have the required security settings, you can also view the *Dragon Medical Client* logs through the **DM360 Network Edition Client Logs** icon on the ribbon.

In DM360 Network Edition, you can use a text file to import multiple users into an existing group. You can also set the user account type and apply a license to each of the users you import. For details, see *Import multiple users into the NMS server* on page 141.

Note: If you delete a user account, you can reassign the license associated with it to another user account. See *Managing licenses* on page 203.

When you create user accounts, keep in mind:

- If a user account is a member of more than one group, you should be sure that the group whose settings you want to take precedence appears first in the **Group Memberships > Selected Groups** list for the user account.
- In most organizations, users should only be members of multiple groups because they use both the *Dragon Medical Client* and the *Nuance Management Console*. In this instance, the person would be both a healthcare provider and an administrator.
- Although it is less common, some users might belong to multiple groups because they dictate for patients in more than one location or facility. For instance, a provider might belong to both **Walden-ER-Cardiologists** and **Walden-Cardiology-Clinic** groups.

Creating user accounts

To create a user account in the *Nuance Management Console*, you configure the basic settings in the **User Account Details** window.

Creating a user account

1. On the menu bar, click **User Accounts** and then click the **Add** icon on the **User Accounts** ribbon.

The User Account Details window opens.

- 2. Configure the options and settings on tabs in the User Account Details window:
 - Details and Address. See Configuring user account details and address settings on page 132
 - Group Memberships. See Assigning user accounts to groups on page 140
 - Messaging. See <u>Send a message to a user</u> for details.
 - Network Edition US. (Only for the DM360 Network Edition product) See <u>Setting user</u> account Dragon options.
 - User Profile. (Only for the DM360 Network Edition product) See Viewing User Profile settings on page 179
- 3. Click **Save** to save the user account settings.

You are prompted to grant the new user a license.

Licensir	ng a New User 🛛 🔀	
2	Do you want to grant the new user a license now? The user will need a license to log in.	
	Yes No	

- 4. Click **Yes** to assign a license to the user account. Click **No** to create the user without a license and remain on the **New User** tab.
- 5. If you click **Yes**, a message prompts you to select the type of license that you want to assign to the user account.



6. Select the license type for the user account and click **OK**. (The number in parentheses indicates how many licenses of that type are still available.)

Assign a National Provider Identifier to a user account or a site

All US healthcare organizations and physicians have a National Provider Identifier (NPI). An NPI is a unique number that identifies the organization.

In the Nuance Management Server, you can assign an NPI to a site or a user. You can also search for an NPI using the name of a site or user.

User NPIs and site NPIs are unique. Two users cannot have the same NPI. The same applies to sites.

For more details about National Provider Identifier's, visit <u>http://en.wikipedia.org/wiki/National_Provider_Identifier</u>.

Assign a National Provider Identifier to a new user account

- 1. In the Nuance Management Console, under User Accounts, click Add.
- 2. On the User Account Details screen, click Details.

etails	
Organization a1	•
NPI	Auto fill
First name	Last name
Middle name	Prefix
Login	Password
	Confirm Password
Location	Department

- 3. In the **NPI** field, enter the NPI for the user.
- 4. If this is a new use account or to have the NMS retrieve data about the user from the HIPAASpace web service and auto-update applicable fields, click **Auto fill**. (If the auto-fill lookup is unsuccessful, the Nuance Management Console displays an error message).
- 5. Click Save.

Assign or modify a National Provider Identifier for an existing user account

- 1. In the Nuance Management Console, find and open a user account.
- 2. On the User Account Details screen, click Details.

Organization a1	•
NPI	Auto fill
First name	Last name
Middle name	Prefix
Login	Password
	Confirm Password
Location	Department

- 3. In the **NPI** field, enter the NPI for the user.
- 4. To have the NMS retrieve data about the user from the HIPAASpace web service and autoupdate applicable fields, click **Auto fill**. (If the auto-fill lookup is unsuccessful, the Nuance Management Console displays an error message).
- 5. Click Save.

Assign a National Provider Identifier to a new site

- 1. In the Nuance Management Console, under Sites, click Manage organization & sites.
- 2. On the Manage Organization screen, double-click a site.

3. On the **Site** screen, click the **General** tab.

rganization	General		Group	os	
NPI		Auto fill	2		
ID	1				
Name	Default Site				
				-	

- 4. In the **NPI** field, enter the NPI for the site.
- 5. If this is a new site or to have the NMS retrieve data about the site from the HIPAASpace web service and auto-update applicable fields, click **Auto fill**. (If the auto-fill lookup is unsuccessful, the Nuance Management Console displays an error message).
- 6. Click Save.

Assign or modify a National Provider Identifier for an existing site

- 1. In the Nuance Management Console, under Sites, click Manage organization & sites.
- 2. On the Manage Organization screen, double-click a site.

3. On the Site screen, click General.

eneral				
Organization	General		Groups	
NPI		Auto fi		
ID	1			
Name	Default Site			
	Delaure Site			
			L.	

- 4. In the **NPI** field, enter the NPI for the site.
- 5. To have the NMS retrieve data about the site from the HIPAASpace web service and autoupdate applicable fields, click **Auto fill**. (If the auto-fill lookup is unsuccessful, the Nuance Management Console displays an error message).
- 6. Click Save.

Search for a National Provider Identifier using the name of a user or site

All US healthcare organizations and physicians have a National Provider Identifier (NPI). An NPI is a unique number that identifies the organization.

In the Nuance Management Server, you can assign an NPI to a site or a user. You can also search for an NPI using the name of a site or user.

User NPIs and site NPIs are unique. Two users cannot have the same NPI. The same applies to sites.

For more details about National Provider Identifier's, visit http://en.wikipedia.org/wiki/National_Provider_Identifier.

Search for a National Provider Identifier by user

- 1. In the Nuance Management Console, under User Accounts, click Search.
- 2. On the User Accounts screen, enter search criteria.
- 3. Click the magnifying glass.
- 4. In the search results, double-click a user account.
- 5. In the **Details** tab, to the right of the **NPI** field, click the magnifying glass.
- 6. In the **NPI Search** window, in the **Name** field, enter the name of the user.
- 7. Click **Search**. The NMS performs a HIPAASpace query based on the name of the user.
- 8. In the search results, select a user and press **Select** (or double-click the user). The NMS autofills the **NPI** field and other fields in the **Details** tab.
- 9. Press Save.

Search for a National Provider Identifier by site

- 1. In the Nuance Management Console, under Sites, click Organization Overview.
- 2. On the Manage Organization screen, double-click a site.

3. On the **Site** screen, click the **General** tab, to the right of the **NPI** field, click the magnifying glass.

rganization	General		Groups	
NPI		Auto fill	2	
ID	1			
Name	Default Site			
			I	

- 4. In the **NPI Search** window, in the **Name** field, enter the name of the site.
- 5. Click Search. The NMS performs a HIPAASpace query based on the name of the site.
- 6. In the search results, select a site and press **Select** (or double-click the site). The NMS autofills the **NPI** field and other fields in the **General** tab.
- 7. Press Save.

Configuring user account details and address settings

On the User Account Details > Details and Address tabs, you store contact, identification, and login credentials for a user account.

- 1. The **Details** tab displays the **Organization** associated with the user account that you are creating.
- 2. In the **NPI** field, enter the National Provider Identifier (NPI) for the user account. For details, see *Assign a National Provider Identifier to a user account or a site* on page 127.
- Enter the information for the user associated with the user account. The First Name, Last Name, and Login are required. The Login must be unique. The first name, last name, and login must be the same as the first name, last name, and login for the user in the back end system.
- 4. In the Middle name field, enter the middle name of the user.
- 5. In the **Prefix** field, enter a prefix to be placed before the user name.

- 6. Enter the **Password**. You should always follow Microsoft's strong password guidelines or have similar organizational guidelines for ensuring passwords are not easy to guess. For more details about setting options for passwords, see <u>Setting user password settings</u>.
- 7. Enter the **Location** (usually the primary work site) and the **Department** of the medical professional.
- 8. Click the **Address** tab and enter the home address information of the user associated with the account. This information is optional and is for your own convenience only, as the *NMS Server* does not use it.

Address1	I			
Address2				
Address3				
City			State	Zip code
Country	United States	*		

- 7. Continue to create the user account on the **Group Memberships** tab. See *Assigning user accounts to groups* on page 140.
- 8. To send email or a text message to the user when they receive an NMS message, set the options in the **Messaging** tab. See *Enable sending messages to an administrator* on page 135

Administrators can send messages to other administrators

An administrator can send messages to contacts in an organization. Organizations and their administrators can receive notifications about events including system upgrades, outages, notices, news, etc.

To use messaging with an on-premise NMS, customer must have an SMTP server for NMS to send emails. Nuance does not provide or support SMTP servers.

The administrator sets up an email address for an organization. The administrator also sets up an email address for the following Nuance Management Console Users:

- All users with an NMC Administration license that are in the NMC Administrator group (assuming NMC Administration licenses have been imported for that organization).
- All users with a DM360 Mobile Recorder license that are in the DM360 Recorders group (assuming DM360 Mobile Recorder licenses have been imported for that organization).
- All NMC Administrator groups (assuming NMC Administration licenses have been imported for that organization).
- All DM360 Recorders groups (assuming DM360 Mobile Recorder licenses have been imported for that organization) .

Afterwards, the administrator can send NMS messages to NMS users (by licenses, group, or user accounts) and can send emails to organization(s).

Messages can be sent to one or more sites or Nuance Management Console users in one step, even if they are from different organizations.

Messages may be sent for a variety of reasons, including:

- a user has an NMS message
- there are medication and command updates that require approvals
- a new DM360 Network Edition patch is available for deployment
- a new NMS patch is available for deployment
- the number of available licenses is low
- scheduled "trend" reports are available
- troubleshooting information is required by support personnel.
- system maintenance or outages are planned.
- other news or events

Enable sending messages to an administrator

You can configure the Nuance Management Server (NMS) to send email messages and SMS messages to administrators when they receive a message from the NMS. You can enable email messaging, SMS messaging, or both when you create a user or after you create a user.

To use messaging with an on-premise NMS, customer must have an SMTP server for NMS to send emails. Nuance does not provide or support SMTP servers.

To use an SMTP server for messaging (for customers with an on-premise NMS), you must configure SMTP in the Nuance Management Console in **System Settings** > **SMTP**.

For details, see Enable SMTP.

Enable sending email to an administrator when they receive an NMS message

To send an email to an administrator when they receive an NMS message, perform the following steps:

1. On the User Account Details screen, click the Messaging tab.

User Accou	nt Details		
Details Address	Group Memberships	Messaging	

- 2. In the **Email** section, select **Inform me via email when I receive NMS messages**. If you select this option, you must enter an email address in the **Email** field to be able to save the administrator.
- 3. In the **Email** field, enter an email address for the administrator.

etails	Address	Group Memberships	Messaging	
Ema	il			
	Inform me via	email when I receive NM	messages	

4. To save the changes and close the administrator, click **Save**. To save the changes and edit another administrator, click **Save & New**.

Enable sending an SMS message to an administrator's phone when they receive an NMS message

To send an SMS message to an administrator's mobile phone when they receive an NMS message, perform the following steps:

1. On the User Account Details screen, click the Messaging tab.

User	Accoun	t Details		
Details	Address	Group Memberships	Messaging	

2. In the **Mobile Phone** section, select **Inform me via SMS when I receive NMS messages**. If you select this option, you must enter values in the **Mobile Phone** field and the **Mobile Phone Provider** field to be able to save the administrator.

Mobile Phone	XXX-XXX-XXXX
Mobile Phone Provider	AT&T
essage Delivery Type	

- 3. In the Mobile Phone field, enter the mobile phone number for the administrator.
- 4. In the Mobile Phone Provider drop-down field, select the administrator's mobile provider.

Mobile Phone	XXX-XXX-XXXX	
Mobile Phone Provider	AT&T	8
essage Delivery Type		

The following is the current list of supported mobile providers:

- Alltel
- AT&T
- Boost Mobile
- Sprint Nextel
- Sprint PCS
- T-Mobile
- US Cellular
- Verizon
- Virgin Mobile USA
- 5. In the **Message Delivery Type**, choose the message delivery type:
 - i. To include the body of the message in the email or SMS message, select **Include the mes**sage body in the delivery (default).
 - ii. To have the email or SMS message only inform the recipient that they have an NMS message, select **Simply inform me that I have a message; I will retrieve it myself**.
- 6. To save the changes and close the administrator, click **Save**. To save the changes and edit another administrator, click **Save & New**.

Enable SMTP

- 1. In the Nuance Management Console, click the Nuance icon.
- 2. Select System settings.
- 3. In the System Settings dialog box, expand the SMTP section.
- 4. To enable SMTP, check Enable SMTP Mail.
- 5. In the **Host** field, enter the URL or address of the SMTP host server.
- 6. In the **Port** field, enter the port number to use for SMTP messaging.
- 7. In the **Default From Account** field, enter the default account to send SMTP message from.
- 8. In the **Message Retry (Days)** field, enter the number of days that must pass before the NMS attempts to re-send the message.
- 9. In the **Message Retention (Days)** field, enter the number of days that the NMS keeps the message before deleting it.
- 10. To use SSL, check Use SSL.
- 11. To use a default user name and password for SMTP messaging:
 - i. Check Use Default Credentials.
 - ii. In the User Name field, enter the default user name to use for SMTP messaging.
 - iii. In the **Password** field, enter the default password to use for SMTP messaging.
- 12. Click Save.

Send a message to an administrator

You can use the Nuance Management Console to send a message to:

- a client application end user (for example, a Dragon Medical 360 | Mobile Recorder provider)
- an administrator
- a group of users (for example, all DM360 Recorders users)
- all users in a particular organization.

To send an email message to a Nuance Management Console administrator or a client application end-user, perform the following steps in the Nuance Management Console. You must have the Send Message right to perform these steps.

- 1. In the Nuance Management Console, on the main ribbon, click Utilities.
- 2. In the **Messages** area, click **Send Message**.
- 3. Press To.
- 4. In the Select Addressee dialog box, perform one of the following procedures:
- To send a message to users or NMC administrators with a specific license type or that are members of a particular group:
 - i. In the Addressee Type field, choose Licenses/Groups.
 - ii. Click the magnifying glass.
 - iii. In the search results, double-click one or more items (for example, DM360 Mobile Recorder) to add them to the **To** field.
- To send a message to a specific user or NMC administrator:
 - i. In the Addressee Type field, choose User Accounts.
 - ii. In the Last Name field, enter the last name of the user.
 - iii. Click the magnifying glass.
 - iv. In the search results, double-click one or more items to add them to the To field.
- To send a message to the email address entered in the **Organization Details** screen:
 - i. In the Addressee Type field, choose Organizations.
 - ii. (Optional) In the **Organization Name** field, enter the name of the organization (or the first few letters of the organization name).
 - iii. (Optional) In the License Type field, select a license type.
 - iv. Click the magnifying glass.
 - v. In the search results, double-click one or more items to add them to the To field.
- 5. Click **OK**.
- 6. In the **Message** field, enter the text of the message.
- 7. Press Send.

Assigning user accounts to groups

Use the **User Account Details > Group Memberships** tab to make a user account a member of one or more groups by indicating group memberships for the user account.

Use the Site filter drop down to choose the appropriate site for the user.

The Available Groups list displays all available groups for the selected site.

Notes:

- You must assign each user account to at least one group. If you do not assign a user account to a group, the *NMS Server* does not let you save the user account.
- If a user account is a member of more than one group, the group whose settings take
 precedence over settings of other groups appears first in the User Account Details > Group
 Memberships > Selected Groups list for that user account.
- You can use the **Available groups** filter drop-down list to refine the list of groups that display in the **User Account Details** page.
- User accounts can only be added to groups by someone who is an **NMC Administrator** with the appropriate security rights. If you want users in your organization to be able to assign themselves to groups, you must create a group with the appropriate rights and add those users to the group.

Assigning a user account to a group

- 1. On the User Account Details screen, click Group Memberships.
- 2. In the Available Groups area, select a group name.
- 3. Click the right arrow button to move your selection to the Selected Groups area.
- 4. Repeat steps 1 and 2 until the user account is assigned to all of the groups that you require.
- 5. Click Save to save your selections.

Removing a user account from a group

There are two ways to remove a user account from a group:

- In the User Account Details > Group Memberships tab, select the group that you want to remove the user account from and click the left arrow button. The group is removed from the Selected Groups area.
- In the Group Details > Members tab click the Add/Remove button under the Group members list. Use the Group Membership User Accounts window to select the name of the user account from the Selected User Accounts list and move it to the Available User Accounts list using the left arrow button.

Import multiple users into the NMS server

In Dragon Medical 360 | Network Edition, you can use the *Import Users* wizard to import multiple users at one time into the system. You can also assign user account types and licenses to the users and assign the users to specific Groups.

To perform a mass import of users, you must perform the following two main tasks:

- 1. Create a comma-delimited text file or an XML file that contains information about the users, including user names and passwords.
- 2. Use the file to import users into the Nuance Management Server.

Creating a file with information about users to import

To import multiple users into the Nuance Management Server (NMS), you must create either a comma-delimited text file or an XML file that contains user information. The Import Users wizard supports both file types. However, each file must conform to specific formatting standards.

Creating a comma-delimited text file for importing users

The comma-delimited text file can contain the following fields for each user:

- First name (50 characters maximum)
- Last name (50 characters maximum)
- Login id (30 characters maximum)
- Password (30 characters maximum)

The fields must be separated by commas. The First name, Last name, and Login id fields must contain characters. The Password field can be blank.

Example: A comma-delimited text file with user information

The following is an example of a valid text file containing user information.

Notice there is no password in the second example. When importing a comma-delimited file, if the password is blank, you must still place a comma after the login id field and leave the password field blank. The NMS expects four fields in the text file.

```
Jack, Degnan, jdegnan, pwd124
Tim, Roberts, troberts,
Frank, Fiddler, ffiddler, fflr2
```

Creating an XML file for importing users

The XML file must begin with the XML version declaration processing instruction, <?xml version="1.0"...?>.

The XML file can contain the following fields for each user. The fields can contain commas.

- First name (required: 1 character minimum, 50 characters maximum)
- Last name (required: 1 character minimum, 50 characters maximum)
- Middle name (50 characters maximum)
- Prefix (10 characters maximum)
- Login id (required: 3 characters minimum, 30 characters maximum)
- Password (required: 30 characters maximum)
- Location (50 characters maximum)
- Department (50 characters maximum)
- Email address (50 characters maximum)
- Street 1 (60 characters maximum)
- Street 2 (60 characters maximum)
- Street 3 (60 characters maximum)
- City (40 characters maximum)
- State (5 characters maximum)
- ZipCode (20 characters maximum)
- NTLMCredential (160 characters maximum) Syntax: <NTLMCredential><DomainName>\<UserName></NTLMCredential>

Note: The NTLM Credential element allows you to import a user's domain and user name pair for multi-domain LDAP. For this import to work, you must create an Active Directory connection string entry for each unique DomainName that you specify in the NTLMCredential element **before** you run the import. For example if you support two domains, Domain1 and Domain2, you must create an Active Directory connection string entry for each of these domains before you can do a bulk import of users on either domain. See the "Configure the Organization" section of the *Configuring LDAP* on page 33 for instructions on setting the Active Directory connection string.

XML file format

To view the XML schema that defines the file format for the user XML file, see <u>XML schema for</u> the user XML file.

Example: An XML file with user information

The following is an example of a valid XML file containing user information:

```
<?xml version="1.0" encoding="utf-8"?>
<Users xmlns="http://nuance.com/NAS/UserImport">
        <User
                FirstName="Jack"
                MiddleName="Phillip"
                LastName="Degnan"
                LoginId="jdegnan"
                Password="pwd124">
                <NTLMCredential>Domain1\Jack.Dragon</NTLMCredential>
        </User>
        <User
                FirstName="Tim"
                LastName="Roberts"
                LoginId="troberts"
                Password=""
                State="GA">
                <NTLMCredential>Domain2\Tim.Roberts</NTLMCredential>
        </User>
        <User
                FirstName="Frank"
                LastName="Fiddler"
                LoginId="ffiddler"
                Password="fflr2"
                Street1="205 2nd St"
                City="Newton"
                State="NC"
                ZipCode="23682"
                Department="Radiology">
                <NTLMCredential>Domain1\Frank.Fiddler</NTLMCredential>
        </User>
</Users>
```

If the user import field is not required, you can omit the attribute. The attributes can be placed in any order in the XML file. The Users and User elements are in the following default XML name space:

```
http://nuance.com/NAS/UserImport
```

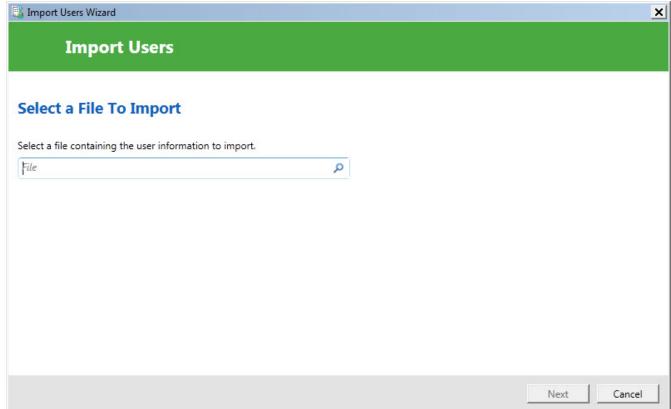
Importing users into the Nuance Management Server

After you create a comma-delimited text file or an XML file that contains user information, you must use the file and the Nuance Management Console to import users into the system.

At any time in the following steps, you can press **Cancel** to exit a step and stop the import process. You can also click the left arrow button to return to the previous screen in the *Import Users* wizard.

- 1. In the Nuance Management Console, select the **User Accounts** tab.
- 2. Select Import. The Import Users wizard appears.

3. In the **Select a File To Import** screen, enter the path and name of the file that contains the user information. If for any reason you decide to not import the users, press **Cancel**.



- 4. If the path and name of the text file are valid, the **Next** button is enabled. Press **Next**. If the *Import Users* wizard has trouble parsing the data from the text file or simply cannot find any users in the text file, the wizard displays a message that tells you no users were found. Press **OK** to close the message. You may now re-enter the name of the text file or make changes to the existing text file and retry this step.
- 5. The Users to Import screen displays information about the users from the text file.
- 6. Review the list of users to import. Press **Next** to continue. If you wish to cancel the import of users, press **Cancel**. To return to the previous page, click the left arrow button.

If the *Import Users* wizard encounters errors when importing the user data, the Nuance Management Console displays a message. Press **Close** on the dialog to leave this step.

7. On the Select an Organization screen, select the organization to associate with the users.

👫 Import Users Wizard		×
Import Users		
Select an Organization		
Choose an organization for the users.		
Nuance	•	
		Next Cancel

- 8. Press Next.
- 9. The **Select Group Membership** screen displays a list of groups that you can associate with the users. The left side of the **Available Groups** page displays all available groups for the current organization and the site in the **Select Site** field.

10. In **Available Groups**, select one or more groups. Use the arrows to move the selected groups to the **Selected Groups** list. You must select at least one group.

	nbership				
Choose which groups the use	rs are members.				
Select Site: Default Site	•				
<u>A</u> vailable Groups			Selected Groups		
Group	Site		Group	Site	
Buffalo Reporting Role Def	ault Site	•	Buffalo reporting Group	Default Site	
DM360 Recorder Grou Def		1.			
NMC Administration Def	ault Site	-			
		V			

- 11. Press Next.
- 12. If you have the administrative rights to grant licenses to users, the *Import Users* wizard displays the **Select Licenses** screen. The screen lists all the licenses that you can grant to the users. The list displays the license type and the number of available licenses for each license type. You cannot apply a license type to the users if the number of available licenses is less than the

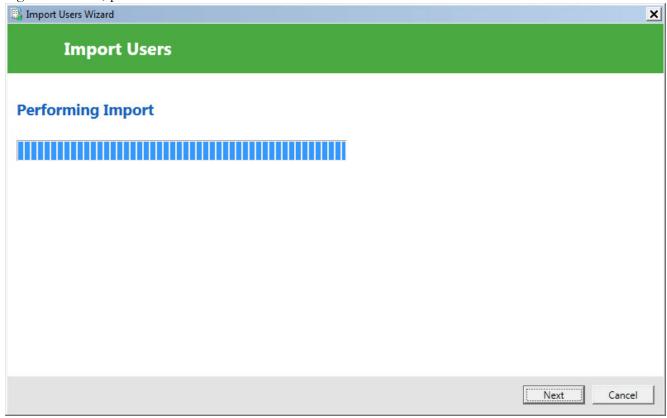
number of users In this case, the license type is disabled and you cannot select it in the screen.

📸 Import Users Wizard	×
Comport Users	
Select Licenses	
Choose the licenses for the users. ✓ Physician Author (499 licenses available) ☐ Non-physician Author (100 licenses available)	
Next	Cancel

- 13. Optional: Select the licenses to apply to the users. Press Next.
- 14. In the Ready to Import screen, press Next to start importing the users.

S Import Users Wizard	×
Emport Users	
Ready to Import	
All information needed for user import has been entered.	
Pressing the Next button will perform the import.	
	Next Cancel

15. The *Import Users* wizard displays the **Performing Import** screen and starts to import the users. A progress indicator displays the status of the import process. When the wizard finishes importing all the users, press **Next**.



- 16. The **Import Results** screen displays a list of all the users that the *Import Users* wizard imported into the system. If the wizard could not import a user, the **Import Results** screen displays information about why the user was not imported.
- 17. Press Finish.

XML schema for the user XML import file

The following schema defines the file format for any XML file that contains user information for importing users into the system.

<?xmlversion="1.0"encoding="utf-8"?> <xs:schema

id="UserImportSchema"

targetNamespace="http://nuance.com/NAS/UserImport"

elementFormDefault="qualified"

xmlns="http://nuance.com/NAS/UserImport"

xmlns:mstns="http://nuance.com/NAS/UserImport"

xmlns:xs="http://www.w3.org/2001/XMLSchema" >

<!-- Users element -->

<xs:elementname="Users"type="Users">

<xs:annotation>

<xs:documentation>A collection of users to import</xs:documentation>

</xs:annotation>

</xs:element>

<!-- Users type definition -->

<xs:complexTypename="Users">

<xs:annotation>

<xs:documentation>This types defines the user collection</xs:documentation>

</xs:annotation>

<xs:sequence>

<xs:elementname="User"type="User"minOccurs="1"maxOccurs="unbounded">

<xs:annotation>

<xs:documentation>One of more users to import</xs:do-

cumentation>

</xs:annotation>

</xs:element>

</xs:sequence>

</xs:complexType>

<!-- User type definition -->

<xs:complexTypename="User">

<xs:annotation>

 $$<\!\!xs:\!documentation\!>\!\!This$ type defines the basic user information that can be imported </xs:documentation>

</xs:annotation>

<xs:attributename="LastName"type="NameString"use="required"/>

<xs:attributename="FirstName"type="NameString"use="required"/>

<xs:attributename="MiddleName"type="NameString" />

<xs:attributename="Prefix"type="PrefixString"/>

<xs:attributename="LoginId"type="LoginIdString"use="required"/>

<xs:attributename="Password"type="PasswordString"use="required"/>

<xs:attributename="Location"type="GeneralInfoString" />

<xs:attributename="Department"type="GeneralInfoString"/>

<xs:attributename="EmailAddress"type="GeneralInfoString"/>

<xs:attributename="Street1"type="StreetAddressString"/>

<xs:attributename="Street2"type="StreetAddressString"/>

<xs:attributename="Street3"type="StreetAddressString"/>

<xs:attributename="City"type="CityString"/>

<xs:attributename="State"type="StateString"/>

<xs:attributename="ZipCode"type="ZipString"/>

</xs:complexType>

<!-- Name String -->

<xs:simpleTypename="NameString">

<xs:annotation>

<xs:documentation>A general string from names (50 characters
maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:minLengthvalue="1"/>

<xs:maxLengthvalue="50"/>

</xs:restriction>

</xs:simpleType>

<!-- Login Id String -->

<xs:simpleTypename="LoginIdString">

<xs:annotation>

<xs:documentation>A string that contains the user's login id
(30 characters maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:minLengthvalue="3"/>

<xs:maxLengthvalue="30"/>

</xs:restriction>

</xs:simpleType>

<!-- Password String -->

<xs:simpleTypename="PasswordString">

<xs:annotation>

< xs:documentation>A string for the user's login password (30
characters maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="30"/>

</xs:restriction>

</xs:simpleType>

<!-- Prefix String -->

<xs:simpleTypename="PrefixString">

<xs:annotation>

<xs:documentation>A user name prefix (10 characters
maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="10"/>

</xs:restriction>

</xs:simpleType>

<!-- General Info String -->

<xs:simpleTypename="GeneralInfoString">

<xs:annotation>

<xs:documentation>A general information string (50 characters
maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="50" />

</xs:restriction>

</xs:simpleType>

<!-- Street Address String -->

<xs:simpleTypename="StreetAddressString">

<xs:annotation>

<xs:documentation>A street address string (60 characters maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="60"/>

</xs:restriction>

</xs:simpleType>

<!-- City String -->

<xs:simpleTypename="CityString">

<xs:annotation>

<xs:documentation>A city string (40 characters maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="40"/>

</xs:restriction>

</xs:simpleType>

<!-- State String -->

<xs:simpleTypename="StateString">

<xs:annotation>

<xs:documentation>A state string (5 characters maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="5"/>

</xs:restriction>

</xs:simpleType>

<!-- Zip String -->

<xs:simpleTypename="ZipString">

<xs:annotation>

<xs:documentation>A zip code string (20 characters
maximum)</xs:documentation>

</xs:annotation>

<xs:restrictionbase="xs:string">

<xs:maxLengthvalue="20"/>

</xs:restriction>

</xs:simpleType>

<!- -NTLM Credential String -->

<xs:simpleType name="NTLMCredentialString">

<xs:annotation>

<xs:documentation>A NTLM Credential string (160 characters
max)</xs:documentation>

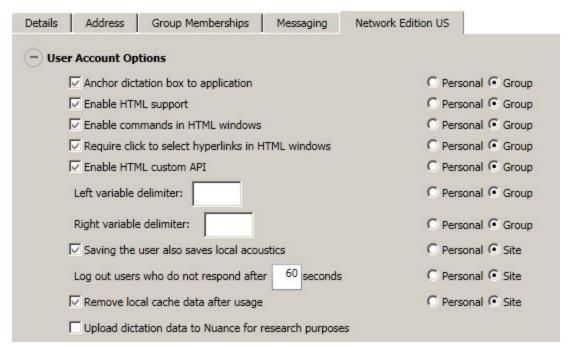
</xs:annotation>

<xs:restriction base="xs:string">

<pre><xs:maxlength value="160"></xs:maxlength></pre>

Setting user account Dragon options

On the User Account Details > Network Edition US tab, you can configure settings for the individual user that override settings that you already selected for the site or group.



Setting User Account options

By default the effect of the settings is configured at the group or site level, indicated by the **Group** or **Site** circle to the right being pre-selected. To override the group or site settings for this user account, select the **Personal** option next to **Group** or **Site**.

• Anchor dictation box to application: By default the group level setting applies.

Checking the **Anchor Dictation Box to application** option makes the Dictation Box start in Anchored mode, anchored to a particular application.

When you do not check the **Anchor Dictation Box to application** option (default), the Dictation Box is not linked to any particular application or window. In this case, the provider can also run the Dictation Box in Hidden Mode.

• Enable HTML Support: By default the group level setting applies.

Enabling this setting makes available a set of *Dragon Medical* commands designed to help providers surf the web by voice in Internet Explorer and Mozilla FireFox 2.x web browsers. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

• Enable commands in HTML windows: By default the group level setting applies.

Enabling this option makes available a set of voice commands designed for providers to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes. These dialog boxes appear with the Internet Explorer symbol (a small document icon with the letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

• **Require click to select hyperlinks in HTML windows:** By default the group level setting applies.

If you select this option, it requires that the provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com." You may need to disable this setting for certain EHR applications.

• Enable HTML custom API:

Select this option to enable Full Text Control in a Hyperspace 2014 HTML edit control for a group of users.

- Variable delimiters: By default the group level setting applies. Usually you do not change delimiters for an indivudal provider because they are most effective when they apply across an entire group's documents.
 - Variable delimiters in Dragon templates (Text & Graphics commands that incorporate voice (variable) fields), are characters that surround each voice field location in the template/command where the provider can later type or dictate a specific value. For example, a template might contain **Patient Name:** [_____] with the space in square brackets after the name is a voice field where the provider dictates the patient name.
 - By default, a pair of square brackets [] indicates the presence of a voice field. To use different characters to indicate a voice field, enter the characters you prefer to use for left and right delimiters.
 - Delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, *Dragon Medical Client* displays a message that they are not valid.
- Saving the user also saves local acoustics: (Formerly Roaming user save acoustics)By default the site level setting applies.

Select this option to save the user's acoustic information locally on the client. By saving the acoustic information, any corrections the provider makes are available even after a close and re-open of the user profile. In addition, selecting this option synchronizes all corrections in the Local cache user profile with the Master user profiles if you also turned on the **Always copy acoustic information to network** option at the site level (active by default).

Log out users who do not respond after _____ seconds: By default enabled, set to a value of 60 seconds, and applied to all providers associated with the site that this user account is associated with.

The option instructs *Dragon Medical Client* to log out this provider after the client has been idle and the provider has been prompted to respond, but the number of seconds you indicate here elapses without a response.

The **Log out users who do not respond after** <u>seconds</u>: field accepts a numeric value (seconds) up to three characters in length.

The number of seconds that the client remains idle before *prompting* a provider is based on the number of seconds set in the **Miscellaneous** settings for the site in **Prompt users to log off after** __ **minutes:**. You cannot change that setting for individual providers. The number of seconds the client can be idle before prompting a provider to log off always applies to all providers across the entire site.

• **Remove local cache data after usage:** By default the site level setting applies. Deletes the contents of the local cache when the user logs out.

Note: If you want to enable this option, you must disable the **Allow disconnected mode** option in the **Site > Master user profile** settings to allow it to work. Conversely, if you want to enable the **Allow disconnected mode** option, you must disable this option to allow it to work. The effects of one setting cancel out the effects of the other.

• Upload dictation data to Nuance for research purposes: By default the Organization level setting applies.

Select this option to automatically upload data from a particular provider's dictation and user profile to Nuance so that the company can improve future versions of the product and further enhance speech recognition technology. You might want to turn on this option for a provider whose dictation is particularly difficult to recognize. For information about Nuance's patient information privacy policy, see the information on *Privacy of your healthcare data and Nuance data collection* on page 318.

Setting Auto-Formatting options

For each user account you can choose to apply the formatting rules that you configured for the group, or you can customize the rules for that individual provider. If you click the **Customize rules** button, the auto formatting settings expand, displaying several categories of formatting rules, shown in the illustration below.



For details on changing these settings, see *Setting Auto-Formatting Dragon options* on page 161. You can use the **Restore** button at the bottom of each section to set the default value in the section, then **Save** your changes.

Setting Profile Optimizer ACO and LMO schedules

By default, you set the **Profile Optimizer Scheduler Settings** at the group level. If you want to set them at user level, the same settings apply. For more information see *Scheduling optimization, medication, and command updates* on page 190

Setting Auto-Formatting Dragon options

You use the **Auto-Formatting** options to set up text formatting that *Dragon Medical Clients* automatically apply to all provider dictation, producing consistently formatted medical reports across the entire organization. Changing these options for a group affects all members of that group exclusively. Customizing the options for a single provider's user account affects only that provider's dictation.

The **Auto-Formatting** options activate different forms of automatic word and number formatting. The automatic formats let providers dictate numbers in a natural way and also dictate different types of word formats, such as abbreviations, contractions, and e-mail addresses.

These formats do not have the last say on punctuation of numbers and currency; instead, numeric punctuation is ultimately controlled by settings on the **Regional Options** tab of the Windows Control Panel **Regional and Language Options** dialog box. (Although the numeric formats are usually standard for the country shown in that dialog box, you can click the **Customize...** button to find tabs for **Numbers** and **Currency** to customize the formats.)

Typically, *NMS Server* administrators set all formatting options on the **Groups Details** > **Network Edition US** tab or the **User Account Details** > **Network Edition US** tab. However, providers can choose to override **Auto-Formatting** settings that apply to the documents that result from their dictation.

For more information on how the **Auto-Formatting** option settings are stored and whose setting of them takes precedence, refer to *Setting general auto-formatting options in Dragon or the Nuance Management Server* on page 288.

Setting Auto-Formatting options

To set auto formatting options, you access several tabs. You can use the **Restore** button at the bottom of each section/tab to set the default value in the section, then **Save** your changes.

General options

- Abbreviate common English units of measure: Enabled by default. Automatically inserts abbreviations for units of measure. For example, "mm" for "millimeter".
- Abbreviate titles: Enabled by default. Inserts abbreviated versions of any title in the default lexicon. For example, "Mr." instead of "Mister."
- Allow pauses in formatted phrases: Enabled by default. Lets number and phrase formatting work together if you pause while speaking a number.
- Automatically add commas and periods: Disabled by default. Automatically adds commas and periods based on pause length and sentence structure.
- Caps Lock key overrides capitalization commands: Disabled by default. When this option is enabled and the keyboard Caps Lock key is active, several *Dragon Medical* capitalization commands are not active: "Cap <word>", "Caps On", "Caps Off" "All-Caps <word>", "All-Caps On", "All-Caps Off", "No-Caps <word>", "No-Caps On", and "No-Caps

Off".

When this feature is enabled and the Caps Lock is on, all the capitalization commands are disabled.

For more information, see the Dragon Medical Client Help.

• Expand common English contractions: Disabled by default. Enables *Dragon Medical* to recognize contractions while transcribing dictation. If you clear this box, *Dragon Medical* transcribes spoken contractions in a more formal manner. For example, if you say "Don't go near the water," *Dragon Medical* transcribes "Do not go near the water."

In some situations, the formal expression of a contraction might be ambiguous. For example, the phrase "It's always" could either mean "It is always" or "It has always" depending on the tense of the verb that follows. In this situation, *Dragon Medical* always expands the contraction, regardless of how this option is set.

- Format ISO currency codes: Disabled by default. Inserts currency codes rather than currency symbols. For example, "USD10.00" instead of "10 dollars," or "EUR50,00" instead of "50 euros."
- Format other numbers: Enabled by default. Inserts properly formatted decimals, negative numbers, and fractions. For example, "-1" instead of "negative 1."
- Format phone numbers: Enabled by default. Turns on automatic formatting of US telephone numbers when you speak a sequence of seven or ten numbers. For example, if you say "7815551234", Dragon Medical will transcribe "781-555-1234."
- Format prices: Enabled by default. Inserts prices and currencies in the proper format with the appropriate currency symbol. For example, "\$10.00" instead of "10 dollars," or " 50,00" instead of "50 euros."
- Format street addresses: Enabled by default. Inserts a properly formatted street address. For example:

"One seventy West one hundred south number fifty Salt_Lake_City Utah eight four seven zero zero"

becomes

"170 W. 100 S., #50, Salt Lake City, UT 84700"

• Format times: Enabled by default. Turns on automatic standard time formatting. For example, if you say "Six Thirty PM," *Dragon Medical* transcribes "6:30 PM." Dictating standard time runs on a 12 hour clock, letting you make the distinction between AM and PM.

Military time: With this option enabled, you can also dictate times in military format. For example, if you say "sixteen hundred hours," *Dragon Medical* transcribes "1600 hrs." If you say "oh three oh five hours" or "zero three zero five hours," *Dragon Medical* transcribes "0305 hrs."

Dictated Military time uses a 24 hour clock and abbreviates "hours" to "hrs."

• Format UK and Canadian postcodes: Disabled by default. Properly formats UK and Canadian postcodes. For example, "N1 8HQ" instead of "n18hq," or "L3X 1A4" instead of

"l3x1a4." **Note:** This option is not available in the UK edition of Dragon Medical 360 | Network Edition.

- Format US Social Security Numbers: Disabled by default. Inserts hyphens in the appropriate location of a number that contains 9 digits when someone dictates it with pauses where the hyphens belong. Note: This option is not available in the UK edition of Dragon Medical 360 | Network Edition.
- Format web and e-mail addresses: Enabled by default. Applies correct formatting to Web and e-mail addresses. For example, "john_doe@acmecorp.com" instead of "john_doe at acme corp dot com."
- Insert two spaces after period: Enabled by default *(disabled by default in the UK edition of Dragon Medical 360 | Network Edition).* Adds two spaces after the end of a sentence instead of a single space. Having two spaces at the end of a sentence used to be standard with mono space fonts produced by typewriters, but is less common with proportional fonts used in word processing programs. If you do not select this option, *Dragon Medical* adds a single space after the period.
- **Prefer 5 million over 5,000,000:** Enabled by default. Inserts numbers as a combination of Arabic numerals and text. For example, "5 million" instead of "5,000,000."
- **Date format:** Controls how *Dragon Medical* formats dates when the day, month, and year have all been dictated. Select the format you want from the list.

If you use the default **Dates As Spoken** value, you need to dictate dates in an unambiguous way, using the name of the month not the digit for the month. For example, with **Dates As Spoken** selected, *Dragon Medical* correctly formats "January eleven two thousand nine" and "the seventh of February two thousand four" as dates but formats "eleven one two thousand nine" as a number.

If you prefer to dictate dates using digits for the month, try selecting the value that best matches how you dictate the date. For example, if you normally say "eleven one two thousand nine", you should set the date format to **D/M/YYYY** to have *Dragon Medical* correctly transcribe the date.

If you omit the year, for example, you say "July twelve", Dragon transcribes "July 12" ("The twelfth of July" becomes "12 July") regardless of the type of date formatting you select.

Valid values are:

- Dates As Spoken
- Month D,YYYY
- Month DD,YYYY
- Mon D,YYYY
- Mon DD,YYYY
- M/D/YY
- M/D/YYYY
- MM-DD-YY
- MM/DD/YY
- MM/DD/YYYY
- YYYY-MM-DD
- D Month, YYYY

- **D/M/YY**
- D/M/YYYY
- DD/MM/YYYY
- DD/MM/YY
- DD-Mon-YY
- Numbers, if greater than or equal to __: Enabled by default. Inserts numbers as numerals if they are equal to or greater than the value shown in the drop-down list. If the number is less than the chosen value, the number is spelled out. For example, if you select "10," *Dragon Medical* transcribes "five" when you dictate "five" and "11" when you dictate "eleven".

Valid values are: Do Not Format, 0, 2, 10, 100. The default value is 0.

Capitalization

• Capitalize the word after a new line: Enabled by default. Capitalizes the first character of every new line you create, whether you dictate "new line" or you press ENTER to create it.

Department name capitalization: Sets the type of capitalization applied to any words in your vocabulary where the **Special Capitalization** option is set to **Department name** in the **Word Properties** dialog box of the **Vocabulary Editor** in the *Dragon Client*. For more information, see the *Dragon Medical Client Help*.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case **YYYYY**.) Default.
- All Caps
- Drug name capitalization: Sets the type of capitalization applied to any words in your vocabulary where the Special Capitalization option is set to Drug name in the Word Properties dialog box of the Vocabulary Editor in the *Dragon Client*. For more information, see the *Dragon Medical Client Help*.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case initial caps for non-generic drugs and lower case for generics.) Default.
- Initial Caps
- All Caps
- **Person name capitalization**: Sets the type of capitalization to apply to any words in your vocabulary where the **Special Capitalization** option is set to **Person name** in the **Word Properties** dialog box of the **Vocabulary Editor** in the *Dragon Client*.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case initial caps.) Default.
- All Caps
- **Medical capitalization list:** This table lists the available capitalizations and there default values. You can unselect or select all the options by clicking **Uncheck All** or **Check All**.

Rule	Default
Capitalize "against medical advice" as "AGAINST MEDICAL ADVICE"	Yes
Capitalize "allergy" and "allergies" as "ALLERGY" and "ALLERGIES"	No
Capitalize "code blue" as "CODE BLUE"	Yes
Capitalize "code R" as "CODE R"	Yes
Capitalize "code status" as "CODE STATUS"	Yes
Capitalize "code S" as "CODE S"	Yes
Capitalize "code T" as "CODE T"	Yes
Capitalize "do not intubate" and "do not resuscitate" as "DO NOT INTUBATE" and "DO NOT RESUSCITATE"	Yes
Capitalize "durable power of attorney" as "DURABLE POWER OF ATTORNEY"	Yes
Capitalize "fish" as "FISH"	No
Capitalize "left" and "right" as "LEFT" and "RIGHT"	No
Capitalize "living will" as "LIVING WILL"	No
Capitalize "PO2" and "PC02" as "pO2" and "pCO2"	No
Capitalize "RBC/hpf"and "WBC/hpf" as "RBC/HPF" and "WBC/HPF"	No
Capitalize "trauma alert" as "TRAUMA ALERT"	No

Numbers, Units, and Dates

Rule	Resulting Format	Default
Expect temperatures to be dictated in Celsius rather than Fahrenheit	Formats temperatures as "C" rather than "F".	No
Note: This option is only available in the UK edition of Dragon Medical 360 Net- work Edition.		
Treat ambiguous numeric strings as dates	Formats any strings of numbers without a clear function as if they are a date. If you enable this option, be sure to select the format you prefer in the Date format in Gen- eral settings. Do not select Dates As Spoken , because if you do, when you say "five five oh eight," instead of 5/5/08, <i>Dragon Medical</i> gives you 5508 and when you say "oh five oh five oh eight," instead of 05/05/08, <i>Dragon Medical</i> gives you 050508. If, however, you select Month D, YYYY for Date Format then dictate "five five oh eight," Dragon inserts May 5, 2008.	Yes
Write single digit + "point" in hyphenated form when not followed by another digit	Inserts a digit, a hyphen, and the word "point" when someone dictates a digit and the word "point" not fol- lowed by another digit. For example, "5-point" instead of "5."	No

Rule	Resulting Format	Default
Format numbers as times when followed by phrases such as "in the morning"	Inserts numbers as times of day when followed by phrases like "in the morning" or "at night." For example, for "ten o'clock at night," Dragon transcribes "10:00 PM."	No
Write the word "number" as "#" prior to numerals	Inserts a hash symbol before a number. For example, "#28" instead of "number 28".	Yes
Write one digit ordinals from "third" to "ninth" in` hybrid form ("3rd" to "9th")	Inserts ordinals in a numeric-text hybrid form. For example, "3rd" instead of "third."	No
Use Roman numerals for diabetes types	Inserts Roman numerals instead of Arabic numerals for diabetes types. For example, "type II diabetes" instead of "type 2 diabetes".	No
Write "degree" and "degrees" after a number as "°" (and abbreviate "Fahrenheit" and "Celsius" to "F" and "C")	Inserts correctly formatted temperatures. For example, "98.6 ° F" instead of "98.6 degrees Fahrenheit" and "37 ° C" instead of "37 degrees Celsius."	Yes
Write "%" as "percent"	Inserts the % symbol instead of the word "percent."	No
Write out "positive" and "negative" before numbers and for blood types and Rh factors	Inserts the word "positive" or "negative" before numbers, and for blood types and Rh factors. For exam- ple, "negative 6" instead of "-6" or "A positive" instead of "A+."	No
Insert a hyphen between a number and the word "French"	Inserts a hyphen when you say "5 French" to describe a type of equipment.	No
Insert a space between "mm" and "Hg"	Inserts a space between the letters in the abbreviations mm and Hg for "millimeter of mercury."	No
Rewrite "cc" after a number as "mL"	Inserts "mL" after a number if the user dictates "cc" fol- lowed by a number. For example, "10 mL" instead of "10 cc."	No
Format of expressions involving feet and inches	 Select how to format expressions with feet and inches. Valid values in the drop-down list are: Leave Unchanged (5 feet 8 inches) Symbols with Spaces (5' 8") Symbols without Spaces (5'8") 	leave unchanged (e.g. 5 feet 8 inches)
Write "o'clock" as a word	 Select when the word should be inserted. Valid values in the drop-down list are: Never Only before "position" Always 	Only before "position" Note: The default is <i>Never</i> in the
		UK edition of Dragon Med- ical 360 Net- work Edition.
Military time suffix	Controls whether <i>Dragon Medical</i> inserts "hours" or "hrs." after military time. For example, "24:00 Hours."	Abbreviate as "hrs."

Rule	Resulting Format	Default
Note: This option is not available in the UK edition of Dragon Medical 360 Net- work Edition.	Valid values are: • Keep "hours" • Abbreviate as "hrs." • Remove "hours"	

Abbreviations

Expand "A fib and V fib" to "atrial fibrillation and ventricular fibrillation"	~
Expand "ACL" to "anterior cruciate ligament"	63
Expand "ADHD" to "attention deficit/hyperactivity disorder"	
Expand "ADL" to "activities of daily living"	
Expand "AEC" to "aortic ejection click"	
Expand "AICD" to "automatic implantable cardiac defibrillator"	
Expand "AKA" to "above-knee amputation"	
Expand "ALF" to "assisted living facility"	
Expand "alk phos" to "alkaline phosphatase"	
Expand "ALS" to "amyotrophic lateral sclerosis"	
Expand "AMA" to "AGAINST MEDICAL ADVICE"	
Expand "AMI" to "acute myocardial infarction"	
Expand "AOC" to "aortic opening click"	
Expand "ASAP" to "as soon as possible"	
Expand "ASHD" to "atherosclerotic heart disease"	

The **Abbreviations** list contains options that determine whether or not *Dragon Medical* inserts the full text of an abbreviated term. Select the appropriate checkboxes to enable the options, click **Check all** to select all of the options, or click **Uncheck All** to remove any selections in the list.

Setting	Default value
Expand "A fib and V fib" to "atrial fibrillation and ventricular fibrillation"	Disabled
Expand "ACL" to "anterior cruciate ligament"	Enabled
Expand "ADHD" to "attention deficit/hyperactivity disorder"	Disabled
Expand "ADL" to "activities of daily living"	Disabled
Expand "AEC" to "aortic ejection click"	Disabled
Expand "AICD" to "automatic implantable cardiac defibrillator"	Disabled
Expand "AKA" to "above-knee amputation"	Disabled
Expand "ALF" to "assisted living facility"	Disabled
Expand "alk phos" to "alkaline phosphatase"	Enabled
Expand "ALS" to "amyotrophic lateral sclerosis"	Disabled
Expand "AMA" to "AGAINST MEDICAL ADVICE"	Disabled
Expand "AMI" to "acute myocardial infarction"	Disabled
Expand "AOC" to "aortic opening click"	Disabled
Expand "ASAP" to "as soon as possible"	Disabled
Expand "ASHD" to "atherosclerotic heart disease"	Disabled
Expand "ASM" to "atrial systolic murmur"	Disabled
Expand "AST" to "aspartate aminotransferase"	Disabled
Expand "AUS" to "artificial urinary sphincter"	Disabled
Expand "AVD" to "aortic valve disease"	Disabled

Setting	Default value
Expand "BCG" to "bacille Calmette-Guerin"	Disabled
Expand "BHP" to "benign hyperplasia prostate"	Disabled
Expand "bicarb" to "bicarbonate"	Enabled
Expand "bili" to "bilirubin"	Disabled
Expand "BKA" to "below-knee amputation"	Disabled
Expand "BM" to "bowel movement"	Disabled
Expand "BP" to "blood pressure"	Disabled
Expand "BPH" to "benign prostatic hypertrophy"	Disabled
Expand "BSO" to "bilateral salpingo-oophorectomy"	Disabled
Expand "BX" to "biopsy"	Disabled
Expand "C. diff" to "C. difficile"	Enabled
Expand "CABG" to "coronary artery bypass graft"	Disabled
Expand "CAD" to "coronary artery disease"	Disabled
Expand "CAF" to "chronic atrial fibrillation"	Disabled
Expand "CAT scan" to "computed axial tomography scan"	Disabled
Expand "cath" to "catheter"	Enabled
Expand "CBC" to "complete blood count"	Disabled
Expand "CCU" to "Critical Care Unit"	Disabled
Expand "chemo" to "chemotherapy"	Enabled
Expand "CHF" to "congestive heart failure"	Disabled
Expand "CMP" to "complete metabolic panel"	Disabled
Expand "CNS" to "central nervous system"	Disabled
Expand "coag" to "coagulation"	Disabled
Expand "COPD" to "chronic obstructive pulmonary disease"	Disabled
Expand "CPK" to "creatine phosphokinase"	Disabled
Expand "CPR" to "cardiopulmonary resuscitation"	Disabled
Expand "crit" to "hematocrit"	Disabled
Expand "CT scan" to "computed tomography scan"	Disabled
Expand "CVA" to "costovertebral angle"	Disabled
Expand "D&C" to "dilatation and curettage"	Disabled
Expand "DC\'d" to "discontinued"	Disabled
Expand "DESD" to "detrusor-external sphincter dyssynergia"	Disabled
Expand "DJD" to "degenerative joint disease"	Disabled
Expand "DM" to "diastolic murmur"	Disabled

Setting	Default value
Expand "DNI and DNR" to "DO NOT INTUBATE and DO NOT RESUSCITATE"	Disabled
Expand "DRE" to "digital rectal exam"	Disabled
Expand "DSM" to "delayed systolic murmur"	Disabled
Expand "DTR" to "deep tendon reflex"	Disabled
Expand "DVT" to "deep vein thrombosis"	Disabled
Expand "E. coli" to "Escherichia coli"	Enabled
Expand "EBL" to "estimated blood loss"	Disabled
Expand "EBV" to "Epstein-Barr virus"	Disabled
Expand "EC" to "ejection click"	Disabled
Expand "ECG" to "electrocardiogram"	Disabled
Expand "ED" to "Emergency Department"	Disabled
Expand "EES" to "erythromycin ethylsuccinate"	Disabled
Expand "EF" to "ejection fraction"	Disabled
Expand "EKG" to "electrocardiogram"	Disabled
Expand "EOMI" to "extraocular movements are intact"	Disabled
Expand "EPSS" to "E point to septal separation"	Disabled
Expand "ER" to "Emergency Room"	Disabled
Expand "ERT" to "estrogen replacement therapy"	Disabled
Expand "ESM" to "ejection systolic murmur"	Disabled
Expand "ESWL" to "extracorporeal shock wave lithotripsy"	Disabled
Expand "ex lap" to "exploratory laparoscopy"	Enabled
Expand "fem-pop" to "femoropopliteal"	Enabled
Expand "flex sig" to "flexible sigmoidoscopy"	Enabled
Expand "FT4" to "free T4"	Disabled
Expand "gastroc" to "gastrocnemius"	Disabled
Expand "GERD" to "gastroesophageal reflux disease"	Disabled
Expand "GI" to "gastrointestinal"	Disabled
Expand "GSW" to "gunshot wound"	Disabled
Expand "GU" to "genitourinary"	Disabled
Expand "H. pylori" to "Helicobacter pylori"	Disabled
Expand "H&H" to "hemoglobin and hematocrit"	Disabled
Expand "HCTZ" to "hydrochlorothiazide"	Disabled
Expand "HHD" to "hypertensive heart disease"	Disabled
Expand "HIV" to "human immunodeficiency virus"	Disabled

Setting	Default value
Expand "HPI" to "history of present illness"	Enabled
Expand "HPV" to "human papilloma virus"	Disabled
Expand "HRT" to "hormone replacement therapy"	Disabled
Expand "IBS" to "irritable bowel syndrome"	Disabled
Expand "IC" to "internal carotid"	Disabled
Expand "ICA" to "internal carotid artery"	Disabled
Expand "ICD" to "implantable cardiac defibrillator"	Disabled
Expand "ICU" to "Intensive Care Unit"	Disabled
Expand "IDA" to "iron deficiency anemia"	Disabled
Expand "IDDM" to "insulin-dependent diabetes mellitus"	Disabled
Expand "IDM" to "immediate diastolic murmur"	Disabled
Expand "IHD" to "ischemic heart disease"	Disabled
Expand "IHSS" to "idiopathic hypertrophic subaortic stenosis"	Disabled
Expand "IM" to "intramuscular"	Disabled
Expand "IMCU" to "Intermediate Care Unit"	Disabled
Expand "ISD" to "intrinsic sphincter deficiency"	Disabled
Expand "ITP" to "idiopathic thrombocytopenia purpura"	Disabled
Expand "IU" to "international units"	Enabled
Expand "IUD" to "intrauterine device"	Disabled
Expand "IVP" to "intravenous pyelogram"	Disabled
Expand "KCl" to "potassium chloride"	Disabled
Expand "KUB" to "kidney, ureter, and bladder"	Disabled
Expand "LAD" to "left anterior descending"	Disabled
Expand "LAE" to "left atrial enlargement"	Disabled
Expand "LAH" to "left anterior hemiblock"	Disabled
Expand "lap chole" to "laparoscopic cholecystectomy"	Enabled
Expand "LBBB" to "left bundle branch block"	Disabled
Expand "LCL" to "lateral collateral ligament"	Disabled
Expand "leuk trase" to "leukocyte esterase"	Disabled
Expand "lites" to "electrolytes"	Disabled
Expand "LLQ" to "left lower quadrant"	Disabled
Expand "LSM" to "late systolic murmur"	Disabled
Expand "LUQ" to "left upper quadrant"	Disabled
Expand "LVEDP" to "left ventricular end-diastolic pressure"	Disabled

Setting	Default value
Expand "LVH" to "left ventricular hypertrophy"	Disabled
Expand "MCL" to "medial collateral ligament"	Disabled
Expand "MDI" to "metered dose inhaler"	Disabled
Expand "meds" to "medications"	Disabled
Expand "MI" to "myocardial infarction"	Disabled
Expand "MMR" to "measles/mumps/rubella"	Disabled
Expand "MOM" to "Milk of Magnesia"	Disabled
Expand "MRI" to "magnetic resonance imaging"	Disabled
Expand "MVA" to "motor vehicle accident"	Disabled
Expand "MVP" to "mitral valve prolapse"	Disabled
Expand "MVR" to "mitral valve replacement"	Disabled
Expand "neb" to "nebulizer"	Disabled
Expand "NEC" to "nonejection click"	Disabled
Expand "neph" to "nephrostomy"	Disabled
Expand "NICU" to "Neonatal Intensive Care Unit"	Disabled
Expand "NIDDM" to "non-insulin-dependent diabetes mellitus"	Disabled
Expand "nitro" to "nitroglycerin"	Enabled
Expand "NKDA" to "NO KNOWN DRUG ALLERGIES"	Disabled
Expand "NSAID" to "nonsteroidal anti-inflammatory drug"	Disabled
Expand "NSR" to "normal sinus rhythm"	Disabled
Expand "NSVD" to "normal spontaneous vaginal delivery"	Disabled
Expand "O2" to "oxygen"	Disabled
"ObGyn" written "OB/GYN"	Enabled
Expand "OR" to "Operating Room"	Disabled
Expand "OS" to "opening snap"	Disabled
Expand "OTC" to "over-the-counter"	Disabled
Expand "PAF" to "paroxysmal atrial fibrillation"	Disabled
Expand "PCL" to "posterior cruciate ligament"	Disabled
Expand "PCN" to "percutaneous nephrolithotomy"	Disabled
Expand "PEC" to "pulmonary ejection click"	Disabled
Expand "PERRLA" to "pupils are equal, round and reactive to light and accommodation"	Disabled
Expand "PFT" to "pulmonary function test"	Disabled
Expand "PID" to "pelvic inflammatory disease"	Disabled
Expand "PIH" to "pregnancy-induced hypertension"	Disabled

Setting	Default value
Expand "PMI" to "point of maximal impulse"	Disabled
Expand "postop" to "postoperative"	Disabled
Expand "PRI" to "PR interval"	Disabled
Expand "pro time" to "prothrombin time"	Disabled
Expand "PSA" to "prostate-specific antigen"	Disabled
Expand "PSIS" to "posterior superior iliac spine"	Disabled
Expand "PSM" to "pansystolic murmur"	Disabled
Expand "PTCA" to "percutaneous transluminal coronary angioplasty"	Disabled
Expand "pulse ox" to "pulse oximetry"	Disabled
Expand "PVR" to "post-void residual"	Disabled
Expand "RBBB" to "right bundle branch block"	Disabled
Expand "rehab" to "rehabilitation"	Enabled
Expand "RLQ" to "right lower quadrant"	Disabled
Expand "RPOC" to "retained products of conception"	Disabled
Expand "RPR" to "RPR test"	Disabled
Expand "RSR" to "regular sinus rhythm"	Disabled
Expand "RSV" to "respiratory syncytial virus"	Disabled
Expand "RUQ" to "right upper quadrant"	Disabled
Expand "SBE" to "subacute bacterial endocarditis"	Disabled
Expand "SC" to "systolic click"	Disabled
Expand "SDM" to "systolic-diastolic murmur"	Disabled
Expand "sed rate" to "sedimentation rate"	Enabled
Expand "segs" to "segments"	Disabled
Expand "SEM" to "systolic-ejection murmur"	Disabled
Expand "SI" to "sacroiliac"	Disabled
Expand "SIDS" to "Sudden Infant Death Syndrome"	Disabled
Expand "SLE" to "systemic lupus erythematosus"	Disabled
Expand "SLR" to "straight leg raising"	Disabled
Expand "SM" to "systolic murmur"	Disabled
Expand "SOB" to "shortness of breath"	Disabled
Expand "SS" to "summation sound"	Disabled
Expand "SSRI" to "selective serotonin reuptake inhibitor"	Disabled
Expand "STD" to "sexually transmitted disease"	Disabled
Expand "subcu" to "subcutaneous"	Enabled

Setting	Default value
Expand "SVD" to "spontaneous vaginal delivery"	Disabled
Expand "SVG" to "saphenous vein graft"	Disabled
Expand "SVT" to "supraventricular tachycardia"	Disabled
Expand "T&A" to "adenotonsillectomy"	Disabled
Expand "TAH" to "total abdominal hysterectomy"	Disabled
Expand "TAH/BSO" to "total abdominal hysterectomy with bilateral salpingo- oophorectomy"	Disabled
Expand "TB" to "tuberculosis"	Disabled
Expand "TEE" to "transesophageal echocardiogram"	Disabled
Expand "temp" to "temperature"	Disabled
Expand "TIA" to "transient ischemic attack"	Disabled
Expand "tib-fib" to "tibia-fibula"	Disabled
Expand "TM" to "tympanic membrane"	Disabled
Expand "T-max" and "T-current" to "MAXIMUM TEMPERATURE" and "CUR- RENT TEMPERATURE"	Enabled
Expand "TMJ" to "temporomandibular joint"	Disabled
Expand "TSH" to "thyroid-stimulating hormone"	Disabled
Expand "TTE" to "transthoracic echocardiogram"	Disabled
Expand "TURB" to "transurethral resection of the bladder"	Disabled
Expand "TURP" to "transurethral resection of the prostate"	Disabled
Expand "UA" to "urinalysis"	Disabled
Expand "UC" to "urinary culture"	Disabled
Expand "URI" to "upper respiratory infection"	Disabled
Expand "UTI" to "urinary tract infection"	Disabled
Expand "V tac" and "sinus tach" to "ventricular tachycardia" and "sinus tachycardia"	Disabled
Expand "VBAC" to "vaginal birth after cesarean section"	Disabled
Expand "VCUG" to "voiding cystourethrogram"	Disabled
Expand "VL" to "vastus lateralis"	Disabled
Expand "VMO" to "vastus medialis oblique"	Disabled
Expand "WNL" to "within normal limits"	Disabled

Rule	Resulting format	Default
Expand dosage abbreviations	Inserts the full word when the user dictates a dosage abbreviation. For example, "qd" is written "once a day."	Yes
Insert commas or spaces into oncol- ogy "T N M" expressions	Uses commas to separate T N M values. For example, "pT1, pN0, M0, R0, G1" instead of "pT1 pN0 M0 R0 G1." Options are: -no separator -spaces -commas.	spaces
Remove period from dosage	Removes periods from dosage abbreviations. For example, "q.d." (once a day) will be written "qd" and "t.i.d" (three times a day) will be written "tid." Selecting "Expand dosage abbreviations" overrides this setting.	No
Remove spaces from dosage abbreviations Note: This option is only available in the UK edition of Dragon Medical 360 Network Edi- tion.	Removes spaces from dosage abbreviations. For example, "q d" (once a day) will be written "qd" and "t i d" (three times a day) will be written "tid." Selecting "Expand dosage abbreviations" overrides this setting.	No
Replace "&" with "and"	Replaces ampersands with the word "and."	No
Rewrite "dad", "kid", "mom", "sib", as "father", "child", "mother", "sibling"	Inserts "father," "child," "mother," or "sibling" when the user dic- tates "dad," "kid," "mom," or "sib."	No
Rewrite "hours" as "h." in dosage abbreviations like "q.2 hours"	Inserts "h." in dosage abbreviations when the user dictates "hours." For example, "q.2 hours" (every two hours) will be written "q.2h."	No
Note: This option is only available in the UK edition of Dragon Medical 360 Network Edi- tion.		
Rewrite "I to E" as "I:E"	Inserts a colon when the user dictates "to" between two letters.	No
Rewrite "off of" as "off"	Inserts "off" when the user dictates "off of."	No
Spell "BI-RADS" as "BIRADS"	Inserts "BI-RADS" when the user dictates "BIRADS".	No
Spell "calyx" and related words with an "i"	Spells "calyx" and related words with an "i". For example, "calix" instead of "calyx".	No
Spell "disc" and related words with a "k"	Spells "disc" and related words with a "k". For example, "disk" instead of "disc."	No

Miscellaneous

Rule	Resulting format	Default
Spell "orthope- dics" and related words with "ae"	Spells "orthopedics" and related words with "ae". For example, "orthopaedics" instead of "orthopedics."	No Note: This is enabled by default in the UK edi- tion of Dragon Med- ical 360 Network Edi- tion.
Treat "bracket" as equivalent to "parenthesis"	Inserts a parenthesis when the user dictates "bracket."	No
Treat "paragraph" as a paragraph break, not as the word Note: This option is only available in the UK edition of Dragon Medical 360 Network Edi- tion.	Saying "paragraph" inserts a paragraph break instead of the word "paragraph."	Yes
Treat paragraph breaks as equiv- alent to line breaks	Saying "New paragraph" inserts line breaks instead of paragraph breaks, obliterating the effect of the previous check box.	No
Write "AP"before the word "dia- meter" as "A-P"	Inserts "A-P" when the user dictates "AP diameter."	No
Write accented characters with their non- accented forms	Inserts accented characters in their non-accented forms. For example, "e" instead of "é".	No
Automatically insert second letter into ver- tebra range when not dictated	Disabled by default. Inserts a second letter into the range when the user does not enter it. For example, when enabled, "C one to two" becomes "C1-C2" rather than "C1-2".	No
Place within the vertebra ranges	One of the following: -Blank -Hyphen -Slash	Blank Note: The default is <i>Slash</i> in the UK edition of Dragon Med- ical 360 Network Edi- tion.
Write "dash" as	Determines what Dragon inserts when a user dictates the word "dash." Valid values are: Single Hyphen	Single Hyphen

Rule	Resulting format	Default
	 Single Hyphen Surrounded by Spaces Double Hyphen Double Hyphen Surrounded by Spaces 	

Vertebrae

Rule	Resulting format	Default
Hyphenate ver- tebra ranges	Enabled by default. Inserts a hyphen between ranges in vertebra data. For example, when enabled, "C1 to 2 becomes "C1-2"and "C1 to C2" becomes "C1-C2".	Yes
Automatically insert second letter into ver- tebra range when not dic- tated	Disabled by default. Inserts a second letter into the range when the user does not enter it. For example, when enabled, "C one to two" becomes "C1-C2" rather than "C1-2".	No
Place slashes within vertebra ranges	Disabled by default (enabled by default in the UK edition of Dragon Medical 360 Network Edition). Inserts a slash character between each vertebra range in a set of vertebra ranges. For example, when enabled, C1 to 2 becomes C1/2", "C1 to C2" becomes "C1/C2".	No Note: This option is ena- bled by default n the UK edition of Dragon Med- ical 360 Net- work Edition

Viewing User Profile settings

In the **User Account Details > User Profile** tab, you view current settings for a User Profile. This information is 'read only' in the Nuance Management Console.

The settings that you can view in the User Profile tab are:

- Language: The language or dialect (such as US English or UK English) that the user uses for dictation. Your choices will depend on the Dragon Medical edition you are using.
- Language Accent: The type of accent that the user uses for dictation.
- **Vocabulary:** The Vocabulary list shows the different types of vocabularies available with *Dragon Medical* and shows the vocabulary selected for the user profile associated with the user account. For a list of available Medical vocabularies, see *Selecting a medical vocabulary for a medical specialty* on page 290.
- Input Devices: The type of device into which the user will be speaking.

The fields in the **User Account Details** > **User Profile** tab display language specific information for DM360 Network Edition US or DM360 Network Edition UK.

The following text is displayed above the Language field:

'When a profile is linked to this user account, this section will be populated with the profile settings the user selected in Network Edition'.

Language:

- If the user is using US settings, the field displays "Language: English (US)".
- If the user is using UK settings, the field displays "Language: English (UK)".
- If the user's language settings are not know, the field displays "Language: ".

Language Accent:

• If the user's language settings are not know, the field displays "Language Accent: ".

Vocabulary:

• If the user's language settings are not know, the field displays "Vocabulary: " and is disabled.

Input Devices:

• If the user's language settings are not know, the field displays "Input devices: " and is disabled.

Profile folder name:

• The name of the folder that contains the profile.

You configure language, accent, vocabulary, and dictation source settings for a user profile in the **User Account Details > User Profile** tab.

The user profile stores acoustic information about the user's voice that *Dragon Medical* uses to recognize what he or she says. The profile also stores any changes to the standard *Dragon Medical* vocabulary, such as specialized words, names, acronyms, and abbreviations.

Setting configurable user profile settings

The settings on the User Profile tab that you can configure in the Nuance Management Console are:

Language: The language or dialect (such as US English or UK English) in which the user will be dictating. Your choices will depend on the Dragon Medical edition you are using.

Language Accent: The type of accent in which the user will be dictating. Your choices are:

Supported in both U.S. and U.K.:

- **General**—Use this if your accent is not covered by the other choices or you are not sure which accent to select.
- Australian
- Indian
- Southeast Asian

Support in U.S. English only:

- Inland Northern US This accent model covers Upstate New York through the Chicago area.
- British
- Southern US—Accent model that covers most of the southern United States, including Texas.
- Spanish

If you have any doubt about choosing an accent, select **General**. Make sure the Acoustic Model Optimization (ACO) and Language Model Optimization (LMO) processes are scheduled to run on the user's profile after he/she has used the product for several hours. The *Profile Optimizer Speech Node* that runs the optimizations updates the user profiles with accumulated acoustic data from any recognition corrections and additional training the user may have carried out. Running the optimizations increases overall accuracy. During optimizations, the *Profile Optimizer Speech Node* might select a different accent for the user.

If you select a specific accent, the *Profile Optimizer* can still increase overall accuracy, but does not change the user's accent. Once you have selected a specific accent for the user, you cannot change it later.

For more information on ACO and LMO processes, see *Scheduling optimization, medication, and command updates* on page 190.

Understanding additional user profile information displayed

Additional information is also displayed on this tab. The information comes from the user profile created by the individual user in *Dragon Medical* and cannot be changed in the *Nuance Management Console*:

Vocabulary: The Vocabulary list shows the different types of vocabularies available with *Dragon Medical* and shows the vocabulary selected for the user profile associated with the user account.

For a list of available Medical vocabularies, see *Selecting a medical vocabulary for a medical specialty* on page 290.

Input Devices: The type of device into which the user will be speaking. The most common choices are:

- Microphone plugged into Mic-In jack
- Nuance PowerMic II microphone

Automatically log out an administrator after a period of inactivity

You can set the NMS to automatically log out a user after a specific time of inactivity.

After you set the timeout value, the NMS applies the value the next time a user logs into the NMS.

When the NMS logs out a user, it discards all unsaved data.

- 1. In the Nuance Management Console, click **Organizations**.
- 2. In the click **Organizations** area, click **Search**.
- 3. Enter search criteria and click the magnifying glass.
- 4. Select an organization.
- 5. In the **Organizations** area, select **Details**.
- 6. On the **Organization Details** screen, click **Products**.
- 7. Expand the Nuance Management Server section.
- 8. In the **NMC Inactivity timeout in _____ minutes** field, enter a value.
- 9. Click **OK**.

Scheduling the optimization of acoustic and language models

The accuracy of dictation depends on how well-tuned the master user profile is for a particular healthcare provider. Dragon Medical 360 | Network Edition tunes each provider's master user profile with data from his or her unique acoustic model and language model.

Understanding ACO and LMO processes

The *Profile Optimizer* manages the aspect of speech recognition that involves learning each healthcare provider's individual pronunciation and speaking patterns. The server controls this learning process (called *adaptation*) by scheduling two processes, Acoustic Model Optimization (ACO) and Language Model Optimization (LMO), which run on the *Profile Optimizer Speech Nodes*. After an optimization process completes, the *Profile Optimizer Server* updates that healthcare provider's master user profile, integrating the ACO and LMO results.

The accuracy of dictation depends on how well-tuned the master user profile is for a particular healthcare provider. Research has shown that running both ACO and LMO processes regularly reduces the relative word error rate for the provider by 10 to 30% and can produce even greater improvements in recognition accuracy for providers who speak with an accent.

When you are determining how often to schedule Acoustic Model and Language Model Optimizations (ACO and LMO processes), you take into account several factors. But how often should the server carry out an ACO or LMO for a particular healthcare provider?

First, let's understand the purpose of each process.

Defining ACO/LMO processes and their impact on recognition

To help you assess how often an ACO or LMO process should occur, let's first look at what each process does:

- Acoustic Model Optimization (ACO) This task optimizes the model used to recognize the way the provider speaks. The model incorporates characteristics such as the accent, dialect, tone of voice, and other aspects of how the speech sounds. When a speaker is new to *Dragon Medical*, you should run the optimization more often than after the speaker has worked with the product for a while.
- Language Model Optimization (LMO) This task optimizes the language model used to help recognize the patterns of the provider's speech. The model incorporates how the provider dictates particular words and sequences of words his or her speech frequently employs.

Both of these processes run in the background and strictly on the *Speech Nodes*, so they do not affect the speed of recognition during dictation on *Dragon Medical Clients*.

You can and should run the ACO and LMO processes at different intervals for the same provider.

Factors in how often to run ACO processes

The ACO process, by contrast with LMO, is time intensive—it runs for 1 hour to process 1 hour of dictation. *Speech Nodes* spend more than 80% of their time running ACO processes.

Some of the factors to consider when deciding how often to carry out an ACO process are:

- Whether or not a particular provider has an accent
- Whether or not the product frequently has trouble interpreting a particular provider's speech
- How much dictation a provider or group of providers generates

To get the most out of the ACO process, you should schedule the process to take place every time the provider has dictated 5 hours of audio. A medical practitioner does not produce 5 hours of audio by working 5 hours, but may produce that much audio over a period of a month or two, while dictating as needed.

The absolute minimum frequency recommended for ACO is once every 6 months. However, if the provider dictates 10 hours of audio in those 6 months, the ACO process will incorporate only the last 5 hours of his or her dictation, so in such a case you would want to schedule the ACO every 3 months instead of every 6 months.

The best practice recommendation is to schedule an ACO every week only while the provider is new to *Dragon Medical*. After the provider has been dictating for a month or has dictated 5 hours of total audio, the provider is no longer considered new to dictation. You can then back off to scheduling the ACO once a month or as often as you find that the provider dictates 5 hours of new audio.

If the *Profile Optimizer Speech Node* does not find enough speech data for that provider in a given month, the node terminates the process and waits until the next scheduled ACO.

If a professional uses more than one audio input device (dictation source), such as one USB microphone and one PowerMic, then the *Speech Node* needs to carry out a separate ACO process for each of those devices

After a provider has dictated his or her first 5 hours of total audio, if the provider has an accent, you might want to schedule the provider for more frequent ACOs that you would schedule for providers who do not have an accent.

Running a maintenance ACO process periodically keeps the provider's master user profile synchronized with his or her voice.

Factors in how often to run LMO processes

Since an LMO process runs quickly, not tying up network or *Speech Node* resources, you can schedule an LMO for every user every day. Guidelines state at minimum to run an LMO process:

- Every day (or night) for providers whose speech *Dragon Medical* has difficulty recognizing or providers who have *ever* had their profile becomes corrupted.
- At least every week (but preferably every day) for providers new to dictating (who do not have a previously existing user profile or who have not yet dictated 5 full hours of audio).
- At least every month for providers with more experience dictating (who already have a user profile and have already dictated a minimum of 5 hours of audio) and who have *never* had profile corruption issues.

Some of the factors to consider when deciding how often to carry out an LMO process are:

- How much dictation a provider or group of providers generates
- How often you add new words to vocabularies
- How often you would like the *Profile Optimizer* to check for corrupted user profiles, because it checks for corruption every time it carries out an LMO process on the profile

Scheduling LMO and ACO processes for a group or user account

To set how often an LMO or ACO process should occur, you can set the *Profile Optimizer Scheduler* settings. You can set the frequency of the processes for a particular group or for each individual user account.

In the **Profile Optimizer Scheduler Settings** window, you can set the interval for each of these optimizations:

DM360 Network Edition LMO interval: Select a frequency from the drop-down list to set the interval that defines how often the Language Model Optimization (LMO) takes place for the group or user account. Nuance recommends you set this process to run at least **Weekly**, but preferably **Every day**, because this setting controls how often the *Profile Optimizer* checks for corrupted profiles.

DM360 Network Edition ACO interval: Select a frequency from the drop-down list to set the interval that defines how often the Acoustic Optimization (ACO) takes place. You should set this interval to **Weekly** for the first month that the provider is dictating and then set it to **Monthly** after that if there are no issues with the user profile.

If a user profile often becomes corrupted, you should increase the frequency of these optimization processes both to **Every day** as a preventive measure.

You can run the optimizations immediately by clicking the **Execute Now** button next to the optimization, and you can set the frequency by selecting an interval from the list:

- Disabled
- Every day
- Every other day

- Every third, fourth, fifth, or sixth day
- Weekly
- Every eight, nine, 10, 11, 12, or 13 days
- Biweekly
- Every three weeks
- Monthly
- BiMonthly
- Every 3, 4, 5, or 6 months

Factors that have no effect on regularly scheduled processes

After you approve medication, command, and other updates from the *Update Server*, you do not take any other action. The *Profile Optimizer Server* automatically schedules processes that integrate these updates into the appropriate models and master user profiles.

Auto-checking the amount of new acoustic data before running optimization

Dragon Medical 360 | Network Edition, Service Pack 2, introduces automatic checking of acoustic data for optimization. When a Speech node receives an ACO task, the node checks to see if the user profile contains enough acoustic data for optimization.

The profile must have at least 15 minutes of new acoustic data for the Speech node to run the ACO task. Prior to DM360 Network Edition, Service Pack 2, 4 minutes was the minimum amount of new acoustic data required to run ACO.

When the NMS server attempts to start an immediate ACO or LMO task for a user, and a job for that user and task type is already scheduled (either waiting to run for the first time, or in the postponed state), the NMS server updates the job parameters. If the job is in the postponed state, the NMS server sets the job to run as soon as possible, rather when the postponed state expires.

Each user profile now has an adaptation status that the NMS server tracks. The adaptation status is based on the amount of acoustic data that the profile contains for optimization.

The adaptation status is either in progress or maintenance:

In progress: The provider is new to Dragon and produces their first 15 minutes to 5 hours of acoustic data. The ACO uses the first 15 minutes to 5 hours of data to optimize the provider's acoustic model.

If the profile has less than 5 hours of acoustic data, the Speech node initiates the ACO task if the following conditions are met:

- the amount of new acoustic data is at least 15 minutes in size.
- the amount of new acoustic data is at least 50% of the amount of data already processed.
- 4 hours of acoustic data produces at least 25% new data for adaptation.

If there is not enough new acoustic data, the ACO task moves into the postponed state.

Maintenance: The provider produces at least 5 hours of acoustic data. The NMS server schedules adaptations from one month to 6 months for users that are in maintenance mode. The server decides on the optimization interval for a profile based on the amount of acoustic data available for adaptation.

If the profile has 5 hours or more of acoustic data:

If the profile is full, the Speech node initiates the ACO task if the following conditions are met:

- 25% of the acoustic data is new. If there is not enough new acoustic data, the ACO task moves into the postponed state.
- The amount of new acoustic data is at least 15 minutes in size.

If the profile is not full, the Speech node initiates the ACO task if the following conditions are met:

• 4 hours of acoustic data produces at least 25% new acoustic data for adaptation.

If there is not enough new acoustic data, the ACO task moves into the postponed state.

View the adaptation status for a user profile

Administrators may need to manage the load on the Profile Optimizer when ACO runs on user profiles.

In the Nuance Management Console, administrators can view the adaptation status of user profiles. This information can help administrators understand the number of profiles that are in adaptation or have gone through adaptation.

- 1. In the Nuance Management Console, select Utilities.
- 2. Select Adaptation Status.
- 3. In the Search Criteria area, enter values in the following fields:
 - Group: the group to search in
 - Site: the site to search in
 - Status: the status of the profiles to include in the search results
 - First name: the first name of the provider
 - Last name: the last name of the provider
- 4. Click the magnifying glass.

The Adaptation Status screen displays the search results for your query. The screen displays the following information for each search result.

- User Login
- Last Name
- First Name
- Adaptation Status
- Profile Name
- Operation Type

To close the current view, click the cancel/close red circle button.

To return to the search screen, click the left arrow buttons.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results

- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Scheduling optimization, medication, and command updates

In the **Profile Optimizer Schedule Settings** dialog box, you can set the Profile Optimizer to run LMO or ACO processes according to a schedule. You can also run medication and command updates immediately from the dialog box.

Scheduling the Profile Optimizer

For information on how often to run LMO and ACO for a particular group or for an individual, see *Scheduling the optimization of acoustic and language models* on page 183.

ragon LMO interval	weekiy	•	Execute Now
ragon ACO interval	Weekly	•	Execute Now
Medications	Execute Now		
Commands	Execute Now		

In the **Profile Optimizer Scheduler Settings** dialog box, you can set the interval for each of these optimizations:

- DM360 Network Edition LMO interval: Select a frequency from the drop-down list to set the interval to define how often the Language Model Optimization (LMO) should take place for the group or user account. Nuance recommends you set this process to run at least Weekly, but preferably Daily, because this setting controls how often the *Profile Optimizer* checks for corrupted profiles.
- DM360 Network Edition ACO interval: Select a frequency from the drop-down list to set the interval that defines how often the Acoustic Optimization (ACO) takes place. You should set this interval to Weekly for the first month that the provider is dictating and then set it to Monthly after that if there are no issues with the user profile.

If a user profile often becomes corrupted, you should increase the frequency of these optimization processes both to **Daily** as a preventive measure.

You can run the optimizations immediately by clicking the **Execute Now** button next to the optimization, and you can set the frequency by selecting an interval from the list:

- Disabled
- Every day
- Every other day

- Every third, fourth, fifth, or sixth day
- Weekly
- Every eight, nine, 10, 11, 12, or 13 days
- Biweekly
- Every three weeks
- Monthly
- Bimonthly
- Every 3, 4, 5, or 6 months

Scheduling the medication and command updates

You can receive immediate medication and command updates by using options in the Profile Optimizer Schedule Settings dialog box.

ragon LMO interval	Weekly	•	Execute Now
ragon ACO interval	Weekly	-	Execute Now
Medications	Execute Now		
Commands	Execute Now		

To receive available Medication updates, beside Medications, click Execute Now.

To receive available Command updates, beside Commands, click Execute Now.

Understanding how local cache user profile updates on client

When a provider logs in and has been speaking into the microphone, after the provider finishes dictating and logs out, the *Dragon Medical Client* sends data about the provider's speech to the corresponding master user profile on the network. If that provider has accumulated 5 hours of dictation and you have scheduled an ACO for the provider, the *Profile Optimizer Speech Node* then carries out an ACO process on the acoustic model for that provider and updates that master user profile accordingly. Later, when the provider logs on to dictate again, the *Dragon Medical Client* retrieves the optimized master user profile from the network and places it in its local cache. The provider should then see improved recognition. (These data transfers and ACO processes occur without the provider even knowing about them.)

The provider may require more than one session to accumulate enough dictation time for the ACO process to take place. For instance, you might schedule an ACO monthly, but if the *Profile Optimizer Speech Node* does not find enough speech data has accumulated for that provider during that month, the node terminates the process and waits until the next ACO that you have scheduled.

Viewing, modifying, and deleting a user account

Once you have created and configured a user account you can return to it at any time and perform the tasks below:

Notes:

- You must have the appropriate *Nuance Management Console* Administrator security rights to perform these tasks.
- (Only for the DM360 Network Edition product) Some settings can be configured in the Nuance Management Console and in the Dragon Medical Client, see Options set through the Dragon client on page 1. The most recent change uploaded to the server is the one that appears in the Dragon Medical Client. For example: If the Nuance Management Console Administrator selects a setting and then a provider on the Dragon Medical Client changes the same setting, the provider's change overrides the Administrator's change because it is more recent.

Finding and viewing a user account

- 1. On the menu bar, click **User Accounts** and then click the **Search** icon on the **User Accounts** ribbon.
- 2. Enter your search criteria on the User Accounts tab.

You can search for user accounts based on the information that you entered on the **User Account Details** tab. You do not have to fill out all of the fields; you can search on a single field or even a few letters in that field.

3. Click the magnifying glass.

The system displays a list of user accounts that meet your search criteria. If you click the magnifying glass without entering any search criteria, the system displays a list of all of the user accounts in the system.

4. In the list, double-click on the name of the user whose account information you want to view, or select the user on the list and then click **Details** in the **User Accounts** ribbon.

The User Account Details window opens and displays all of the settings for the selected user account on the Details, Address, Group Memberships, Messaging, (Only for the DM360 Network Edition product) DMNE Common, (Only for the DM360 Network Edition product) DM360 Network Edition Network Edition US, (Only for the DM360 Network Edition product) User Profile, and (Only for the DM360 Network Edition product) Credentials tabs. For more details about these tabs, see *Creating user accounts* on page 125

Deleting a user account

- 1. On the menu bar, click **User Accounts** and then click the **Search** icon on the **User Accounts** ribbon.
- 2. In the User Accounts window, enter your search criteria.
- 3. You can search for user accounts based on the information that you entered on the **User Account Details** tab. You do not have to fill out all of the fields; you can search on a single field or even a few letters in that field.
- 4. Click the magnifying glass.
- 5. Select the user Account that you want to delete from the list and then click **Delete** on the **User Accounts** ribbon.
- 6. (Only for the DM360 Network Edition product) If the user account is associated with a master user profile, a message displays this information to you and informs you that if you delete the user account, you will also delete the profile. To delete both the user account and the master user profile, click **Yes**. To keep the profile, click **No** or **Cancel**, and export the profile before attempting to delete the account. In Dragon Medical 360 | Network Edition, 2.1, you use the Dragon client to export and import user profiles. For details, see the Dragon Help and the Dragon user guide.
- 7. A message displays and asks if you want to delete the user account. Click **Yes** to delete the account.

(Only for the DM360 Network Edition product) Before deleting a user account, if the user account is associated with a master user profile, you should export the master user profile, in case you want to associate the profile with another user account or with a new user account that you create in the future. In Dragon Medical 360 | Network Edition, 2.1, you use the Dragon client to export and import user profiles. For details, see the Dragon Help and the Dragon user guide.

Modifying a user account

1. Use the procedure above to find the user account.

The changes you can make to a user account depend on your security rights. Fields that you cannot modify are shaded in gray and are inactive.

- 2. On the **Details** and **Address** tabs (see *Configuring user account details and address settings* on page 132) you can:
 - Change contact information for the user
 - Change the user account password. For more details about setting options for passwords, see <u>Setting user password settings</u>.
- 3. On the **Group Memberships** tab you can:
 - Add or remove the user account from a group. See *Assigning user accounts to groups* on page 140
 - Set the default group for a user by moving it to the top of the Selected Groups list.
- 3. On the **Messaging** tab you can:
 - Set email and mobile messaging options. See Enable sending messages to an administrator on page

135.

- 4. (Only for the DM360 Network Edition product) On the Network Edition US tab you can:
 - Configure the User Account Options, see Setting user account Dragon options on page 157
 - Modify the text **Auto Formatting** settings, see *Setting Auto-Formatting Dragon options* on page 161
 - Modify the **Profile Optimizer Scheduler** settings for the user profile. See *Scheduling optimization, medication, and command updates* on page 190
- 5. (Only for the DM360 Network Edition product) On the User Profile tab you can:
 - View the default language and accent for the user profile.
 - View the Vocabulary and Input devices for the user profile. See *Viewing User Profile settings* on page 179.
 - View the Dragon client settings that are only configurable in the Dragon client for the user profile.
- 7. When your modifications are complete, click **Save** to apply them to the user account.

Changing the user account password

Change Password		×
User name	HThoreau	
Old password		
New password		
Confirm password		
	OK Cancel	

- 1. On the User Account Details screen, click the Details tab.
- 2. Click the **Change password** button.
- 3. In the **Change Password** dialog box, enter the new password and then confirm it by entering it a second time.
- 4. Click **OK** to save the password and return to the **User Account Details** tab

Encryption of patient health information

To access settings for your organization where you can choose to **Encrypt patient information** and **Upload user data to Nuance for research purposes**, see *Accessing and adding to your organization data* on page 24.

Understanding how Dragon encrypts data

When you have selected the **Encrypt patient info** check box, *Dragon Medical Client* software takes particular actions delineated here:

When a user dictates using the *Dragon Medical Client*, *Dragon Medical* automatically saves all audio and transcribed text in Dragon Recorded Audio (**.DRA**) files. If the healthcare provider corrects any of the dictated text, *Dragon Medical* automatically stores these corrections in **.enwv** files. *Dragon Medical* saves both the **.DRA** and **.enwv** files in the background.

The *Profile Optimizer* uses these automatically created **.DRA** and **.enwv** files during the Acoustic Model Optimization (AMO) and Language Model Optimization (LMO) processes that optimize the user profile.

When this option is enabled, *Dragon Medical* encrypts these automatically created **.DRA** and **.enwv** files before storing them in the Local cache or Master user profile directories to ensure they do not become a back door into patient data and violate the patient's privacy. *Dragon Medical* also encrypts these files when a user dictates into a supported application like Microsoft Word or an Electronic Healthcare Record (EHR) application.

Due to the restrictions mandated by privacy regulations (such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and EC 95/46 Directive in Europe), only *Dragon Medical* can open these encrypted **.DRA** and **.enwv** files and only for internal use. As a result of these restrictions, non-Medical versions of *Dragon* and *Dragon* toolkits like the *Dragon SDK Client Edition* (DSC) and *Dragon SDK Server Edition* (DSS) cannot open these encrypted files. In addition, **DragonPad**, even within the *Dragon Medical Client*, can never open these encrypted interim **.DRA** and **.enwv** files.

Caution: Limitations of Dragon Encryption

- Dragon Medical does not encrypt .DRA files that the user explicitly saves. For example, if a user saves recorded dictation when saving a document (for example, in Word, WordPerfect, or DragonPad), these saved .DRA files are not encrypted. The user who created these files is responsible for saving these files in a secure location.
- Nuance does not guarantee that the file encryption provided in *Dragon* ensures total compliance with privacy regulations. Other security measures are required for full compliance.

Saving space otherwise occupied by excess data that might not enhance security

As long as other adequate security protections are in place to protect patient data, you can avoid saving excess patient data by:

- Deactivating encryption of patient health information
- Deactivating creation of DRA files and set options to conserve disk space
- Deactivating creation of unencrypted **.nwv** files

Deactivating encryption of patient health information

This option is activated by default. To deactivate the encryption of these background speech recognition files, you must deselect the **Encrypt patient info** option.

- 1. In the Nuance Management Console, click **Organization Overview**.
- 2. In the **Sites** area, click **Details**.
- 3. On the Organizations Details screen, click Products.
- 4. Expand the **DM360 Network Edition** section.
- 5. Encrypt patient info is enabled by default. Click the check box to uncheck the option.

Note: When this feature is deactivated, Nuance does not contribute to HIPAA or EC 95/46 Directive compliance.

Deactivating creation of .dra patient data files/setting system to conserve disk space

.DRA files are created when the option **Upload user data to Nuance for research purposes** is selected. This option can be selected at Account level or at User level.

When other security measures are in place, you can deactivate the creation of the **.DRA** files to further protect the patient's privacy.

- 1. In the Nuance Management Console, click **Organization Overview** or under **Sites** click **Manage organization & sites**.
- 2. In the **Sites** area, click **Details**.
- 3. On the Organizations Details screen, click Products.
- 4. Expand the DM360 Network Edition section.

Uncheck **Upload user data to Nuance for research purposes**. This deactivates this option as the default setting for all users. You can override it at the user level in the **User Account Details > Network Edition US** tab.

Activate your system settings to conserve disk space. When you activate these settings, Dragon automatically stops creating files that require large amounts of storage space.

Deactivating creation of unencrypted text collection .nwv archive files

To further ensure privacy, you can deactivate the creation of archive files that might contain

patient data from the Dragon Medical Client in the site configuration:

- 1. Open the site that you want to modify
- 2. Click the DM360 Network Edition tab.
- 3. Expand the **Data** section.
- 4. De-select the Store correction in archive option.
- 5. Click Save to save your settings.

Chapter 5: Applying Dragon Settings to organizations, sites, or groups

You can apply DM360 Network Edition Settings at the following levels:

- For the organization
- For the site
- For the group
- For the user account

The following table outlines the Dragon settings you can configure.

Dragon Setting	Set at the Organization level	Set at the Site level	Set at the Group level	Set at the User account level
Upload data to Nuance for research	Yes	No	No	Yes—under User Account Options
Anchor Dic- tation Box to application	No	No	Yes—under Admin- istrative Settings	Yes—under User Account Options
Auto-For- matting Options	No	No	Yes—under Auto- Formatting	Yes—under Auto- Formatting
ACO and LMO schedules	No	No	Yes—under Profile Optimizer Scheduler	Yes—under Profile Optimizer Scheduler

One feature that you must set on the Dragon Medical Client is the Medical Vocabulary.

If you set the feature for a group, and the group is the first on the **Group Details > Members > Group members** list, it applies to all user accounts in that group.

If you set feature for a user account, it applies only to that user account and the user account level setting overrides the group or site setting.

Configuring the Dragon settings

The following links provide more information on the how to configure the Dragon settings:

- Encryption of patient health information on page 224
- Sending speech data to Nuance on page 316
- Setting Dragon voice command options for provider groups on page 221
- Setting Auto-Formatting Dragon options on page 161
- Scheduling the optimization of acoustic and language models on page 183

You can also select the best medical vocabulary, but you must take this action on the *Dragon Medical Client*. Refer to *Selecting a medical vocabulary for a medical specialty* on page 290

Chapter 6: Managing licenses

In Dragon Medical 360 | Network Edition, you can quickly and easily assign licenses to individuals who are managing the system or dictating using the *Dragon Medical Client*. This chapter describes how to grant and revoke licenses and how to obtain information on the licenses being used by your organization.

Use this chapter to configure settings in the NMC that are common for most products that use the Nuance Management Server.

The information in this chapter is for administrators that have the privileges to configure settings for Dragon Medical 360 | Network Edition.

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Automatically grant permission to use the Dragon Medical client when you create a user account

An organization that uses DM360 Network Edition can use a new enterprise level license to automatically grant new users permission to use the Dragon client.

After receiving and importing the license key for the Enterprise License, when an administrator creates a user account, the user account is automatically granted permission to use the Dragon client.

This avoids having to manually assign the Physician Author license every time an administrator creates a new user account.

With the enterprise license, any user in the organization can use Dragon.

Note: Enterprise licenses have expiration dates, just like user-based licenses.

Obtaining and using the DM360 Network Edition enterprise license

- 1. Purchase the Enterprise License for Dragon from Nuance.
- 2. Nuance sends you the license key for the Enterprise License.
- 3. In the Nuance Management Console, import the license key.
- 4. When a user logs into the Dragon client, the NMS checks the license for the user.
- 5. The NMS confirms that the user has permission to use Dragon.

For more information about the DM360 Network Edition Enterprise License, and how to obtain it, contact your Nuance representative.

Managing licenses

When you first install Dragon Medical 360 | Network Edition, you enter the organization number that Nuance provides, and after the installation is complete, you already have a user account named **admin** that you can use to log on.

When you first log on to *Nuance Management Console*, the *NMS Server* uses your organization ID to retrieve licenses based on how many and what types of licenses you have purchased and the administrator licenses Nuance provides.

You purchase three types of licenses:

- **NMC Administrator**—License to access the *NMS Server* and configure the system. Nuance provides two free licenses of this type.
- **Physician Author**—License for a physician healthcare provider to dictate using the *Dragon Medical Client*.
- **Non-Physician Author**—License for any type of healthcare provider other than a physician (nurse practitioner, physical therapist, or similar professional) to dictate using the *Dragon Medical Client*.

DM360 Network Edition allows only **NMC Administrator** users with particular privileges to manage licenses for all other users.

Types of license upgrades available

If you are an existing customer and would like to purchase additional licenses or upgrade your existing licenses, you can contact your Nuance representative.

You can upgrade an existing *Dragon Medical* or *Dragon Professional* license to a **Physician Author** or **Non-Physician Author** license. For more information, speak with your Nuance representative.

Obtaining and applying licenses

When you first purchase the product, you also usually purchase some initial licenses. To later purchase additional licenses, contact your Nuance representative.

Importing licenses included with Dragon Medical 360 | Network Edition

You can purchase as many licenses as you need up front when you purchase the product. Later, when you start the *NMS Server*, to download the licenses purchased for your account:

- 1. On the menu bar click **Licensing**, and then click the **Import License Key** icon. The **Import License Key** window opens.
- 2. Copy and paste the encrypted license key you received in e-mail into the License Key box.
- 3. Click Show Information.
- 4. Click **Import**. The *NMS Server* decrypts the license key and generates the licenses on your system where they become available for you to grant to the user accounts you create.

Purchasing and obtaining new licenses

When you purchase additional licenses through your Nuance representative, once the licenses have been issued, you see a message about the license or licenses in **Utilities**> **Messages**. You do not have to take any action to receive those licenses. You are not required to approve them to initiate download of those licenses; instead, the licenses appear in the **Licenses Summary** when you click **Licensing** > **View Licenses** tab, where you can grant those licenses to particular administrators or providers. To refresh the data on the **Licenses Summary** screen, press **Refresh** at the bottom right of the screen.

For more information on working with the licenses in the Licenses Summary, see:

- Preparing to grant licenses on page 204
- Granting licenses on page 209
- Receiving expiration alerts and renewing licenses on page 212
- Revoking licenses on page 213

Preparing to grant licenses

After you have successfully installed the *Nuance Management Console* software and run the *NMS Server*, you usually already have licenses to use the *NMS Server* and the *Dragon Medical Clients*. To make use of those licenses, you must grant them to particular individuals.

But before you can grant licenses, you need to take several steps to prepare:

- 1. Log in to the Nuance Management Console.
- 2. Create a group called **License Managers** that can contain **NMC Administrator** users only. Assign the users in that group these particular **Security Rights**:

- Notified when licenses are expiring
- Able to grant licenses
- Able to revoke licenses
- Able to view licenses

You can assign the **License Managers** group other rights if you would like, but these rights are those required to manage licenses. For more information on how to create groups, refer to *Setting Security Rights for NMC Administrator groups* on page 116

For more information on how to create groups, refer to Creating groups on page 111.

3. Create user accounts for people who you want to give license management responsibilities to and add them to the **License Managers** group. For more information on how to create user accounts, refer to *Configuring user accounts* on page 124.

The individuals with **License Managers** privileges are now ready to grant, renew, and revoke licenses as required.

Viewing licenses

After you have purchased licenses and prepared to grant those licenses, any individual with an **NMC Administrator** user account that you assigned the appropriate security rights can take steps to view the licenses that are in your *NMS Server*.

Viewing existing licenses

- 1. Click **Licensing** on the menu bar.
- 2. Click the View Licenses icon.
- 3. In the Licenses Summary screen, enter the search criteria.
- 4. Click **Search**.Click the magnifying glass icon. The **Licenses Summary** screen displays the search results, as shown below:

Organization name	Mode	OEM Name	Product name	License type	Expires on	Total licenses	Used licenses
Default Organization	Account	Nuance	Nuance Mgt Console	NMC Administrator	1/1/2099	2	
Default Organization	Account	Nuance Speech On Demand	Speech Anywhere	Speech Anywhere	6/6/2020	500	0

- 5. To refresh the data on the **Licenses Summary** screen, press **Refresh** at the bottom right of the screen. In this table, you can see several pieces of information about each license:
 - **Organization name**—Each license is associated with a particular organization for a particular product.
 - Mode—This field is always set to Account or Enterprise.
 - **OEM Name** Ignore this field.
 - Product name—For an NMC Administrator license, the product name is the Nuance Mgt Console (NMC); for a Physician Author or Non-Physician Author license, the product type is DM360 Network Edition.

- License type—All licenses are NMC Administrator (for using the console), and Physician Author, or Non-Physician Author (for dictating on client workstations).
- **Expires on**—The expiration date for the license.
- **Total licenses** Total number of licenses of the particular type that you have, whether or not you have granted them to anyone.
- Used licenses—Total number of licenses of the particular type that you have granted to user accounts.
- 6. From this table, you can now grant or revoke licenses.

As you grant the licenses, the number of that type of licenses available automatically adjusts in the table. Likewise, when you receive the new licenses from Nuance, the *NMS Server* adjusts the number of licenses of that type in the **Licenses Summary** table.

- 7. To grant licenses using this table, see Granting licenses on page 209.
- 8. To revoke licenses using this table, see Revoking licenses on page 213.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results 🖄
- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Viewing license usage information

In the Nuance Management Console, you can create a report and view data about how your DM360 Network Edition licenses are being used in your network by indicating how often and when users last logged in to either the Dragon Client (Author licenses) or the NMS (Administrator licenses).

You can view usage information for available license types. The following license types are specific to DM360 Network Edition:

- NMC Administrator
- Physician Author license
- Non-Physician Author license

.You can use the license usage information in the report to manage and optimize the use of DM360 Network Edition licenses in your organization. For example, if a user with a DM360 Network Edition license does not use the license frequently, you can re-assign the DM360 Network Edition license to another user.

You can also use the license usage information to plan the future license requirements for your organization.

To generate and view the usage report, you must have the proper administrative rights in the Nuance Management Server (NMS).

- 1. Open the Nuance Management Console.
- In the Trends section, under Usage, select License Use.
 The Nuance Management Console displays the License Usage view.

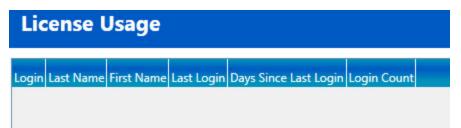
License Usage

Organization	er		•
License type	Physician Author		-
Start Date/Time	10/01/2012 00:00:00 AM	•	
End Date/Time	10/08/2012 23:59:59 PM	w.	

3. Select the search criteria for the report:

- i. The **Organization** field is greyed out.
- ii. In the **License type** field, select a license type.
- iii. In the **Start Date/Time** field, select a start date and time.
- iv. In the End Date/Time field, select an end date and time.
- 5. Click the magnifying glass.

The Nuance Management Console generates a report using data from the Nuance Management Server.



The Nuance Management Console displays the report as a grid with the following information:

- Login The login information of the user.
- Last Name The last name of the user.
- First Name The first name of the user.
- Last Login The date and time that the user last logged into the system.
- Days Since Last Login The number of days since the last date the user logged into the system.
- Login Count -The total number of times the user logged into the system between the Start Date/time to the End date/time.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results
- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Granting licenses

You can grant licenses when you create a user account or after you create the account.

If you delete a user account for a professional who still has an active license, the license becomes available for you to grant to another user.

Granting a license immediately after creating a user account

1. When you first create a new user account, if you have already downloaded licenses, when you save the user account, in the dialog box pops up asking **Do you want to grant the new user a license now?**, select **Yes**.



- 2. In the next dialog that appears, select one or more types of licenses to assign to the user account.
- 3. Once you select the license types, if purchased licenses of that type are available on the server, *NMS Server* automatically assigns them to the user account. Otherwise, it pops up a message, saying the license is not available. If the license is not available, that's not a problem, as you can grant the license later, after you either purchase or download more licenses or free up a license from another user account by revoking that account's license or deleting the user account.

Granting a license to an existing user account

To grant a license to an existing user account:

- 1. Click Licensing on the menu bar.
- 2. In the ribbon below the Licensing tab, click the View Licenses icon.
- 3. In the Licenses Summary screen, enter search criteria in the fields and click the magnifying glass.
- 4. Click on the type of license that you want to grant to highlight it.

Licenses Su	mmai	У					
Organization name	Mode	OEM Name	Product name	License type	Expires on	Total licenses	Used license
Default Organization	Account	Nuance	DM360 Network Edition	Physician Author	10/26/2099	110	43
Default Organization	Account	Nuance	Nuance Mgt Console	NMC Administrator	1/1/2099	12	6

5. In the Licensing ribbon, click the Grant icon.



6. When the **Grant License** tab opens, you see your organization's name to the top left and the type of license (such as **Physician Author**) to the top right. Below the organization name, you see a list of **Available Users** containing the names of people whose user accounts you have not yet granted licenses and to the right of it you see an empty list of **Selected Users** with a small box above it labeled **Available Licenses** that contains the number of licenses of this type still available for you to assign.

ganization			License Ty	pe				
efault Organiza	tion		Physician	Author				
vailable Users						Selected Users -		
Search	Q						Available License	s 67
Last Name	First Name	Login Id	Location	-				
admin	another	aadmin						
Admin	Burlington							
Administrator	Default	admin						
					>			

Below the **Organization** text box, if you do not see the name of the person you want to grant the license to in the list of **Available Users**, click the magnifying glass to the right of **Search** to find that user account. Then select the person or persons to grant the license to in the **Available Users** list and those names become highlighted.

- Click the > button between the two lists to move that user's name to the Selected Users list. The user name(s) move to the Selected Users list on the right and the number of available licenses then reduces to show that fewer licenses are available.
- 8. If you missed any names, repeat the last three steps for other users in the **Available Users** list who you'd like to grant the same type of license.
- 9. If you make a mistake or change your mind about granting one of these licenses while the tab is still open, you can click on the name in the **Selected Users** list and click the < button to return that name to the **Available Users** list.

- 10. When you are satisfied that licenses listed are those you want to grant, click **OK** to save the information and grant the licenses. The tab closes and you return to the **Licenses Summary** table.
- 11. Repeat this process for each type of license you want to grant.

Receiving expiration alerts and renewing licenses

Thirty days before a Dragon Medical 360 | Network Edition license is going to expire, you start receiving alerts about that fact. You should be sure to renew the license before it expires.

Viewing messages about expired licenses

If a license is close to expiring, you receive a reminder message. To view messages that might contain alerts about licenses that are expiring soon:

- 1. Click the **Utilities** tab on the ribbon.
- 2. Click Messages.
- 3. In the **Messages** window, search for messages that are related to licenses. Expiration messages look like the following messages:

lessages		Unread Messag All Messag	
Mark Comple	ete Date/Time	Message Text	
Image: A start of the start	3/17/2010	Please note: You have 7 [Author] license(s) for product [Dragon Medical] that will expire in 30 days or less.	
	3/18/2010	Please note: You have 7 [Author] license(s) for product [Dragon Medical] that will expire in 30 days or less.	
	3/19/2010	Please note: You have 7 [Author] license(s) for product [Dragon Medical] that will expire in 30 days or less.	
Image: A start of the start	3/20/2010	Please note: You have 7 [Author] license(s) for product [Dragon Medical] that will expire in 30 days or less.	
1			

4. If the message says a license or set of licenses are about to expire, you should follow the renewal process below to renew the license.

Renewing the License

To renew an existing license:

- 1. Contact your Nuance representative. The representative should be able to verify your official organization number and take you through the process of purchasing renewal licenses and any additional licenses you would like.
- 2. Once the renewal is approved, the licenses download to your *Nuance Management Server*. You can then see the licenses in your *Nuance Management Console*.

Revoking licenses

To revoke a license that is associated with a user account:

- 1. Click **Licensing** on the menu bar and in the ribbon below the **Licensing** tab you see the **View Licenses** icon.
- 2. Click the View Licenses icon.
- 3. Enter search criteria and click the magnifying glass.
- 4. Click on a license that you want to revoke. Several more icons become available in the ribbon above.
- 5. To revoke the license from one or more uses, click the **Revoke** icon. The Nuance Management Console displays the **Revoke License** tab. In the tab, you see a list of **Licensed Users** to the left and an empty **Removed Users** list to the right.
- In the Licensed Users list, select one or more users to revoke that type of license from, then click the button between the two lists with a > symbol in it. The names move to the Removed Users list.
- 7. Click **OK** to save the change. The tab closes and you return to the **Licenses Summary** table. The newly revoked licenses should be added to the number of licenses available in the table.
- 8. Repeat this process for each type of license you want to revoke.

Dictating with Author licenses while disconnected from network

Because licenses to dictate with a *Dragon Medical Client* are always stored on the *NMS Server*, each healthcare provider with a **Physician Author** or **Non-Physician Author** license must log on to the network at least every 90 days. The 90 day limit is how long the professional can dictate (usually on a laptop) without connecting to the server to *refresh* the license.

If the provider tries to dictate for longer than 90 days without connecting to the server, Dragon Medical 360 | Network Edition rejects that provider's user name and password, and prompts the professional to connect to the network.

The *Dragon Medical Client* continues to refuse the provider access until after the dictation equipment has been reconnected to the network, where the *NMS Server* can confirm authorization to use the license.

Chapter 7: Applying Dragon Settings to organizations, sites, or groups

You can apply DM360 Network Edition Settings at the following levels:

- For the organization
- For the site
- For the group
- For the user account

The following table outlines the Dragon settings you can configure.

Dragon Setting	Set at the Organization level	Set at the Site level	Set at the Group level	Set at the User account level
Upload data to Nuance for research	Yes	No	No	Yes—under User Account Options
Anchor Dic- tation Box to application	No	No	Yes—under Admin- istrative Settings	Yes—under User Account Options
Auto-For- matting Options	No	No	Yes—under Auto- Formatting	Yes—under Auto- Formatting
ACO and LMO schedules	No	No	Yes—under Profile Optimizer Scheduler	Yes—under Profile Optimizer Scheduler

One feature that you must set on the Dragon Medical Client is the Medical Vocabulary.

If you set the feature for a group, and the group is the first on the **Group Details > Members > Group members** list, it applies to all user accounts in that group.

If you set feature for a user account, it applies only to that user account and the user account level setting overrides the group or site setting.

Configuring the Dragon settings

The following links provide more information on the how to configure the Dragon settings:

- Encryption of patient health information on page 224
- Sending speech data to Nuance on page 316
- Setting Dragon voice command options for provider groups on page 221
- Setting Auto-Formatting Dragon options on page 161
- Scheduling the optimization of acoustic and language models on page 183

You can also select the best medical vocabulary, but you must take this action on the *Dragon Medical Client*. Refer to *Selecting a medical vocabulary for a medical specialty* on page 290

Selecting a medical vocabulary for a medical specialty

You should select and use a medical specialty that is based on the appropriate vocabulary.

Medical specialties and medical vocabularies -US and UK English Dragon Medical

The following table correlates Medical specialties with Dragon Medical vocabularies available in US and UK English. Items that are not available in UK English are marked with an asterisk (*).

Specialty	Medical Vocabulary
Addiction Psychiatry	Mentalhealth
Allergy and Immunology	Generalpractice
Anesthesiology	Neurology
Bariatric Surgery *	Surgery
Behavioral Health *	Psychiatry
Blood Banking/Transfusion Medicine *	Pathology
Breast Surgery *	Surgery
Cardiac Surgery	Surgery
Cardiology	Cardiology
Cardiothoracic Surgery *	Surgery
Cardiovascular Disease *	Generalpractice
Case Management *	General Medical
Chiropractic *	Neurology
Clinical Cardiac Electrophysiology *	Cardiology
Colon and Rectal Surgery	Surgery
Dentistry	Orthopaedic
Dermatology	Generalpractice
Dermatopathology *	Pathology
Developmental-Behavioral Pediatrics *	Pediatrics
Diagnostic Radiology *	Radiology
EEG *	Psychiatry
Emergency Medicine	Emergency

Specialty	Medical Vocabulary
EMG Examinations *	Neurology
Empty Dictation	empty dictation
Endocrinology Diabetes and Metabolism	Mentalhealth
ENT	Obgyn
Epidemiology	Generalpractice
Family Medicine	Generalpractice
Fetal Medicine	Obgyn
Gastroenterology	Gastroenterology
General	General
General Medical	Medical
Geriatric Medicine	Generalpractice
Hand Surgery	Orthopaedic
Hematology	Generalpractice
Infectious Disease	Generalpractice
Internal Medicine	Generalpractice
Interventional Cardiology *	Generalpractice
Medical Education and Writing	Generalpractice
Medical Microbiology *	Pathology
Medical Toxicology *	Emergency
Midwifery	Obgyn
Neonatal and Perinatal Medicine	Pediatrics
Nephrology	Generalpractice
Neurodevelopmental Disabilities *	Pediatrics
Neurology	Neurology
Neuromuscular Medicine *	Neurology
Neuropathology *	Pathology
Neurosurgery	Orthopaedic
Neurotology *	Obgyn
Nuclear Medicine	Radiology
Nursing	Generalpractice
Obstetrics and Gynecology	Obgyn

Specialty	Medical Vocabulary
Oncology	Oncology
Ophthalmology	Medical
Oral and Facial Surgery	Orthopaedic
Orthopaedic Surgery	Orthopaedic
Osteopathy	Generalpractice
Otolaryngology *	Obgyn
Pain Medicine	Neurology
Pathology	Pathology
Pediatric Cardiology	Cardiology
Pediatric Dentistry	Pediatrics
Pediatric Gastroenterology	Gastroenterology
Pediatric Otolaryngology *	Obgyn
Pediatric Pathology *	Pathology
Pediatric Pulmonology *	Pediatrics
Pediatric Rheumatology *	Pediatrics
Pediatric Transplant Hepatology *	Pediatrics
Pediatrics	Pediatrics
Physical Medicine and Rehabilitation *	Neurology
Plastic Surgery	Orthopaedic
Podiatry	Orthopaedic
Proctology	Surgery
Psychiatry	Mentalhealth
Psychology	Mentalhealth
Pulmonary Disease	Generalpractice
Radiation Oncology *	Radiology
Radiation Therapy	Oncology
Radiology	Radiology
Rheumatology	Generalpractice
Sleep Lab	Generalpractice
Social Worker *	General Medical
Speech and Language Pathology *	Neurology

Specialty	Medical Vocabulary
Spinal Cord Injury Medicine *	Neurology
Surgery	Surgery
Thoracic Surgery	Surgery
Transplant Hepatology *	Generalpractice
Undersea and Hyperbaric Medicine *	Emergency
Urology	Surgery
Vascular and Interventional Radiology	Neurology
Vascular Surgery	Surgery

Setting Dragon voice command options for provider groups

The **Network Edition US** tab for a group includes a list of voice command options under **Commands** that control how the *Dragon Medical Client* interprets voice commands.

Once you configure commands for a group, the command settings then apply to all healthcare providers in the group.

- Enable mouse motion commands: By default, this feature is enabled. Allows the user to use mouse motion commands such as "Move Mouse left," "Faster," and "Slower." Use the **Mouse movement** slider to control how quickly the mouse pointer moves across the screen.
- Enable HTML Support: By default the group level setting applies.

Enabling this setting makes available a set of *Dragon Medical* commands designed to help providers surf the web by voice in Internet Explorer and Mozilla FireFox 2.x web browsers. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

• Enable commands in HTML windows: By default the group level setting applies.

Enabling this option makes available a set of voice commands designed for providers to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes. These dialog boxes appear with the Internet Explorer symbol (a small document icon with the letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain EHR applications. For more information, see the *Dragon Medical Client* Help.

- Require click to select hyperlinks in HTML windows: By default, this feature is enabled and the group level setting applies.
 Requires that provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com."
- Enable HTML custom API: Enable Full Text Control in a Hyperspace 2014 HTML edit control for a group of users.
- Enable recognition mode switching commands: Enabling recognition mode switching allows users in the group to dictate and say the mode switching commands interchangeably. Turning off recognition mode switching disables the ability to switch between modes For example:
 - Dictation Mode: In Dictation Mode *Dragon Medical* interprets everything you say as dictation and nothing is interpreted as a command. Say "Start Dictation Mode" or "Switch to Dictation Mode."
 - **Command Mode**: In Command Mode *Dragon Medical* interprets everything you say as a command and nothing is interpreted as dictated text. Say "Start Command Mode" or "Switch to Command Mode."
 - **Spell Mode**: In Spell Mode *Dragon Medical* allows you to say any combination of letters, digits, or symbols as you might need to do dictating license plate or parts numbers. Say "Start Spell Mode" or "Switch to Spell Mode."

- Numbers Mode: In Numbers Mode *Dragon Medical* interprets your dictation as numbers. Say "Start Numbers Mode" or "Switch to Numbers Mode."
- Normal Mode: The most flexible mode in *Dragon Medical* is Normal Mode. In Normal Mode, *Dragon* distinguishes dictation from commands by analyzing what you say between pauses. Say "Start Normal Mode" or "Switch to Normal Mode."

For more information on modes, see Using Recognition Modes in the *Dragon Medical Client* Help.

- Enable Web search commands: Select this option to make available Web search commands that let providers in the group search the Internet using commands that are patterned on their natural speech. See Voice Shortcuts for Web Search in the *Dragon Medical Client* Help for more information.
- Enable desktop search commands: Select this option to make available Desktop search commands that let providers in the group search their Windows desktops using commands that are patterned on their natural speech. See Voice Shortcuts for Desktop Search in the *Dragon Medical Client* Help for more information.
- Enable Email and Calendar commands: Select this option to make available Voice Shortcuts for Email and Calendar that let providers in the group control Outlook's email and calendar functions using commands that are patterned on their normal speech. See the *Dragon Medical Client* Help for more information.
- Enable cut shortcut commands, Enable delete shortcut commands, Enable Copy shortcut commands: Select these options to enable the Cut, Copy and Delete Quick Voice Formatting Commands. Delete and Copy are enabled by default.

In versions 9 and earlier of the *Dragon Medical Client*, cutting, copying, or deleting was a twostep operation: you first had to select the text before you could operate on it. The Quick Formatting Commands let you perform many of these tasks with a single command.

If you turn off these commands, you can still cut, copy, and delete, but you have to first select the text with the "Select <text>" command and then issue a second command to perform the operation you want; for example, "delete that".

For more information, see the Dragon Medical Client Help.

• Variable delimiters: By default the group level setting applies.

The variable delimiters are used by Text and Graphics/auto-texts commands that incorporate Voice (variable) Fields. Voice Fields are variable fields where the provider can later type or dictate a specific value.

By default, Text and Graphics/auto-texts Voice commands use the square bracket [] characters to indicate the presence of a variable field. To change the variable delimiting characters, specify a character for the left and right delimiters.

The delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, the *Dragon Medical Client* displays a message that they are not valid.

Caution: Nuance recommends you set the delimiting characters once and never change them, because if, for instance, you use square brackets in several Text and Graphics/auto-texts commands, then change the delimiting characters to */ and /*, the Text and Graphics/auto-texts commands that are using the square brackets then fail because the *Dragon Medical Client* looks for variables only between */ and /*, not between [and].

For more information about using variables with Text and Graphics/auto-texts commands, see Using Voice Fields with Text and Graphics/auto-texts commands in the *Dragon Medical Client* Help.

• Enable Natural Language Commands: This series of four options enables the users in the group to use Natural Language commands with the applications Microsoft Word, WordPerfect, Microsoft Excel, and Microsoft PowerPoint. This feature uses an additional 8 MB of memory and requires that you restart your computer before it takes effect. Natural Language Commands are available by default only in Microsoft Word.

For more information, see the Dragon Medical Client Help.

Encryption of patient health information

To access settings for your organization where you can choose to **Encrypt patient information** and **Upload user data to Nuance for research purposes**, see *Accessing and adding to your organization data* on page 24.

Understanding how Dragon encrypts data

When you have selected the **Encrypt patient info** check box, *Dragon Medical Client* software takes particular actions delineated here:

When a user dictates using the *Dragon Medical Client*, *Dragon Medical* automatically saves all audio and transcribed text in Dragon Recorded Audio (**.DRA**) files. If the healthcare provider corrects any of the dictated text, *Dragon Medical* automatically stores these corrections in **.enwv** files. *Dragon Medical* saves both the **.DRA** and **.enwv** files in the background.

The *Profile Optimizer* uses these automatically created **.DRA** and **.enwv** files during the Acoustic Model Optimization (AMO) and Language Model Optimization (LMO) processes that optimize the user profile.

When this option is enabled, *Dragon Medical* encrypts these automatically created **.DRA** and **.enwv** files before storing them in the Local cache or Master user profile directories to ensure they do not become a back door into patient data and violate the patient's privacy. *Dragon Medical* also encrypts these files when a user dictates into a supported application like Microsoft Word or an Electronic Healthcare Record (EHR) application.

Due to the restrictions mandated by privacy regulations (such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and EC 95/46 Directive in Europe), only *Dragon Medical* can open these encrypted **.DRA** and **.enwv** files and only for internal use. As a result of these restrictions, non-Medical versions of *Dragon* and *Dragon* toolkits like the *Dragon SDK Client Edition* (DSC) and *Dragon SDK Server Edition* (DSS) cannot open these encrypted files. In addition, **DragonPad**, even within the *Dragon Medical Client*, can never open these encrypted interim **.DRA** and **.enwv** files.

Caution: Limitations of Dragon Encryption

- Dragon Medical does not encrypt .DRA files that the user explicitly saves. For example, if a user saves recorded dictation when saving a document (for example, in Word, WordPerfect, or DragonPad), these saved .DRA files are not encrypted. The user who created these files is responsible for saving these files in a secure location.
- Nuance does not guarantee that the file encryption provided in *Dragon* ensures total compliance with privacy regulations. Other security measures are required for full compliance.

Saving space otherwise occupied by excess data that might not enhance security

As long as other adequate security protections are in place to protect patient data, you can avoid saving excess patient data by:

- Deactivating encryption of patient health information
- Deactivating creation of DRA files and set options to conserve disk space
- Deactivating creation of unencrypted .nwv files

Deactivating encryption of patient health information

This option is activated by default. To deactivate the encryption of these background speech recognition files, you must deselect the **Encrypt patient info** option.

- 1. In the Nuance Management Console, click **Organization Overview**.
- 2. In the **Sites** area, click **Details**.
- 3. On the Organizations Details screen, click Products.
- 4. Expand the DM360 Network Edition section.
- 5. Encrypt patient info is enabled by default. Click the check box to uncheck the option.

Note: When this feature is deactivated, Nuance does not contribute to HIPAA or EC 95/46 Directive compliance.

Deactivating creation of .dra patient data files/setting system to conserve disk space

.DRA files are created when the option **Upload user data to Nuance for research purposes** is selected. This option can be selected at Account level or at User level.

When other security measures are in place, you can deactivate the creation of the **.DRA** files to further protect the patient's privacy.

- 1. In the Nuance Management Console, click **Organization Overview** or under **Sites** click **Manage organization & sites**.
- 2. In the **Sites** area, click **Details**.
- 3. On the **Organizations Details** screen, click **Products**.
- 4. Expand the DM360 Network Edition section.

Uncheck **Upload user data to Nuance for research purposes**. This deactivates this option as the default setting for all users. You can override it at the user level in the **User Account Details** > **Network Edition US** tab.

Activate your system settings to conserve disk space. When you activate these settings, Dragon automatically stops creating files that require large amounts of storage space.

Deactivating creation of unencrypted text collection .nwv archive files

To further ensure privacy, you can deactivate the creation of archive files that might contain

patient data from the Dragon Medical Client in the site configuration:

- 1. Open the site that you want to modify
- 2. Click the **DM360 Network Edition** tab.
- 3. Expand the **Data** section.
- 4. De-select the **Store correction in archive** option.
- 5. Click **Save** to save your settings.

Configuring default PowerMic II settings for a group

The Dragon Client can obtain default group level PowerMic II settings from the Nuance Management Server (NMS). An administrator configures default PowerMic II button settings at the group level. When a new user is created, the user is given the default values from the NMS instead of the default settings from the Dragon Client.

The impact of NMS PowerMic II settings on new and existing users

When an administrator sets the default PowerMic II button settings for a group, new users receive the default PowerMic II button settings configured by the administrator. The new users can use the PowerMic II options dialog in the Dragon client to modify the NMS PowerMic II settings.

The PowerMic II settings for existing users are not directly affected when an administrator sets the default PowerMic II settings for the user's group.

If an existing user wants to synchronize their PowerMic II settings with the defaults PowerMic II settings from the NMS, the user can click the "Restore defaults" button in the PowerMic II options dialog in the Dragon client.

PowerMic II settings in the Nuance Management Console

In the Nuance Management Console, you set the default PowerMic II settings for a group. In the **Network Edition US** tab, the **PowerMic II** section displays two columns that you use to configure the PowerMic's buttons, associating them with different commands:

- Transcribe: The default value is 'Show dictation box'.
- Tab Backward: The default value is 'Tab backward'.
- Tab Forward: The default value is 'Tab forward'.
- Dictate: The default value is 'Press-to-talk'.
- Rewind: The default value is 'Previous field'.
- Fast Forward: The default value is 'Next field'.
- Stop/Play: The default value is 'Accept defaults'.
- Custom Left: The default value is 'Force command recognition'.
- Enter/Select: The default value is 'Transfer Text'.
- Custom Right: The default value is 'Force dictation recognition'.

You can set the application that the PowerMic II button actions apply to:

- the Dictation Box
- Global: any application except the Dictation Box

You can also set the actions that each PowerMic II button performs.

Configuring default PowerMic II settings for a group

You must have the product rights to manage DM360 Network Edition.

- 1. In the Nuance Management Console ribbon, click Groups.
- 2. In the **Groups** area, click **Search**.
- 3. Enter search criteria and click the magnifying glass.
- 4. Perform one of the following actions:
 - i. In the search results, select a group and click **Details**.
 - ii. In the search results, double-click a group
- 5. Select the **Network Edition US** tab.
- 6. Expand the PowerMic II section to view the PowerMic II settings.

Application:	Global	-
Button	Action	
Transcribe	Show dictation box	-
Tab Backward	Tab backward	-
Tab Forward	Tab forward	-
Dictate	Press-to-talk	-
Rewind	Previous field	-
Fast Forward	Next field	-
Stop/Play	Accept defaults	
Custom Left	Force command recognition	-
Enter/Select	Transfer Text	-
Custom Right	Force dictation recognition	
		Restore Defaults

Network Edition US

- 7. In the **Application** drop-down field, set the application that the microphone button commands apply to:
 - **Global**: Microphone button commands apply to any application other than the Dictation Box. Default setting.
 - **Dictation Box**: Microphone button commands apply to the Dictation Box only.
- 8. In the **Action** column, click the drop-down menu to the right of a button, place the cursor over one of the following actions, and select one of the choices to the right of the action:

Application:	Global		•
Button	Action		
Transcribe	Show dictation box	R	•
Tab Backward	<none> Applications</none>		•
Tab Forward	Dictation Navigation	;	•
Dictate	Recognition modes Playback	;	•
Rewind	User Commands	•	-

- Applications:
 - Show DragonBar menu: To open the menu selected on the DragonBar.
 - Show dictation box: To open the Dictation Box.

• Dictation:

- Microphone on/off: To turn the microphone on and off.
- Show correction window: To open the Correction dialog box.
- **Microphone sleep/on**: To awaken the microphone or make the microphone sleep.
- Press-to-talk: To capture dictation.
- Train new word: To open the Add Individual Word dialog box.
- Transcribe recording: To open the Transcribe from dialog box.
- Transfer Text: To move text from the Dictation Box to an application.

• Navigation:

- Skip back.
- Skip forward.
- Press OK button.
- Press Cancel button.
- Tab forward.
- Previous field.
- Next field.
- Accept defaults
- Recognition mode:
 - Force normal recognition: Puts the Dictation Box into Normal mode.
 - Force dictation recognition: Puts the Dictation Box into Dictation mode.
 - Force command recognition: Puts the Dictation Box into Command mode.
 - Force numbers recognition: Puts the Dictation Box into Numbers mode.
 - Force spell recognition: Puts the Dictation Box into Spell mode.
 - Hidden Mode on/off: Puts the Dictation Box into Hidden mode.

- Playback:
 - Playback.
 - Fast Playback.
 - Fast Forward.
 - Rewind.
- User Commands:
 - **Specify**: The user selects this option to associate a button with a custom command.

Language-specific settings for DM360 Network Edition

A large number of Dragon Medical 360 | Network Edition settings are configured in the Nuance Management Console and then retrieved by the Dragon client. These settings include administrative settings, configuration options, and many formatting options.

You can specify DM360 Network Edition settings for a specific language. Each language has it own complete set of DM360 Network Edition settings. You can only configure language-specific settings at the user and group level.

Changing a setting in one language does not change the setting in a different language.

User setting and group setting priority occurs within the same language.

Setting language-specific DM360 Network Edition settings

You must have the rights to manage groups and users, and, the appropriate licenses and rights to see DM360 Network Edition settings.

- 1. In the Nuance Management Console, in the **Organizations** area, click **Details**.
- 2. On the **Organization Details** screen, click **Products**.
- 3. Expand the **DM360 Network Edition** section.
- 4. To manage DM360 Network Edition US settings, select **Enable US Settings**. The option is checked by default.
- 5. To manage DM360 Network Edition UK settings, select Enable UK Settings.
- 6. To manage both DM360 Network Edition US and DM360 Network Edition UK settings, select **Enable US Settings** and **Enable UK Settings**.
- To manage DM360 Network Edition US user settings, select a user, and navigate to the User Account Details > Network Edition US tab.
- To manage DM360 Network Edition UK user settings, select a user, and navigate to the User Account Details > Network Edition UK tab.
- To manage DM360 Network Edition US group settings, select a group, and navigate to the Group Details > Network Edition US tab.
- To manage DM360 Network Edition UK group settings, select a group, and navigate to the Group Details > Network Edition UK tab.
- 11. Change the user or group level settings and click Save.

Chapter 8: Managing user profiles and Speech Nodes

Dragon Medical 360 | Network Edition stores the information about how a particular healthcare provider speaks and pronounces words and phrases in the master user profile for that provider.

The sections in this chapter help you understand actions that you carry out to upgrade user profiles from earlier versions of *Dragon* and then continue to optimize those profiles over time.

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Creating a user profile

On the *NMS Server* you create user accounts that later associate with user profiles, but you do not create any actual user profiles on the server. Only *Dragon* creates user profiles. As long as you have created a user account for a healthcare provider to log on to *Dragon*, *Dragon* takes it from there.

Every time a provider dictates for the first time, *Dragon* creates a user profile based on a combination of the provider's language, accent, audio input device, and vocabulary with the provider's voice and speech patterns.

Over time, as *Dragon* collects more data about the provider's voice and speech patterns, the *Profile Optimizer Server* initiates periodic optimization processes that analyze the data collected and integrate the information into acoustic and language models it builds for that provider. The server launches the processes based on the schedule you set up in the **Profile Optimizer Scheduler** in the **User Account Details > Network Edition US** tab. For more information on optimizations and scheduling them, see:

- Scheduling optimization, medication, and command updates on page 190
- Scheduling the optimization of acoustic and language models on page 183

Although the *Profile Optimizer Server* launches the optimization processes, the processes actually take place on *Profile Optimizer Speech Nodes*. If your *Profile Optimizer* has more than one *Speech Node*, the *Profile Optimizer Server* selects the node that can take on more work. By spreading the optimization work over multiple speech nodes, the *Profile Optimizer Server* ensures that the processes complete efficiently.

Upgrading a user profile to DM360 Network Edition Version 2.1

If you are upgrading from:

- Dragon Medical Enterprise Edition Version 10.1
- Dragon Medical Practice Edition Version 11
- DM360 Network Edition Version 10.5

to DM360 Network Edition, version 2.1, you must upgrade your user profiles.

Note:

If you are upgrading from a version of DM360 Network Edition that is not Service Pack 3 or higher, you must first upgrade to Service Pack 3. See the *DM360 Network Edition SP 3 Installation Guide* for more information.

Complete the following steps to upgrade your user profiles:

Before upgrading Dragon user profiles

Notes:

- Before you upgrade them, Nuance recommends you back-up your user profiles.
- Profile upgrades can take a long time. Because of this, Nuance recommends that you plan to
 upgrade the user profiles at a time when healthcare providers are not using them to dictate, such
 as at night or on a weekend. If there is no time when all your user profiles are not in use
 (because healthcare providers dictate 24/7), you can upgrade multiple sets of user profiles at
 appropriate times.
- Export your Dragon Medical Enterprise Edition and Dragon Medical Practice Edition profiles to the NMC, as described in the *Converting local user profiles to master user profiles* section of the Dragon Medical 360 | Network Edition Installation and Upgrade Guide.
- Nuance recommends upgrading user profiles on multi-core machines for better throughput. Profiles upgraded on machines with a number of cores that is different than the number of cores on the speech nodes that run the profiles generates a warning message about recognition accuracy. For example, if you upgrade your profiles on a dual core machine but run them on a single core speech node, the warning message appears when the profile is opened.

To prevent the warning message from appearing, use machines with the same number of cores to upgrade speech profiles and for the speech nodes. For example, if you upgrade the profiles on a dual core machine, run those profiles on dual core speech nodes.

- 1. Start the Nuance Management Console and log in.
- Go to the site that contains the user profiles that you want to upgrade and click the DM 360 Network Edition tab. The DM360 Network Edition settings interface appears.
- 3. Click the + icon next to Master user profile to expand the Master user profile options:

Site		
General Address DM360 Netw	vork Edition Clintegrity 360 CAPD	
+ Miscellaneous		4
- Master user profile		
Master user profile directorie	s Default Configure	
Initiate Speech Profile Up	grade to DMNE Version 2.0	
Local cache directory Direct	ory 🔎	
Allow disconnected mode		1
Saving the user also saves		
	en/close only (Minimizes network traffic)	
Ask before breaking lock of Set audio levels on each m		
Copy DM360 Network Edi		
Always copy acoustic information	-	
Restore Defaults		
Save	Cancel	

- 4. Click the **Initiate Speech Profile Upgrade to DMNE Version 2.0** button. A dialog appears asking if you want to upgrade the speech profiles. Click **OK** to start the upgrade.
- 5. When the profile upgrade is complete, the NMC sends a confirmation message to the Administrator.
- 6. Associate the upgraded user profiles with user accounts, as described in *Associating new user accounts with existing user profiles* on page 239.

Configuring the location of user profiles

The Nuance Management Server supports multiple versions of user profiles:

- Dragon Medical 360 | Network Edition 10.1
- Dragon Medical 360 | Network Edition, version 2.0 or higher

Each version has its own user profile location.

When an end user logs into Dragon through the NMS server, the NMS sends the location of the user's profile to Dragon. This allows Dragon to find and access the user profile.

Note: In NMS 4.1, the "New User Accounts will use DMNE Version 1.0 speech profiles" option lets you set all new user accounts to use either:

- version 10 profiles: for a site that has not yet upgraded to DM360 Network Edition, version 2.0 or higher
- version 12 profiles: for a site that has upgraded to DM360 Network Edition, version 2.0 or higher

For details, see <u>New User Accounts will use DMNE Version 1.0 speech profiles</u>.

An administrator can configure these locations in the Nuance Management Console.

Setting the location of profiles for Dragon

- 1. In the Nuance Management Console, search for and select a site.
- 2. In the **Sites** area, click **Details**.
- 3. Select the DM360 Network Edition tab.
- 4. Expand the Master user profile section.
- 5. Beside **Master user profile directories**, select **Configure**. Perform step 6 if the site uses DM360 Network Edition SP5 or earlier. Perform step 7 if the site uses DM360 Network Edition, version 2.0 or greater.
- 6. In the **General** tab, in the **DMNE Version 1.x Speech Profile Location** field, enter the location of the Dragon Medical 360 | Network Edition 10.1 user profile. This is the user profile that Dragon uses when an end-user logs into DM360 Network Edition SP3 or earlier through the NMS.
- 7. In the **DMNE Version 2.0 (or higher) Speech Profile Location** field, enter the location of the Dragon Medical 360 | Network Edition, version 2.1 user profile. This is the user profile that Dragon uses when an end-user logs into DM360 Network Edition, version 2.1 or higher through the NMS.

Setting the location of profiles for the Profile Optimizer

- 1. In the Nuance Management Console, select **Utilities**.
- 2. Search for and double-click a speech node.
- 3. On the **Speech Node Collection** screen, in the **DMNE v1.x (UNC)** field, enter the UNC path for the Speech Node Collection for the Dragon Medical 360 | Network Edition 10.1 user profile.
- 4. In the **DMNE v1.x (HTTP WebDAV)**, enter the http(s) path for the speech node to access the Master User Profiles directory for the Dragon Medical 360 | Network Edition 10.1 user profile only if webDAV is used. Also include webDAV credentials.
- 5. In the **DMNE v2.0 or higher (UNC)** field, enter the UNC path for the Speech Node Collection for the Dragon Medical 360 | Network Edition, version 2.1 or higher user profile.
- 6. In the **DMNE v2.0 or higher (HTTP WebDAV)** field, enter the http(s) path for the speech node to access the Master User Profiles directory for the Dragon Medical 360 | Network Edition, version 2.1 or higher user profile only if webDAV is used. Also include webDAV credentials.

Associating new user accounts with existing user profiles

If you have not already done so, you should upgrade any roaming user profiles from *Dragon Medical* Versions 8.x or 9.x before you proceed. If you have roaming user profiles from Dragon versions 10.0 or 10.1, you need only copy those profiles to the new master user profiles location on the *NMS Server* before you proceed. Then to allow healthcare providers to dictate with their newly upgraded user profiles, you need to:

- In the *Nuance Management Console*, create a DM360 Network Edition user account for each healthcare provider. For more information, see *Configuring groups and user accounts* on page 103.
- Associate that user with the corresponding master user profile.

Installing the Profile Association Tool

The Profile Association tool is only required for US customers that are upgrading from Dragon Medical US Enterprise Edition.

Notes:

- If the NMC detects that the tool is not installed, you are prompted to install it.
- If the NMC detects that the tool not current, you are prompted to update it.
- Once the tool installation or upgrade is complete, the NMS launches the tool
- 1. Start the Nuance Management Console and log in.
- 2. On the menu bar, click **Utilities** > **Tools**.
- 3. Click Launch user profile association tool.
- 4. If you are running the user profile association tool for the first time, the *Nuance Management Console* displays a dialog box that asks if you want to install the tool. Click **Yes**.
- 5. On the Profile Association Tool InstallShield Wizard, click Next.
- 6. Click Next.
- 7. Click Install.
- 8. When you see the InstallShield Wizard Complete screen, click Finish.

Associating user accounts with upgraded user profiles

In Dragon Medical 360 | Network Edition, 2.1, the profile association tool is available as a separate tool from the Nuance Management Console. You can still access the tool from the Nuance Management Console but it is installed and run locally.

The main functionality of the profile association tool has not changed.

However, there are some new features:

• The tool prompts you for the address of the server with the users you want to associate to profiles. The server can be an on-premise NMS server or a Cloud-based NMS server.

- You must provide your login credentials to connect to the server.
- The tool only displays the users that are part of your organization.
- The tool only displays information about: users that are a member of a group with the "Dragon Author" role, and that have a Physician Author or Non-Physician Author license.

To run the user profile association tool, you must have the Dragon – Able to run DM360 Network Edition tools rights.

To associate new user accounts with upgraded master user profiles:

- 1. Start the Nuance Management Console and log in.
- 2. On the menu bar, click **Utilities** > **Tools**.
- 3. Click Launch user profile association tool.
- 4. Fill out the fields in the following dialog box:
 - Login: The login id for the server with the users you will associate to profiles.
 - **Password**: The password for the server with the users you will associate to profiles.
 - Server: The address of the server that contains the users you will associate to profiles.
- 5. Click **OK**. The **DM360 Network Edition Profile Association Tool** screen appears.
- 6. If you do not see the names or profiles you are looking for in the **Users** or **Profiles** lists, click the **Scan now** button and wait for the lists to update.
- 7. Click the login for the user account in the **Users** list, then click the corresponding user profile in the **Profiles** list, and click the **Associate** button to tie the profile to the user account. The user account and the associated user profile appear in the **Associations** list in the lower portion of the screen.
- 8. Repeat the above steps until you have associated all provider user accounts with profiles.
- 9. To undo the association, you can select a user account in the **Associations** list and click the **Remove Association** button; the user account and profile return to the lists above, and you can try again.
- 10. Click Finish and Save All Associations.

Synchronization of Master and Local cache profiles

The *NMS Server* manages synchronization of the local cache user profiles (on the *Dragon Medical Client* workstation) with master user profiles stored on the server.

When a healthcare provider exits the *Dragon Medical Client*, switches user profiles, closes a user profile, or saves a user profile, *Dragon Medical* saves changes to the local cache and then synchronizes these changes with the master user profile on the network.

When a provider dictates using a computer not currently connected to a network, *Dragon* saves all changes to the local cache of the client computer and synchronizes those changes when the provider reconnects the client computer to the DM360 Network Edition network where the *Master User Profile Server* resides and opens that user profile again.

For more information on how setting options affects the particular data synchronized between the master and local cache user profiles, see <u>Setting site master user profile General settings</u>.

Note:

If a provider who is not on the network has made changes to recognized text that affect the user profile, the changed user profile is stored only in the local cache. When that provider later re-connects that computer to the network, several actions might occur depending on whether the most recent changes were made to the local cache or the master user profile:

- If the local cache has changed, but the master user profile has not, *Dragon* writes the changes in the local cache to the master user profile.
- If the master user profile has changed (because the provider affected the profile, for instance, while dictating on a disconnected laptop and then affected the profile again by dictating on a PC in an examining room), the more recent changes to the master user profile override the changes made to the local cache on the laptop.
- If the provider works on a disconnected laptop and that individual makes a change to a configuration option, and then an administrator makes a change to the same configuration option in the *Nuance Management Console*, when *Dragon* later synchronizes the local cache with the master user profile, the more recent change is stored in the master user profile.

Notes about acoustic models and user profiles and DM360 Network Edition version 2.1

- BestMatch IV and BestMatch V acoustic models on a dual-core machine are about 36 MB larger than BestMatch III acoustic models.
- When you upgrade a profile to DM360 Network Edition version 2.1, the Acoustic optimizer processes several ..dra files. The processed .dra files are larger than the original .dra files.
- When you upgrade a profile to DM360 Network Edition version 2.1, the upgrade process copies the full contents of the backup directory. The size of the folder depends on the size of the current folder that was present when the backup was made.

What happens during synchronization

The following changes take place when local cache and master user profiles are synchronized.

Actions that synchronization takes:

- Combines words added to the local cache during a dictation session with the master user profile vocabulary.
- Removes words deleted from the local cache from the master user profile vocabulary.
- Copies acoustic data (from files with a .DRA or .NWV extension) from the local cache and adds them to the master user profile, where the information becomes available to the Acoustic Optimizer. *Dragon* does not add .DRA files that the provider saved voluntarily with a document to the master user profile.

Note: The .DRA files that *Dragon Medical* automatically creates for use by the optimizer are the only ones it adds to the master user profile. For more information on running the Acoustic Optimizer, see the Dragon Help.

• Copies any custom commands created or modified locally (using the **MyCommands** editor) to the master user profile.

Changes not synchronized:

The following options are *not* synchronized with the master user profile; they remain exclusively on the local computer in the local cache:

Locally set options in the **Options** dialog box:

- On the **Miscellaneous** tab:
 - Use Active Accessibility for menu and dialog control option
 - Launch in QuickStart mode on Windows startup option
- On other tabs of the **Options** dialog box:
 - All options on the **Text-to-speech** tab
 - All options on the Hot keys tab

Specific information synchronized:

The table that follows explains how and when *Dragon* copies or updates individual files to the master user profile or to the local cache when it synchronizes them.

For more information on option settings that affect what data *Dragon* synchronizes between the master user profile and local cache, see <u>Setting general site settings for master user profiles</u>.

These options can affect how much data is transferred across your network when the master user profile and local cache are synchronized. For more information, see *Estimating Network traffic caused by synchronization* in the *Dragon Medical Client* Help.

File Name or Type		Copied or Updated to Local Cache
Acoustic files: *.usr and	Copied at save time if Always copy acoustic infor- mation to network is checked on the Site > DM360	Copied if the version number of the file on

*.sig	Network Edition tab (the default). If the setting is not checked, after the Acoustic Optimizer runs on the master user profile, the server incorporates the changes.	the server is different
Vocabulary files: *.voc	Copied only after the vocabulary files for the user profile have been modified with information from Add Words From Documents, Add Words from Email, Add Lists of Words, and similar procedures.	Copied if the version number of the file on the server is different
Acoustic archive created for each dic- tation session: archive.nwv , archive.enwv	Copied to the session folder if it exists; once the master user profile's voice_container limit is reached, nothing more is copied. The local copy is deleted and a zero- length file is created to receive new dictation.	Never
Audio.ini	Copied to the master user profile after running the Audio Setup Wizard. If copying after running the Audio Setup Wizard is not successful, the file is copied when the user profile is closed.	Copied if the version number of the file on the server is different; also copied just before running the Audio Setup Wizard
DRA files created dur- ing dictation: DRA files, aco.ini; dra- files.ini	Copied to session folder if the master voice_container has space. Files are deleted after being copied and new aco.ini and drafiles.ini are recreated at zero-length to receive new data.	Never
Custom commands created on client PC: MyCommands.dat	Copied when user profiles are saved, or user is closed and saved.	Copied at user open
.INI file changes on client PC: Options.ini, soptions.ini, itnoptions.ini	Copied at user close and options dialog close when the timestamp on the local file has changed.	Copied on user open, options dialog open if version number is dif- ferent on the server
History of changes to the vocabulary: Vocdelta.dat	Merged to master copy on user save and log in. When vocabularies are copied up, vocdelta.dat is reset to zero in the master copy for that topic.	Copied to local cache on user log in and merged into the voc if version number is different on the server
.INI file changes on client PC: nsuser.ini, local.ini, nssystem.ini, natspeak.ini	Never (machine dependent).	Never

Importing and exporting user profiles

You import and export user profiles in order to move them from one server to another or from one organization to another.

In Dragon Medical 360 | Network Edition, 2.1, you use the Dragon client to import and export user profiles. For details, see the Dragon Help or the Dragon user guide.

Why import or export user profiles?

Here are some situations that might require importing or exporting user profiles:

- If your organization hires a new provider who has created a user profile in a previous organization, you might want to avoid the work of creating a new profile by having the provider's previous employer export his or her profile, then importing the new provider's pre-existing profile.
- If a provider in your organization is transferring to another organization, you may want to export the provider's existing user profile to allow the administrator of the new organization to import that profile for the provider's user account in the new organization.
- If for any reason you decide to delete a medical professional's user profile from the server, you should first export it. Then should you need to restore the profile at any time in the future, you can import the profile again.

Why delete a user profile?

Here are several reasons why you might want to delete a user profile, including the following:

- Occasionally a provider's user profile might become corrupted and the *Dragon Medical Client* might be unable to open it. If this happens, you can delete the profile and the provider can build a new one.
- You may have imported the wrong profile and need to remove it.
- You may have associated the wrong user profile with the user account through the User Profile Association utility. See *Associating new user accounts with existing user profiles* on page 239

Approving updates of user profiles and language models

When you receive command, medication, or other updates from the Nuance *Update Server*, you see corresponding messages appear in the **Messages** tab.

For details on how to find and respond to these messages, refer to Managing Update and License messages.

Checking the status of Profile Optimizers and speech nodes

With the NMS server in the cloud and the Profile Optimizers set up locally in customer sites, administrators need the ability to check the health of the remote profile optimizers and speech nodes.

You can query and display the status of remote Profile Optimizers. You can view the following information:

- **Organization Name**: Name of the organization associated with the Speech Node.
- Status:
- Green Last check in from the Profile Optimizer within the last 3 minutes
- Yellow Last check in from the Profile Optimizer within the last 5 minutes
- Red Last check in from the Profile Optimizer longer than 5 minutes.
- Last Check in Time: The time of the last check in from the Profile Optimizer.
- Number of Speech Nodes: The number of speech nodes associated with the Profile Optimizer.
- In the Nuance Management Console, under Utilities > Profile Optimizer, click the Dashboard icon. The Nuance Management Console displays the Profile Optimizer Systems screen.
- 2. In the **Profile Optimizer Status** field, select a status:
 - All
 - Green Last check in from Profile Optimizer within the last 3 minutes
 - Yellow Last check in from Profile Optimizer within the last 5 minutes
 - Red Last check in from Profile Optimizer longer than 5 minutes.
- 3. Click the magnifying glass.
- 4. The Nuance Management Console displays the following search results:
 - **Organization Name**: Name of the organization associated with the Speech Node.
 - Status:
- Green Last check in from the Profile Optimizer within the last 3 minutes
- Yellow Last check in from the Profile Optimizer within the last 5 minutes
- Red Last check in from the Profile Optimizer longer than 5 minutes.
- Last Check in Time: The time of the last check in from the Profile Optimizer.
- Number of Speech Nodes: The number of speech nodes associated with the Profile Optimizer.
- To view profile optimizer task information, select a row in the search results, and select Profile Optimizer > Tasks. You can also right-click the row and select Profile Optimizer Tasks.
- To view profile optimizer status information, select a row in the search results, and select Profile Optimizer > Status. You can also right-click the row and select Profile Optimizer Status.

Viewing the status of scheduled optimizations

To see the status of a scheduled or automatic Acoustic Model Optimization (ACO) or Language Model Optimization (LMO) process on a *Speech Node*, you can access related tabs on the **Utilities** ribbon by clicking on either of these two icons:

- Profile Optimizer > Status icon
- Profile Optimizer > Tasks icon

Uploading Profile Optimizer task logs

- 1. In the Nuance Management Console, perform the steps in <u>Searching and filtering Profile Opti-</u> <u>mizer task details</u>.
- 2. Right-click a task and select **Request logs**.
- 3. Click **OK**. The request is sent to the Profile Optimizer Server. The server processes the request and uploads the Profile Optimizer log file and the Dragon log file to the Nuance Management Server. It may take a few minutes for the logs to appear in the Nuance Management Console.
- 4. To view the logs, under Utilities, click Server Logs.

Upgrading the Profile Optimizer Server to NMS in the Cloud

Prior to NMS 3.0 and NMS 3.1, the NMS sends requests to the PO server to get task and node information. In NMS 3.0 and NMS 3.1, with NMS in the cloud, a path from NMS to the PO server no longer exists.

Instead, the NMS hosts an interface that allows the PO server to send task and node information to NMS in the cloud for storage. The NMS uses its locally accessible tasks and nodes storage to satisfy queries from the Nuance Management Console.

Prior to NMS 3.0 and NMS 3.1, the PO server sends updates to the NMS server every time the state of a task changes. In NMS 3.0 and NMS 3.1, the PO server sends updates to the NMS in the cloud every 60 seconds (by default) for tasks on a scheduled basis.

When you upgrade the PO Server to NMS 3.0 or NMS 3.1, the on-premise PO server starts migrating node and task tables to NMS in the cloud. The PO server first sends its newest data to NMS in the cloud. The server then sends older or historical data to the cloud.

During the upgrade, there may be a small period of time when data is not available in the Nuance Management Console for node groups or task status.

Viewing Profile Optimizer Speech Node status

When you click the **Profile Optimizer** > **Status** icon, the **Profile Optimizer Status** screen opens. To refresh the data on the **Profile Optimizer Status** screen, press **Refresh** at the bottom right of the screen.

The columns in the table tell you information about each process:

- **Organization**: Name of the organization associated with the *Speech Node*.
- Node name: Name of the computer or virtual machine hosting the Speech Node.
- **Physical host name**: Name of the computer running the *Speech Node* or hosting the virtual machine for the *Speech Node*.
- SDK Version: The version of the Dragon Medical client SDK.
- Service Start Time: The date and time that the service started.
- Idle Since: The date and time that the service entered idle mode.
- State: Action the node is engaged in right now: Idle, Running, Error, or Maintenance. Idle and Running are self-explanatory; Error requires your attention and Maintenance might or might not:
 - Error appears when the *Speech Node* encounters a condition it cannot recover from and stalls. To determine what the error is, right click on the link in the task list and select View Log. A service attempts to restart the *Speech Node*, but if that service fails or if the Error state persists, you should have the log file handy and contact Technical Support.
 - Maintenance appears when the node is starting up or attempting to restart after an error condition. The Maintenance state should resolve itself. If it does not, you can take the same steps you took for Error and contact Technical Support.
- **Profile name**: Name of the *Dragon* master user profile that the process is optimizing (matches the user account login name of the provider).
- Task type: ACO for an Acoustic Model Optimization or LMO for a Language Model Optimization.
- Task status: Idle, In Progress, Completed, Failed, Canceled, Postponed, or Waiting. Waiting means that the process has completed and is waiting to update the user profile.
- Task progress: Between 1% and 100%.
- **Task started**: Date and time that the process started.
- **Progress updated**: Date and time when the most recent previous progress update occurred.

Viewing Profile Optimizer task details

When you click the **Profile Optimizer** > **Tasks** icon, the **Profile Optimizer Tasks** screen opens. In this tab, you can see several details about each optimization task. To refresh the data on the **Profile Optimizer Tasks** screen, press **Refresh** at the bottom right of the screen.

- **Organization**: The organization under which the profile tasks run.
- Task type
- All : search for all task types
- ACO : search for an Acoustic Model Optimization task
- LMO : search for a Language Model Optimization task
- Update Medication : search for a medication update task
- Update Command : search for a command update task
- **BackUpProfile**: search for a profile back up task
- Restore Last Known Good DNSProfile: search for a profile restoration task
- **Upgrade Profile**: search for a profile upgrade task
- Batch Word Update: search for a batch word update task

- User login: The user account you wish to see tasks for.
- Task status:
 - All : search for task status types
 - Free : search for active tasks not yet run by the system
 - Running : search for tasks that are currently running
 - Completed : search for tasks that completed successfully
 - Failed : search for tasks that did not run successfully
 - **Canceled** : search for tasks that were cancelled
 - **Postponed**: search for tasks that are postponed.
 - Inactive: search for tasks that are not currently active
 - Maintenance : search for currently active tasks
- Task progress: Between 1% and 100%.
- **Progress updated**: Date and time that the progress of the active task was last updated.
- **Node name**: Name of the machine that the *Speech Node* is running on. More than one process can be running simultaneously on the same *Speech Node*
- **Duration**: How long the completed task ran or the active task has been running.
- Task ID: Unique GUID that identifies the task's process.
- **Profile name**: The name of the user profile
- Task started: Date and time that the process started.
- Task completed: Date and time that the process completed.
- Reason: The cause of task failure or postponement.

Searching and filtering Profile Optimizer task details

You can obtain detailed information about Profile Optimizer tasks. Information about tasks related to ACO, LMO, Command and Medication Updates are easier to access and view. The Nuance Management Console only retrieves information for tasks that meet the search criteria and that administrators have the authority to view.

- 1. In the Nuance Management Console, select the Utilities tab.
- Select Profile Optimizer > Tasks. The Nuance Management Console displays fields that you use as search criteria for tasks. Fill-in the following fields to define the search criteria for your query:
 - Start Date/Time: the date and time when a task started.
 - End Date/Time: the date and time when a task completed.
 - User Login: the login for the user associated with a task
 - **Organization**: the name of the organization associated with a task.
 - Task Type:
 - All : search for all task types
 - ACO : search for an Acoustic Model Optimization task
 - LMO : search for a Language Model Optimization task

- UpdateMedication : search for a medication update task
- UpdateCommand : search for a command update task
- Task Status:
 - All : search for task status types
 - Free : search for active tasks not yet run by the system
 - Running : search for tasks that are currently running
 - **Completed** : search for tasks that completed successfully
 - Failed : search for tasks that did not run successfully
 - Canceled : search for tasks that were cancelled
 - **Postponed**: search for tasks that are postponed.
 - Inactive: search for tasks that are not currently active
 - Maintenance : search for currently active tasks
- 3. Click the magnifying glass. The system searches for tasks the meet the search criteria and displays information about each task in a table row on the screen.
- 4. To close the results screen, click the cancel/close red circle button.
- 5. To return to the search criteria screen, click the left arrow button.

Configuring Speech node collections

You can assign one or more speech nodes to a speech node collection and associate the node collection with a Site. The speech nodes in the node collection run optimization tasks for the user profiles in the Master User Profile directory for the Site. This allows for the partitioning of speech nodes based on a particular set of user profiles. By design, speech node collections optimize network performance by allowing you to physically co-locate speech nodes with the user profile locations for a site.

You can assign multiple Sites to a collection of Speech nodes provided each Site uses the same user profile location. This allows for user profiles in Sites that are in different geographical locations to be served by speech nodes that are all in the same location.

Organizations with remote sites can assign speech nodes at the remote site to the master user profile location for the remote site. Assigning the speech nodes at the remote site to optimize the profiles at the remote site can improve network performance and experience the following benefits:

- faster opening, closing of user profiles
- faster synchronization of master and local user profiles
- faster optimization of user profiles

When you create a Speech Node collection and associate it with a site, the user profiles in the Master User Profile directory for the site are associated with the node collection. All tasks for user profiles at the site are handled by the speech nodes in the speech node collection that is associated with the site.

When the NMS Server sends a task request to the Profile Optimizer Server, the NMS provides the node collection ID with the task request. The Profile Optimizer server uses the ID to assign the task to an idle speech node within the node collection that is associated with the task.

Administrators use the Nuance Management Console to create, edit, and delete speech node collections and to assign a collection to a specific site.

You can assign speech nodes to the default node collections, edit the node collections, or delete them.

Using Speech Node collections without adding more speech nodes to your network

In an organization that has multiple sites that each use unique profile locations, you must assign a speech node collection to each site.

If the number of sites with unique master profile locations is greater than the number of speech nodes in the organization, you have two options:

- Add more speech nodes until each required node collection contains at least one speech node
- Configure the sites to share the same speech nodes even though there are multiple Speech Node collections.

Organizations may prefer the second option if they do not need or want to add more speech nodes to their network.

In the second option, the 'empty' speech node collections will use the unassigned speech nodes to optimize the user profiles that the node collections are associated with.

The steps to implement the second option are straight forward:

- Create one speech node collection for each unique profile location
- Do not assign any speech nodes to the node collections.

Example: Using Speech Node collections without adding more speech nodes

An organization has four sites; each with a unique master user profile location. The organization currently requires and has only two speech nodes.

You must create four speech node collections and assign each collection to a site.

If you assign each of your speech nodes to a node collection, two of the speech node collections will not contain speech nodes.

Alternately, you can create four empty speech node collections and assign each collection to a unique master user profile location.

The speech node collections will use the unassigned speech nodes to optimize the user profiles.

Setting up speech node collections during an upgrade to Service Pack 2

When you upgrade from DM360 Network Edition 10.1 or Service Pack 1, the upgrade automatically configures the system to support speech node collections. You will have at least one default speech node collection for each user profile location in the organization.

The default speech node collections use the naming convention *AutoCreatedn*, when **n** is the number of user profile locations in the organization. For example, if your organization has three user profile locations, after you upgrade to DM360 Network Edition Service Pack 2, you have three default speech node collections that you can use: **AutoCreated1**, **AutoCreated2**, and **Auto-Created3**. The DM360 Network Edition Service Pack 2 upgrade process always creates one default speech node collection called **AutoCreated1**. For example:

Before upgrading to DM360 Network Edition Service Pack 2, an organization has 3 sites with 3 different profile locations.

- Site 1 Profile Location X
- Site 2 Profile Location Y
- Site 3 Profile Location Z

After upgrading to Dragon Service Pack 2 or higher, the Nuance Management Server creates three speech node collections and automatically assigns them to sites.

- Site 1 AutoCreated1
- Site 2 AutoCreated2

• Site 3 – AutoCreated3

Speech nodes are not automatically assigned to speech node collections.

DM360 Network Edition and the NMS server function exactly as they did prior to the upgrade. All jobs that the Profile Optimizer is processing are sent to the next available speech node.

After you upgrade to DM360 Network Edition Service Pack 2, you can add speech nodes to the speech node collections, if desired. See <u>Creating a Speech node collection</u> for details.

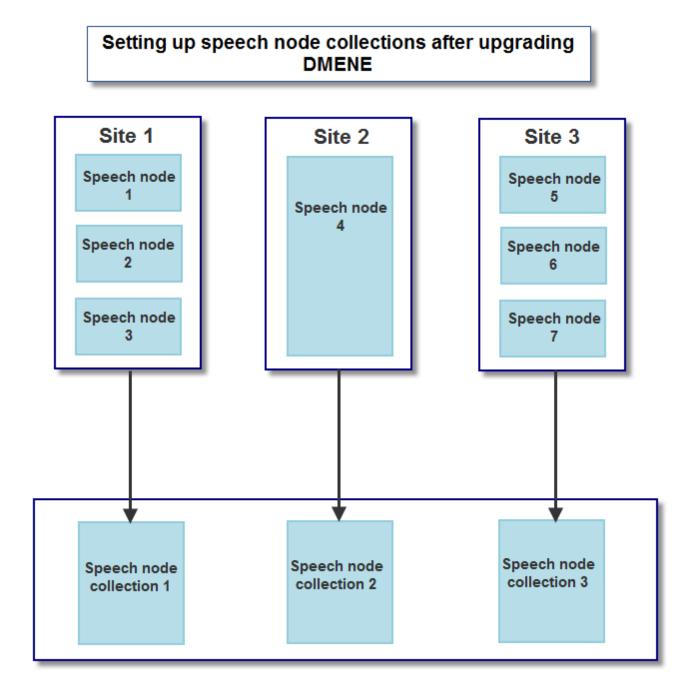
Setting up speech node collections after an upgrade to Service Pack 2

To have specific speech nodes optimize the user profiles at a specific location, you can assign the speech nodes to a speech node collection. Afterwards, you associate the collection with the use profile location for the site. If multiple sites use the same profile location, you can assign the same speech node collection to each of the sites.

Notes:

- You can only assign a speech node to one speech node collection.
- If you assign all available speech nodes to speech node collections, and there are user profile locations that are not associated with a speech node collection (or are associated with an empty collection), the profiles in those locations will not be optimized. This is because all speech nodes are already assigned to other profile locations and there are no free speech nodes to optimize the other profile locations. You must either create a new speech node or remove an existing node from one of the speech node collections.

For example, assume a DM360 Network Edition system has seven speech nodes and uses the following system configuration:



An administrator would configure the system as follows:

- Add speech nodes 1, 2, and 3 to speech node collection 1.
- Add speech node 4 to speech node collection 2.
- Add speech nodes 5, 6, and 7 to speech node collection 3.

Running out of free speech nodes

Let's assume that all the speech nodes in an organization are assigned to speech node collections. Assume that each user profile location in the organization is associated with a speech node collection. In this scenario, all the user profiles in the locations that are associated with a node collection will be optimized.

If you add or create a new user profile location, and all speech nodes are assigned to speech node collections for other profile locations, then there are no 'free' speech nodes available to optimize the profiles in the new location.

If there are no 'free' speech nodes available for the new profile location, the Nuance Management Console displays the message "The last Speech Node has been assigned to a collection and Speech collections still exist. A situation exists where User Profiles may not be optimized. Please review that all User Profiles Locations are assigned to Collections with speech nodes."

You must either create one or more speech nodes or remove one or more speech nodes from an existing speech node collection. See Editing a speech node collection for details.

Creating a Speech node collection

When you assign the last available speech node to a speech node collection, the Nuance Management Console displays the message "The last Speech Node has been assigned to a collection and Speech collections still exist. A situation exists where User Profiles may not be optimized. Please ensure that all user profile locations are assigned to collections". You must make sure that each speech node collection has at least one speech node or there is at least one speech node available to service those user profile locations that are assigned to a speech node collection without a specific speech node assigned.

In Dragon Medical 360 | Network Edition, 2.1, speech node collections are defined at the organization level.

- In the Nuance Management Console, in the Utilities ribbon, select Speech Node Collections > Add.
- 2. In the **Name** field, enter a name for the node collection.
- 3. In the **DMNE v1.x (UNC)** field, enter the UNC location of the Master User Profiles directory.
- 4. In the **DMNE v1.x (HTTP WebDAV)** field, enter the http(s) path for the speech node to access the Master User Profiles directory only if webDAV is used. Also include webDAV credentials.
- 5. To add Speech nodes to the node collection:
 - i. In the Available Speech Nodes box, select one or more speech nodes.
 - ii. Press the > arrow to move the nodes to the Assigned Speech Nodes box.
- 6. To remove speech nodes from the node collection:
 - i. In the Assigned Speech Nodes box, select one or more speech nodes.
 - ii. Press the < arrow to move the nodes to the **Available Speech Nodes** box.
- 7. When you are done creating the node collection, press Save.

Searching for a Speech node collection

You can use the Nuance Management Console to search for all the Speech node collections that exist in an organization.

- 1. In the Nuance Management Console, in the **Utilities** ribbon, under **Speech Node Collections**, select **Search**.
- 2. The **Speech Node Collections** screen appears and displays the following information for each speech node collection in the organization:
 - Collection name: the name of the node collection
 - Organization: the organization that the node collection is part of
 - **DMNE v1.x (UNC)**: the UNC path for the Speech Node Collection for the version 10.5 user profile.
 - **DMNE v1.x (HTTP WebDAV)**: the http(s) path for the speech node to access the Master User Profiles directory for the version 10.5 user profile only if webDAV is used. Also include webDAV credentials.
 - **DMNE v2.0 or higher (UNC)**: the UNC path for the Speech Node Collection for the version 12 user profile.
 - DMNE v2.0 or higher (HTTP WebDAV): the http(s) path for the speech node to access the Master User Profiles directory for the version 12 user profile only if webDAV is used. Also include webDAV credentials.
 - Web DAV Login: the name of the login account for the Web DAV server that hosts the Master User Profiles directory (if applicable)
 - Number of Nodes: the number of nodes in the speech node collection
- 3. To close the Speech Node Collections screen, press Close.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results
- An icon to save search results to a .csv file
 - i. Press the **I** icon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Editing a Speech node collection

- 1. In the Nuance Management Console, in the **Utilities** ribbon, under **Speech Node Collections**, select **Search**.
- 2. On the **Speech Node Collections** screen, select a node collection. To refresh the data on the **Speech Node Collections** screen, press **Refresh** at the bottom right of the screen.
- 3. Under Speech Node Collections, select Details.

- 4. On the Speech Node Collection screen, edit the values of the fields.
- 5. When you are done editing the node collection, press Save.

Deleting a Speech node collection

You can only delete a speech node collection if the collection does not contain any speech nodes.

- 1. In the Nuance Management Console, in the **Utilities** ribbon, under **Speech Node Collections**, select **Search**.
- 2. On the **Speech Node Collections** screen, select a node collection. To refresh the data on the **Speech Node Collections** screen, press **Refresh** at the bottom right of the screen.
- 3. If the node collection contains one or more speech nodes, the Nuance Management Console displays a message and you must perform the following steps:
 - i. Under Speech Node Collections, select Details.
 - ii. In the Assigned Speech Nodes box, select all the speech nodes.
 - iii. Press < to move the selected speech nodes to the **Available Speech Nodes** box.
 - iv. Press Save.
- 4. On the Speech Node Collections screen, select a node collection.
- 5. Under Speech Node Collections, select Delete.
- 6. To delete the node collection, select OK. To cancel the action, select Cancel.

Assigning a Speech node collection to a Site

You can associate a speech node collection with a Site through the Nuance Management Console. The speech nodes in a node collection only perform tasks against the user profiles from the site the collection is associated with.

To refresh the data on the **Organizations** screen, press **Refresh** at the bottom right of the screen.

- 1. In the Nuance Management Console, in Sites group, select Manage organizations & sites.
- 2. On the **Organizations** screen, double-click a site.
- 3. Select DM360 Network Edition.
- 4. Expand the Master user profile area.

5. Beside Master user profile directories, select Configure.

General	HTTP Settings	SSL Settings		
Jeneral	IIII Settings			
		Name	Default	
	DMNE Version 1.x	Speech Profile Location	Directory	Q
OMNE Ve	rsion 2.0 (or higher)	Speech Profile Location	Directory	Q
		will use to access the U	les of the Location setting that DM360 Ne ser Profiles. This setting will need to equat th to Profiles setting in the Speech Node c	e to the sam
		Mapped network drive	S:\ or S:\Profiles	
		UNC Path	\\DFSName\Profiles	
HTTP HTTPS		НТТР	http://ProfilesServer.com/webdav	
		HTTPS	https://ProfilesServer.com/webdav	
	SI	Deech Node Collection	<none></none>	

- 6. In the **Master User Profile Directory Settings** dialog box, in the **Name** field, enter a name for the new Master user profiles location.
- 7. In the **General** tab, in the **Speech Node Collection** field, select a speech node collection to associate with this site. **Note**: If you associate the "<None>" Speech Node Collection with a site, optimization will not run on the user profiles at that site.
- 8. Set the DMNE Version 1.x Speech Profile Location field to equate to the DMNE v1.x (UNC) in the speech node collection. The DMNE v1.x (UNC) field displays the UNC path for the Speech Node Collection you select. To view valid values for the DMNE Version 1.x Speech Profile Location field, look in the Examples section under the DMNE Version 1.x Speech Profile Location field.

If the **DMNE Version 1.x Speech Profile Location** field is not set to equate to the UNC path for the collection, the Nuance Management Console displays an error message. To save the settings and close the dialog, select **Yes**. To return to the dialog and reset the Location field, select **No**.

9. Press **OK** to save the new configuration.

Chapter 9: Using the Dragon Medical client on Windows Server 2008 R2 or Windows 7 Ultimate server

This chapter contains information on setting up and using the Dragon Medical client on a machine with Windows Server 2008 R2 or Windows 7 Ultimate Server. This chapter includes information about using the PowerMic II remotely and about Terminal Services.

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Using Dragon Medical on Windows Server 2008 R2 or Windows 7 Ultimate Server

This section provides information on how to deploy Dragon Medical on Windows Server 2008 R2 or Windows 7 Ultimate Server.

Tasks:	Торіс:
Overview of how client users can remotely connect to Dragon installed on Windows Server 2008 R2 or Windows 7 Ultimate Server.	Allow client users to connect to Dragon and applications on Windows Server 2008 R2 or Windows 7 Ulti- mate Server
Install Dragon on the server and install Dragon Client For Remote Desktop	Installing Dragon software on the server and the client computer
Set up the Windows server options	Configuring the Windows server
Set up client computers by setting audio pol- icies and the Remote Desktop Connection 7.	Configuring the client computer to connect to Dragon on a server through a remote desktop connection
Use a PowerMic II with Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server	Using the PowerMic II through a remote desktop connection
System Requirements for Dragon on Win- dows Server 2008 R2 or Windows 7 Ulti- mate Server	System Requirements for Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server

Allow client users to connect to Dragon and applications on a server

Microsoft Windows Server 2008 R2 and Windows 7 Ultimate Server include the ability to enable audio redirection from a remote desktop connection into the server. For Dragon Medical users, this allows speech recognition to take place over the network when Remote Desktop Connection version 7 (or higher) is used to connect the Windows client to the server. When Dragon Medical is installed on Windows Server 2008 R2 or Windows 7 Ultimate Server, Dragon detects when the RDC 7 client session starts and allows users to dictate into remote applications that are published on the server.

Windows 7 Ultimate Server allows only one client connection at a time. Windows Server 2008 R2 allows multiple client connections at once. Keep this in mind as you plan your configuration.

Supported client and server operating systems

Server Operating Systems	Description	Client Operating systems
Windows Server 2008 R2	Supports multiple client connections at the same time.	 Windows XP Service Pack 3 (32- bit)* Windows 7 (22 bit and 64 bit)
Windows 7 Ultimate Server	Supports only a single client connections at one time.	 Windows 7, (32-bit and 64-bit) Windows Vista Service Pack 2 (32-bit and 64-bit)

You can use Dragon through a remote desktop connection with the following operating systems:

In order to transmit audio from the client computer to Windows Server 2008 R2 or Windows 7 Ultimate Server running Dragon Medical, you must:

- enable the audio recording option on the remote client software
- enable the audio recording redirection policy on the server

This configuration allows one Windows client computer to access and use a single installation of Dragon Medical on the server.

Support for dictation sources over a remote desktop connection

In Dragon Medical, you can use the following dictation sources over a remote desktop connection:

- USB microphones: including PowerMic II, Philips SpeechMike
- Other microphones: Microphone plugged into Mic-In jack
- Headset: Andrea NC-181
- Bluetooth: Plantronics Calisto Bluetooth Headset

To use the PowerMic II over the RDC connection, you install the Powermic II Button Control application to enable button support.

Notes: Using Dragon Medical on Windows Server 2008 R2 or Windows 7 Ultimate Server:

- When you create a User Profile, you will not see a choice for the Powermic II dictation source. You must use the USB selection. When you use the USB dictation source, you cannot use hot keys for the PowerMic II unless you manually configure the buttons using the PowerMic II Button Control application, which is available in this release.
- If you are using the Remote Application web interface When you launch Dragon Medical from the Remote Desktop Connection, if you launch the DragonBar in Docked-to-Top or Docked-to-Bottom mode, the Dragon menus will not be visible. To access the menus, you need to switch to work with Floating, Clinging, or the Tray Icon mode.

* The 2.x versions of DM360 Network Edition will be the last versions of the product to support Windows XP. DM360 Network Edition 2.1 continues to support Windows XP.

Installing Dragon software on the server and the client computer

To enable audio redirection through a remote desktop connection, and allow users to connect and use Dragon Medical on Windows Server 2008 R2 or Windows 7 Ultimate Server, you install and configure software on both the client computers that will connect to Dragon on the server, and on the server machines. You can expect to spend around thirty minutes installing and configuring the required software.

Perform the following steps:

- Install Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server. You can also perform remote dictation from Windows 7 Enterprise and Windows 7 Ultimate servers. For Windows Server 2008 R2, it is possible for multiple users to connect at the same time. For Windows 7 servers, only a single client can connect at a time.
- 2. Install the Dragon Client For Remote Desktop on each client computer that will connect to Dragon on a server.

If you are installing Dragon Client for Remote Desktop using the MSI Windows Installer, run dragonclientinstaller.msi; otherwise, run setup.exe. These files are located on the Dragon DVD in the "DragonClientForRemoteDesktop" folder.

The Dragon Client For Remote Desktop installation consists of two components that you install on the client computer:

- Audio Setup Wizard: a stand-alone application that provides a way to check that your microphone sound levels and signal quality are suitable for using Dragon Medical with a remote desktop connection.
- PMIIControl.exe the Powermic II Button Control application: a stand-alone application that provides a way to customize the buttons on the PowerMic II. The buttons can be used with Dragon Medical while working across the remote desktop connection, and can also be used with local applications, independent of installing and using Dragon.
- 3. Proceed to Configuring the Windows server.

Configuring the Windows server

- 1. Ensure the server computer meets the system requirements. See <u>System Requirements for</u> <u>Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server for more information.</u>
- 2. On Windows Server 2008 R2 or Windows 7 Ultimate Server, make sure that the "Remote audio" recording device already exists.
- 3. If you are using Windows Server 2008 R2, perform the steps in <u>Configuring Remote Desktop</u> <u>Connection for Windows Server 2008 R2</u>.
- 4. If you are using Windows 7 Ultimate Server, perform the steps in <u>Configuring Remote Desktop</u> <u>Connection for Windows 7 Ultimate Server</u>.
- 6. Optionally, you can publish all applications and EMRs on Windows Server 2008 R2 or Windows 7 Ultimate Server using Remote Application Manager. This provides full support for dictation and playback.
- 7. Proceed to <u>Configuring the client computer to connect to Dragon through a remote desktop</u> <u>connection</u>.

Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 1

Perform the following steps to install and configure the Remote Desktop Services role.

- 1. Open Remote Desktop Connection.
- 2. Open the Server Manager.
- 3. Select Roles.
- 4. Select Add Roles.

📕 Server Manager		
Elle Action View Help		
🗢 🤿 🙇 📅 🚺		
Server Manager (WIN-LBFHH0SSLC Roles Features Diagnostics Configuration Storage	Roles	
	View the health of the roles installed on yo	our server and add or remove roles and features.
E Caloudyc	Roles Summary	Roles Summary Help
	Roles: 0 of 17 installed	Add Roles
<u> </u>	Last Refresh: Today at 6:23 AM Configure refresh	

5. On the **Before You Begin** screen, click **Next**.

6. On the Select Server Roles screen, select Remote Desktop Services, click Next.

Before You Begin Server Roles	Select one or more roles to install on this server. Roles:	Description:
Remote Desktop Services Role Services Confirmation Progress Results	Active Directory Certificate Services Active Directory Domain Services Active Directory Federation Services Active Directory Lightweight Directory Services Active Directory Rights Management Services DHCP Server DHCP Server DIS Server Fax Server File Services Hyper-V Network Policy and Access Services Print and Document Services Web Server (IIS) Windows Deployment Services Windows Server Update Services	Remote Desktop Services, formerly Terminal Services, provides technologies that enable users to access Windows-based programs ti are installed on an RD Session Host server or to access the full Window desktop. With Remote Desktop Services, users can access an RD Session Host server or virtual mach from within your corporate network from the Internet.
	More about server roles	

7. On the **Remote Desktop Services** screen, click **Next**.

8. On the Select Role Services screen, select Remote Desktop Session Host, click Next.

Add Roles Wizard		X
Select Role Se	rvices	
Before You Begin Server Roles Remote Desktop Services Role Services Application Compatibility Authentication Method Licensing Mode User Groups Client Experience Confirmation Progress Results	Select the role services to install for Remote Desktop Services: Remote Desktop Session Host Remote Desktop Virtualization Host Remote Desktop Connection Broker Remote Desktop Gateway Remote Desktop Web Access	Description: Remote Desktop Session Host (RD Session Host), formerly Terminal Server, enables a server to host Windows-based programs or the full Windows desktop. Users can connect to an RD Session Host server to run programs, save files, and use network resources on that server.
	More about role services	
	< <u>P</u> revious <u>N</u> ex	xt >installCancel

9. On the Uninstall and Reinstall Applications for Compatibility screen, click Next.

10. Select **Do not require Network Level Authentication**, click **Next**.

Add Roles Wizard	<u>×</u>
Specify Auther	ntication Method for Remote Desktop Session Host
Before You Begin Server Roles Remote Desktop Services Role Services Application Compatibility	Network Level Authentication is a new authentication method that enhances security by providing user authentication earlier in the connection process when a client connects to an RD Session Host server. With Network Level Authentication, user authentication occurs before a full Remote Desktop connection to the RD Session Host server is established. Specify whether Network Level Authentication is required.
Authentication Method Licensing Mode User Groups Client Experience Confirmation Progress Results	 Require Network Level Authentication Only computers that are running both a version of Windows and a version of the Remote Desktop Connection clent that supports Network Level Authentication can connect to this RD Session Host server. If you are remotely connected to this server, ensure that your computer supports Network Level Authentication to enable reconnection to this server. © Do not require Network Level Authentication Computers that are running any version of the Remote Desktop Connection client can connect to this RD Session Host server. W This option is less secure than when Network Level Authentication is used because user authentication occurs later in the connection process.
	< PreviousinstalCancel

- 11. On the Specify Licensing Mode screen, click Next.
- 12. Click Next.

13. Select the **Audio and video playback** option and the **Audio recording redirection** option and click **Next**.

Add Roles Wizard		×
Configure Client	Experience	
Before You Begin Server Roles Remote Desktop Services Role Services Application Compatibility Authentication Method Licensing Mode User Groups	You can configure the RD Session Host server so that users connecting to a remote desktop session can use functionality similar to that provided by Windows 7. Providing this functionality requires additional system and bandwidth resources and may affect the scalability of the RD Session Host server. Select the functionality that you want to provide. Additional functionality can be configured by using the Remote Desktop Session Host Configuration tool. Selecting audio and video playback or desktop composition will install the <u>Desktop Experience feature</u> on the RD Session Host server.	
Client Experience	reading of the RD Session House ver	
Confirmation Progress Results	✓ Audio and video playback ✓ Audio recording redirection □ Desktop composition (provides the user interface elements of Windows Aero) ③ If a selection is dimmed, a Group Policy setting is currently being applied to the computer that prevents that functionality from being configured. For more information, see Group Policy Settings and Configuring the Client Experience. More about configuring the client experience <a href="mailto: experience">experience experience">experience experience">experience experience">More about configuring the client experience experience">experience experience">experience	

14. Confirm your selections, and click Install.

Before You Begin Server Roles Remote Desktop Services Role Services Application Compatibility Authentication Method Licensing Mode User Groups Client Experience Confirmation Progress Results	To install the following roles, role service	
	 This server must be restarted after the installation completes. Remote Desktop Services 	
	Remote Desktop Session Host You may need to reinstall exi TE Enhanced Security Config Authentication method : Licensing mode : Groups allowed access : Audio and video playback : Audio recording redirection : Desktop composition : Desktop Experience	isting applications.

The Installation Progress screen display the status of the installation.

- 15. On the Installation Results screen, verify that the installation was successful. Click Close.
- 16. Restart the computer.
- 17. Proceed to Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 2.

Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 2

Perform the following steps to configure the local group policy on the server and to allow connections from client computers.

- 1. On the server, in a command prompt, run gpedit.msc.
- 2. Navigate to Computer Configuration > Administrative Templates > Windows Components > Remote Desktop Services > Remote Desktop Session Host > Device and resource redirection.
- 3. Enable the Allow audio and video playback redirection option: on the Allow audio and video playback redirection screen, select Enabled and Press OK.
- 4. Enable the Allow audio recording redirection option: on the Allow audio recording redirection screen, click Enabled and Press OK.
- 5. Launch regedit on the client PC and set the following registry setting to 0: HKLM\SYSTEM\CurrentControlSet\Control\Terminal Server\WinStations\RDP-Tcp fDisableAudioCapture REG DWORD 0x0000000
- 6. On the server, open the Control Panel.
- 7. Navigate to System and Security > System.
- 8. Select Remote.
- 9. Allow remote connections by choosing your preferred configuration.
- 10. Click **OK**.
- 11. Continue at step 5 in <u>Configuring the client computer to connect to Dragon through a remote</u> desktop connection.

Configuring Remote Desktop Connection for Windows 7 Ultimate Server

- 1. On the Windows 7 Ultimate Server, open the Control Panel.
- 2. Open System Properties.
- 3. Click the Remote tab.
- 4. Allow remote connections by choosing your preferred configuration.
- 5. Proceed to <u>Configuring the client computer to connect to Dragon through a remote desktop</u> <u>connection</u>.

Configuring the client computer to connect to Dragon on a server through a remote desktop connection

After you install Dragon Medical on the server and Dragon Client for Remote Desktop on each client computer, perform the following steps on each client computer that will connect to Dragon Medical on the server.

- 1. Ensure the client computer meets the system requirements. See <u>System Requirements for</u> <u>Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server</u> for more information.
- 2. On the client, plug in the microphone that you will use to dictate with Dragon Medical. Then run the Audio Setup Wizard to check that microphone sound levels and signal quality are suitable.
- 3. Ensure Remote Desktop Connection 6.1 (RDC 6.1) or higher is installed on the client computer. If it is not, visit the following link to download Remote Desktop Connection 7.0 client update <u>http://support.microsoft.com/kb/969084</u>
- 4. When you start Remote Desktop Connection 7, in the Remote Desktop Connection dialog box, click **Options**.

😼 Remote Desktop Connection			
	Remote Desktop Connection		
Computer:	BN-DNSQA-CITD		
User name:	None specified		
You will be asked for credentials when you connect.			
O ptions	Connect Help		

5. Select the **Local Resources** tab, click **Settings**.

😼 Remote I	Desktop Connection	
N	Remote Desktop Connection	
General Di	splay Local Resources Programs Exper	ience Advanced
Remote au	dio Configure remote audio settings. <u>S</u> ettings	
- Keyboard-	Apply Windows <u>k</u> ey combinations: Only when using the full screen Example: ALT+TAB	~
Local devic	Choose the devices and resources that you your remote session. ✓ Printers ✓ Clipboard <u>More</u>	ı want to use in
(a) <u>O</u> ptions	Con	ect <u>H</u> elp

6. Select **Play on this computer** and **Record from this computer**, and click **OK**. Selecting these options enables audio support each time the user opens the remote connection to use Dragon Medical on Windows Server 2008 R2.

Remote Desktop Connection
Remote Desktop Connection
 Remote audio playback Play on this computer Do not play Play on remote computer
Remote audio recording Record from this computer Do not record OK Cancel

8. Recommended only for the PowerMic: On the Local Resources tab, set the Apply Windows.key combinations field to Only when using the full screen. Using full screen lets you use the PowerMic II Button Control application correctly. Note: If not using full screen mode, key combinations may not work as expected and may be limited.

😼 Remote D	esktop Connection			
	Remote Desk Connectio			
- Keyboard	Configure remote audio Settings Apply Windows key com Only when using the ful Example: ALT+TAB	nbinations:	Experience Ac	tvanced
	es and resources Choose the devices and your remote session. Printers More	_	hat you want to u oboard	se in
) Options			Connect	Help

9. Recommended only for the PowerMic: On the **Display** tab, set the **Display configuration** to Full Screen.

💀 Remote Desktop Connection
Remote Desktop Connection
General Display Local Resources Programs Experience Advanced
Choose the size of your remote desktop. Drag the slider all the way to the right to use the full screen. Small Full Screen Use all my monitors for the remote session
Colors Choose the color depth of the remote session. High Color (16 bit)
Options Connect Help

10. In the Windows sound settings, verify that Remote Audio device appears.

2	Remote Au		

User Profiles and using Dragon through a Remote Desktop session

Dragon users must perform four minutes of Short training when they create a User Profile. It is not possible to skip User Profile training when Dragon Medical is installed on Windows Server 2008 R2 or Windows 7 Ultimate Server and when using Remote Desktop Connection 7.

Dragon users can Use Profiles created on Dragon workstations without performing additional training on Windows Server 2008 R2 or Windows 7 Ultimate Server.

Nuance recommends that you create and train a User Profile (or add a dictation source to an existing User Profile) while Dragon is running in a Remote Desktop session. If an end-user uses an existing profile with a dictation source that was trained while Dragon was running on the enduser's workstation, poor accuracy may result.

If an end-user works both locally and remotely, they should create two separate dictation sources. This can be done with the PowerMic II:

- 1. Create a dictation source called "PowerMic II" to use when Dragon is running on the end-user's workstation.
- 2. Create a dictation source called "USB Microphone" to use when Dragon is running through a Remote Desktop session.

Using the PowerMic II through a remote desktop connection

If you use the Nuance PowerMic II microphone to dictate with Dragon Medical, the buttons will not work with Remote Desktop Connection 7 unless you customize button settings using the PowerMic II Button Control application. You use the PowerMic II Button Control application to assign the buttons for use in any application that accepts hot keys, such as EMRs, audio recorders, etc. You do not need to start the Remote Desktop Connection to assign hotkey settings to the buttons. See Keyboard keys you can assign to PowerMic II buttons for more information.

Configuring the PowerMic II buttons

- In Windows explorer, navigate to the folder that contains PMIIControl.exe. The default location of PMIIControl.exe in Windows 7 64-bit is: C:\Program Files (x86)\Nuance\Dragon Client For Remote Desktop\PMIIControl
- 2. Double-click PMIIControl.exe. The following screen appears:

Power	Mic II	Control
		common

Device S	Device Status: PowerMic II Connected					
pressed w sequences the 'button	PowerMic II buttons you hen the button is presse s for the button press/rel pressed' key sequence pel to each button. Use th	d and/or released. No ease e∨ents. You can ⊨pressed until the butt	ote that you can set d use the Key Up che on is released. You d	ifferent key ckbox to keep can also assign a		
Enabled	Button Label	Button Pressed Key Sequence	Button Released Key Sequence	Button Release Triggers Key Up	NUANCE	
	Start Dragon	Shift + Ctrl + D	None]		
2	PushToTalkMic	F3	None]	5 6	
	Playback	Ctrl + P	Escape]	28	
		None	None]	9 4 10	
5		None	None		101	
6		None	None]		
7		None	None			
8		None	None			
3		None	None			
10		None	None			
11	2	None	None			

- 3. Place your cursor in the text box under Button Pressed Key Sequence.
- 4. Enter the Windows keystrokes that will be sent to the server when you press the microphone button, release the button, or press and release the button.

Enabled	Button Label	Button Pressed Key Sequence	Button Released Key Sequence	Button Release Triggers Key Up
	Start Dragon	Shift + Drl + D	None	
	PushToTalk Mic	F3	None	
	Playback	Drl + P	Alt	
		None	None	

- Button 1: is set to send the sequence {Shift + Ctrl+D}, which is assigned to the Dragon Medical desktop shortcut and will start Dragon. Simply pressing Button 1 starts Dragon Medical; nothing happens when you let go of the button.
- **Button 2:** is set to simulate the Dragon Medical Press-to-Talk button by pressing function key F3. Let's say the administrator assigns F3 in Dragon as the hotkey setting for using Press-to-Talk: for a Remote Desktop Connection, the user must also set F3 in the Pow-erMic II Button Control application. In order for the microphone to turn off when the user lets go of Button 2, it is necessary to enable the Button Release Triggers Key Up checkbox. No additional key sequence is required for this type of usage.
- Button 3: is set to send two key sequences to simulate turning a feature on and off. For example, let's say the user assigns {Ctrl+ P} and {Alt} to use to play and stop the audio playback feature. The same key sequences must be assigned to buttons in order for the feature to work with a remote desktop connection. This set of key sequences works differently from the example for Button 2, since the keystroke for the Button Released is defined explicitly by the user. It is not necessary to enable the Button Release Triggers Key Up checkbox, since the key sequence itself defines the action.

Notes: : Configuring the PowerMic II buttons

- If you type a letter key (A-Z), the system automatically adds "Ctrl+Alt" as a modifier.
- If you type a digit (0-9), the system adds "Shift+Alt" as a modifier.
- Support is present for the Ctrl and Alt modifiers for all keys; Shift can only be allowed with another modifier, followed by a letter or digit key. For example, you can assign "{Shift+Extended -}," but not "{Shift -}.
- It is not possible to assign key sequences for mouse control features, or map the predefined mouse buttons. However, you may modify the mouse speed by changing the Mouse settings in the Windows Control Panel.
- If you use the PowerMic II Button Control application on a computer where Dragon Medical is installed, you will receive a warning if you try to assign a key sequence that is already assigned in Dragon Medical.

- The PowerMic II Button Control application will not run if an installation of Dragon other than Dragon Medical is running on the local computer. In this case, the user will receive a warning.
- You can assign a key sequence for:
 - The Scan button, located just below the joystick on the PowerMic II (see position 11 in the above graphic).

Keyboard keys you can assign to PowerMic II buttons

You can use the PowerMic II Button Control application to assign the following keyboard keys to the PowerMic II buttons:

- BACKSPACE
- DOWNARROW
- END
- ENTER
- ESC
- ∎ F1
- F10
- F11
- F12
- ∎ F2
- F3
- F4
- F5
- F6
- ∎ F7
- F8
- F9
- HOME
- INS
- LEFTARROW
- MINUSKeyPad
- PAGEDOWN
- PAGEUP
- PLUSKeyPad
- RIGHTARROW
- SLASHKeyPan
- STARKeyPad
- TAB
- UPARROW

System Requirements for Dragon on Windows Server 2008 R2 or Windows 7 Ultimate Server

- Server Operating System: Windows Server 2008 R2 or Windows 7 Ultimate Server Window Server 2008 R2 supports multiple client connections at the same time. Windows 7 servers supports only a single client connections at one time.
- Client Operating System: The following operating systems support Remote Desktop Connection 7:
 - Windows XP Service Pack 3, 32-bit*
 - Windows 7, 32-bit and 64-bit
 - Windows Vista Service Pack 2, 32-bit and 64-bit
- Client Hardware:
 - Disk space:
 - 2 MB for the Remote Desktop Client version 7 (from Microsoft)
 - 8 MB for the Dragon client
 - USB port for the microphone
- Server Hardware: To support 6 concurrent users connecting to Dragon Medical on a server, the minimum requirements are:
 - Cache: 1 MB L2 cache per CPU
 - **CPU**: 3.x Ghz
 - Disk space: 5 GB
 - Processor: Multi-core processor with 4 cores
 - **RAM**: 16 GB DDR2 RAM
- Microphone:
 - USB microphones: including PowerMic II, Philips SpeechMike
 - Other microphones: Microphone plugged into Mic-In jack
 - Headset: Any Nuance-approved headset. For details, visit http://support.nuance.com/compatibility/ to view the Hardware Compatibility List.
 - Bluetooth: Plantronics Calisto Bluetooth Headset
- Software:
- Remote Desktop Connection 7 (RDP 7). The RDP 7 download is available here, and works for all operating systems: <u>http://support.microsoft.com/kb/969084</u>
- Network:
- 100 Mbps connection speed
- Network bandwidth required per active user is 1.3 Mbps

* The 2.x versions of DM360 Network Edition will be the last versions of the product to support Windows XP. DM360 Network Edition 2.1 continues to support Windows XP.

Chapter 10: Managing Dragon Medical Clients

From the *NMS Server*, you can manage individual client computers. The process of managing clients can begin with installing the client using the *Nuance Management Console*, then setting several options for the client. You can take several actions to manage clients:

System Requirements for Dragon Medical Clients	284
Installing Dragon and documentation from the Nuance Management Console	285
Setting general auto-formatting options in Dragon or the Nuance Management Server	. 288
Selecting a medical vocabulary for a medical specialty	. 290
Configuring and running Dragon from a command line	294
Starting Dragon Medical Clients from Command Line	. 296
Closing the Dragon Medical client from a command line	298
Viewing user activity	299
Auditing Events	300

System Requirements for Dragon Medical Clients

Bluetooth (Optional): For Bluetooth wireless microphone support, visit <u>http://support.nuance.com/compatibility</u>.

CPU: 2.4 GHz Intel Dual Core or equivalent AMD processor. (IMPORTANT: SSE2 instruction set required)

DVD-ROM: drive required for installation

Free hard disk space: 5 GB

Internet Browser: Microsoft Internet Explorer 8, 9, 10, and 11 (free download at <u>www.m-icrosoft.com</u>)

Microphone: Nuance-approved microphone (included in purchase)

For details on Bluetooth microphones, recorders, Tablet PCs, and other hardware, please go to support.nuance.com/compatibility/.

- Standard Headsets
- USB microphones
- PowerMic 2 non-scanner
- PowerMic 2 scanner
- Plantronics Calisto Bluetooth microphones
- Digital recorders
- Enhanced Bluetooth (Calisto II) microphones
- Special enrollment for array microphones
- an iOS or Android device as a microphone using the Dragon Remote Microphone app
- Other Microphones listed in <u>support.nuance.com/compatibility/</u>

Operating system:

- Microsoft® Windows® 8.1 32 bit and 64 bit
- Microsoft® Windows® 8 (including Professional and Enterprise), 32 bit and 64 bit
- Microsoft® Windows® 7, 32-bit and 64-bit
- Microsoft® Windows Vista® Service Pack 2, 32-bit and 64-bit
- Microsoft® Windows XP® Service Pack 3, 32-bit only*
- Microsoft® Windows Server 2008, Service Pack 1, Service Pack 2, and R2, 32-bit and 64-bit
- Microsoft® Windows Server 2008 R2 64 bit Service Pack 2
- Microsoft® Windows Server 2012
- Microsoft® Windows Server 2012 R2

Processor Cache: 2 MB

RAM:

- 2 GB RAM for Microsoft® Windows XP®* and Microsoft® Windows Vista®.
- 4 GB for Microsoft® Windows® 7, 32-bit and 64-bit, Microsoft® Windows® 8, 32-bit and 64-bit, Windows Server 2008 64-bit, Windows Server 2012 64-bit, and Windows Server 2012 64-bit R2.

Sound Card: Creative® Labs Sound Blaster® 16 or equivalent sound card supporting 16-bit recording.

Supported non-EHR Applications:

- DragonPad
- WordPad
- NotePad
- Microsoft® Word 2007, 2010 (32 & 64 bit), 2013 (32 & 64 bit)
- Microsoft® Outlook® 2007, 2010, 2013
- Microsoft® Excel® 2007, 2010, 2013
- WordPerfect® x5, x6
- Apache OpenOffice Writer 3.4
- Open Office Writer v3.1, 3.2
- Internet Explorer 8, 9, 10
- Rich Internet Application IE9
- Mozilla® Firefox® 8+
- Rich Internet Application Firefox® 12+
- Rich Internet Application Google Chrome 16+
- Windows Live Mail v15 & v16
- Mozilla® ThunderbirdTM x3 and up
- Lotus Notes 8.5

* The 2.x versions of DM360 Network Edition will be the last versions of the product to support Windows XP. DM360 Network Edition 2.1 continues to support Windows XP.

Installing Dragon and documentation from the Nuance Management Console

After you create your own MSI installer for *Dragon Medical Client*, from any workstation on the network where you have installed the appropriate certificates, you can access the Nuance Management Console, then download the *Dragon Medical Client* MSI installer through the console for installation on that workstation:

Note:

For details on how to create your own MSI installer for *Dragon Medical Client*, refer to the DM360 Network Edition *Installation Guide*.

- 1. Be sure that the computer you are installing the *Dragon* client on meets the system requirements for installing and running *Dragon*. See *System Requirements for Dragon Medical Clients* on page 284.
- 2. Log in to the computer as a Windows administrator.
- 3. On the workstation where you are installing *Dragon*, open Internet Explorer and enter the URL to access the *Nuance Management Console* (see *Accessing NMS Server: Logging in through the Nuance Management Console* on page 19).
- 4. Once the client GUI displays its login page, log on.

Setting the location and version of the Dragon MSI installer

If this is the first time you have attempted to download the Dragon MSI installer from the *NMS Server*, you must enter the location of the installer on the NMS server:

- 1. In the Nuance Management Console, in the Sites section, select Organization Overview.
- 2. In the **Organizations** section, click **Details**.
- 3. On the Products tab, expand the DM360 Network Edition section.
- 4. In the **Deployed Version** field, select the version of the Dragon client that your organization is using. The NMS downloads items that are specific to the version of the Dragon client that you specify in the **Deployed Version** field.
- 5. In the **Downloads** section, under **Download locally**, in **Client installation URL**, enter the path to where the .msi installation file for the Dragon Medical Client is located on the NMS Server. The NMS maps the **Install DM360 Network Edition** icon to location.
- 6. Click **OK**

Setting the local download location for documentation

- 1. In the Nuance Management Console, in the Sites section, select Organization Overview.
- 2. In the **Organizations** section, click **Details**.
- 3. On the **Products** tab, expand the **DM360 Network Edition** section.
- 4. In the Downloads section, under Download locally, perform the following steps:
- 5. In the **Admin manual URL** field, enter the path where the Nuance Management Server Administrator Guide PDF file is located on the NMS Server. The default path to the guide is IIS-ROOT\NMC\links.
- 6. In the **Client user guide URL** field, enter the path to where the Dragon Medical User Guide PDF file is located on the NMS Server.
- 7. Click **OK**.

Downloading the Dragon MSI installer and documentation to a workstation

After you have set the location of the Dragon MSI installer, you are ready to download the Dragon MSI installer and documentation to a workstation:

- 1. In the Nuance Management Console, click the Utilities tab.
- 2. Click the **DM360 Network Edition Install** icon. The **DM360 Network Edition Instal**lations tab appears.

	and Falling a decimation	
_	work Edition admin ma work Edition client insta	
DM360 Net	work Edition client user	guide
Download to:	Directory	Q
Download to:	Directory	م

- 3. To download the Dragon MSI installer to a workstation, check **DM360 Network Edition** client installation.
- 4. To download the NMS Administrator guide to a workstation, check **DM360 Network Edition Install**.
- 5. To download the Dragon user guide to a workstation, check **DM360 Network Edition client user guide**.
- 6. Beside the **Download to** text box, click on the magnifying glass and browse to the location where you want the files downloaded.
- 7. Click the **Download** button. The NMS server immediately downloads the items you checked to the workstation.
- 8. Proceed to the directory on the workstation where you downloaded the Dragon **.msi** installation file.
- 9. Double click on the **.msi** file to launch the Dragon client installation.
- 10. For details on proceeding through the *Dragon Medical Client* installation wizard, refer to the *DM360 Network Edition Installation Guide*.

Setting general auto-formatting options in Dragon or the Nuance Management Server

Typically, *NMS Server* administrators set all formatting options on the **Groups Details** > **Network Edition US** tab or the **User Account Details** > **Network Edition US** tab.

However, healthcare providers can use the Dragon client to override **General Auto-Formatting** options. Providers cannot set other types of auto-formatting options; including **Capitalization**; **Numbers, Units, and Dates**; **Abbreviations**, and **Miscellaneous**) formatting options. Only administrators can set non-general auto-formatting options. This helps to ensure consistency across an organization.

If a provider changes **General Auto-Formatting** options in the *Dragon Client*, the provider's changes override the administrator's settings, unless an administrator subsequently makes changes to them. Basically, *Dragon* applies the **General Auto-Formatting** option settings of last person that changed those option settings—whether that person is the dictating provider or an administrator using the *Nuance Management Console*.

The **General Auto-Formatting** options that either a provider or an administrator can set are shown in the illustration on the next page. For more information on setting these options, see *Setting Auto-Formatting Dragon options* on page 161.

You can use the **Restore** button at the bottom of each section/tab to set the default value in the section, then **Save** your changes.

Status of General Formatting settings on recently reconnected laptops

By default, if the provider does not change them, **General Formatting** options automatically take the values last set by the *NMS Server* administrator in the *Nuance Management Console*.

If the administrator changes them at any time, new **General Formatting** option settings take effect as soon as a provider logs on to the *Dragon Client*.

If a provider has been dictating in Disconnected mode (off-site or otherwise off the network), the **General Formatting** option settings from the *NMS Server* take effect as soon as the provider again plugs the *Dragon Client* machine in to the network.

-) General	
	common English units of measure
Abbreviate	
1000	es in formatted phrases
	lly add commas and periods
Caps Lock k	ey overrides capitalization commands
Expand com	nmon English contractions
Format com	imon English abbreviations
Format ISO	currency codes
Format othe	er numbers
Format pho	ne numbers
Format price	es
Format stre	et addresses
Format time	5
Format UK a	and Canadian postcodes
Format US S	Social Security Numbers
Format web	and e-mail addresses
Insert two s	spaces after period
Prefer 5 mil	lion over 5,000,000
Date format:	Dates As Spoken

Note:

Providers can only set general Auto-Formatting options in the Dragon client

Selecting a medical vocabulary for a medical specialty

You should select and use a medical specialty that is based on the appropriate vocabulary.

Medical specialties and medical vocabularies -US and UK English Dragon Medical

The following table correlates Medical specialties with Dragon Medical vocabularies available in US and UK English. Items that are not available in UK English are marked with an asterisk (*).

Specialty	Medical Vocabulary
Addiction Psychiatry	Mentalhealth
Allergy and Immunology	Generalpractice
Anesthesiology	Neurology
Bariatric Surgery *	Surgery
Behavioral Health *	Psychiatry
Blood Banking/Transfusion Medicine *	Pathology
Breast Surgery *	Surgery
Cardiac Surgery	Surgery
Cardiology	Cardiology
Cardiothoracic Surgery *	Surgery
Cardiovascular Disease *	Generalpractice
Case Management *	General Medical
Chiropractic *	Neurology
Clinical Cardiac Electrophysiology *	Cardiology
Colon and Rectal Surgery	Surgery
Dentistry	Orthopaedic
Dermatology	Generalpractice
Dermatopathology *	Pathology
Developmental-Behavioral Pediatrics *	Pediatrics
Diagnostic Radiology *	Radiology
EEG *	Psychiatry
Emergency Medicine	Emergency

Specialty	Medical Vocabulary
EMG Examinations *	Neurology
Empty Dictation	empty dictation
Endocrinology Diabetes and Metabolism	Mentalhealth
ENT	Obgyn
Epidemiology	Generalpractice
Family Medicine	Generalpractice
Fetal Medicine	Obgyn
Gastroenterology	Gastroenterology
General	General
General Medical	Medical
Geriatric Medicine	Generalpractice
Hand Surgery	Orthopaedic
Hematology	Generalpractice
Infectious Disease	Generalpractice
Internal Medicine	Generalpractice
Interventional Cardiology *	Generalpractice
Medical Education and Writing	Generalpractice
Medical Microbiology *	Pathology
Medical Toxicology *	Emergency
Midwifery	Obgyn
Neonatal and Perinatal Medicine	Pediatrics
Nephrology	Generalpractice
Neurodevelopmental Disabilities *	Pediatrics
Neurology	Neurology
Neuromuscular Medicine *	Neurology
Neuropathology *	Pathology
Neurosurgery	Orthopaedic
Neurotology *	Obgyn
Nuclear Medicine	Radiology
Nursing	Generalpractice
Obstetrics and Gynecology	Obgyn

Specialty	Medical Vocabulary
Oncology	Oncology
Ophthalmology	Medical
Oral and Facial Surgery	Orthopaedic
Orthopaedic Surgery	Orthopaedic
Osteopathy	Generalpractice
Otolaryngology *	Obgyn
Pain Medicine	Neurology
Pathology	Pathology
Pediatric Cardiology	Cardiology
Pediatric Dentistry	Pediatrics
Pediatric Gastroenterology	Gastroenterology
Pediatric Otolaryngology *	Obgyn
Pediatric Pathology *	Pathology
Pediatric Pulmonology *	Pediatrics
Pediatric Rheumatology *	Pediatrics
Pediatric Transplant Hepatology *	Pediatrics
Pediatrics	Pediatrics
Physical Medicine and Rehabilitation *	Neurology
Plastic Surgery	Orthopaedic
Podiatry	Orthopaedic
Proctology	Surgery
Psychiatry	Mentalhealth
Psychology	Mentalhealth
Pulmonary Disease	Generalpractice
Radiation Oncology *	Radiology
Radiation Therapy	Oncology
Radiology	Radiology
Rheumatology	Generalpractice
Sleep Lab	Generalpractice
Social Worker *	General Medical
Speech and Language Pathology *	Neurology

Specialty	Medical Vocabulary
Spinal Cord Injury Medicine *	Neurology
Surgery	Surgery
Thoracic Surgery	Surgery
Transplant Hepatology *	Generalpractice
Undersea and Hyperbaric Medicine *	Emergency
Urology	Surgery
Vascular and Interventional Radiology	Neurology
Vascular Surgery	Surgery

Configuring and running Dragon from a command line

You can run the *Dragon Medical Client* from the command line by running **natspeak** from the following location on the workstation:

C:\Program Files\Nuance\NaturallySpeaking12\Program\

natspeak switches

You can use the following options on the command line with **natspeak** to modify the way that *Dragon Medical Client* starts up.

Switch	Function
/diagnose	Runs the <i>Dragon Medical Client</i> in diagnostic mode. Outputs information into the Dragon.log file and exits.
	The diagnostic information shown in the log includes file ver- sion verifications. The diagnostic results end with a line that says Diagnoses: Passed .
/trusted	Automatically logs in to the <i>Dragon Medical Client</i> with the user account of the logged in Windows user (also known as Active Directory Single Sign-On). The user account must be set up in Active Directory and have a corresponding user account in the <i>NMS Server</i> .
/SSOUser	Automatically logs in to the <i>Dragon Medical Client</i> with the user account named. The switch expects you to supply the EHR username and a Client ID that you created in <i>Creating Organization Tokens</i> on page 102. The user account must be set up in the <i>NMS Server</i> as described in <i>Creating Single Sign-On user accounts</i> on page 36.
/user <username> <password></password></username>	Automatically logs in to the <i>Dragon Medical Client</i> with the user account named. The password is optional if the account does not have a password. The user account must be set up in the <i>NMS Server</i> . Note that Nuance always recommends each user account have
-user <username> <password></password></username>	a password. Same as /user .

natspeak command line options

Via the SDK installed on your speech node, you can use the following option on the command line with **natspeak** to modify the *Dragon Medical Client* options settings in the **nsdefaults.ini** file before installing the client on multiple machines. See the *MSI Installation of multiple clients with the same default options* section of the Installation Guide for more information.

Switch	Function
/SetDefaultOptions	Opens the <i>Dragon Medical Client</i> 's Options dialog box, where you can pre-set the options. When you apply the setting changes and save them, Dragon saves the settings in the nsdefaults.ini file.

Starting Dragon Medical Clients from Command Line

On any workstation where you installed the client, you can start the *Dragon Medical Client* from the command line and login/connect to the *NMS Server*, as long as you know the login name and password of the user account on the server:

- 1. Select **Start > Run...** and enter **cmd** in the **Run** dialog box that pops up.
- 2. Switch directories to the following path: (use Program files (x86) for x64 systems)

<drive>:\Program Files\Nuance\NaturallySpeaking12\Program

3. Enter the command line shown below, passing either the **-user** option or the **/user** option followed by the user name and password, in that order. The user name and password must be from a user account created on the *NMS Server*.

natspeak.exe /user <username> <password>

- 4. The password is optional if a provider does not have a password, but Nuance recommends that you assign all providers using *Dragon Medical* a password.
- 5. To log in using an Active Directory single sign-on user account (when the *NMS Server* has been set up to run in Active Directory and the user accounts correspond to Windows user accounts), once the provider has logged in to Windows, he or she can use the **/trusted** switch on the command line:

natspeak.exe /trusted

6. To log in using an EHR single sign-on user account use the **/SSOUser** switch on the command line.

If you are running the command on the same machine where Dragon is installed use:

natspeak.exe /SSOUser <username> <ClientID>

If you are running the command where Dragon is installed on a Citrix machine, use:

natspeakSSO.exe /SSOUser <username> <ClientID>

Where <username> is an EHR username, and <Client ID> is the token that you created in *Creating Organization Tokens* on page 102.

The user account must be set up in the NMS Server, as described in *Creating Single Sign-On user accounts* on page 36.

7. You can also use **natspeak** to install the client from the command line. To receive diagnostic messages about the *Dragon Medical Client* installation process, you can use the diagnostic option shown below:

natspeak.exe /diagnose

When you use the **/diagnose** option, *Dragon Medical* sends any information about errors that occur during the installation into the **Dragon.log** file.

Closing the Dragon Medical client from a command line

In Dragon Medical 360 | Network Edition, 2.1, on any workstation where Dragon is installed, end-users can logout of Dragon and close the Dragon from the command line.

Closing Dragon from a command line is the same as closing Dragon from the Dragonbar menu and closes all Dragon related processes.

This feature is useful for customers that use Dragon in a virtual environment as it allows administrators to close Dragon without using the Task Manager.

- 1. Select **Start > Run...** and enter **cmd** in the **Run** dialog box that pops up.
- 2. Switch directories to the following path: (use Program files (x86) for x64 systems)

<drive>:\Program Files\Nuance\NaturallySpeaking12\Program

3. To close Dragon without saving user profile changes, enter the command line shown below. This command works even if the **Automatically save user files on close** option is enabled in the Nuance Management Console.

natspeak.exe /ShutDown

4. To close Dragon and save user profile changes, enter the command line shown below. This command works even if the **Automatically save user files on close** option is disabled in the Nuance Management Console.

natspeak.exe /SaveandShutDown

Notes:

- If Dragon is running and a user profile is not open, running natspeak.exe /ShutDown or natspeak.exe /SaveandShutDown simply closes Dragon and all related processes.
- If Dragon is running and a user profile is open, running natspeak.exe /ShutDown closes Dragon and all related processes and **does not** save user profile changes.
- If Dragon is running and a user profile is open, running natspeak.exe /SaveandShutDown closes Dragon and all related processes and **saves** user profile changes.

Running natspeak.exe/ShutDown during General Training

If natspeak.exe /ShutDown executes while the General training wizard is running, Dragon displays a dialog box that asks the end-user if they want to interrupt the training session without saving changes.

Workaround 1

- 1. The Dragon end-user provides a 'Yes' response in the dialog. This closes the General Training wizard.
- 2. The Dragon end-user closes and re-starts Dragon.

Workaround 2

- 1. The Dragon user does not respond to the dialog box. After few seconds, Dragon hides and redisplays the dialog box several times until the DragonBar becomes hidden.
- 2. The Dragon user closes the General Training wizard.
- 3. The Dragon end-user closes and re-starts Dragon.

Viewing user activity

As an *NMS Server* administrator, you need to be aware of the activities of users in your Dragon Medical 360 | Network Edition *Network*. The *Nuance Management Console* provides several ways to view this information:

- To view all the users (both **NMC Administrators** and **DM360 Authors**) in your system or to find a particular user, see <u>Viewing</u>, modifying, and deleting user accounts.
- To view all of the users (administrators) who are logged on to the *Profile Optimizer Scheduler*, see *Viewing the status of scheduled optimizations* on page 247
- To view how often users log on to and log out of the system see *Auditing Events* on page 300
- To view Dragon Medical log files see Viewing Dragon log files on page 414

Auditing Events

The *Nuance Management Console* provides the **Audit Events** utility for you to track the activity of dictating providers using *Dragon Medical Client* or other administrators accessing the *NMS Server*.

Viewing how often providers or administrators log in or out of the system

	Apptation Search Add	Speech Recognition	Audit Server	Generic	nsing Utilit OM360 Network	0
mizer Status Optimizer Tasks Profile Optimizer	Status Speech No	de Collections 🛛 🖻	Events Logs View		Edition Install Launch	6
Audit Events Adaptation St	tatus Groups O	rganizations - Betsy's	s clinic Org	anizations	User Accounts	Hom
Events						
Search Criteria						
Start date/time	11/14/2012 00:00:00 A	M 🔹				
End date/time	11/14/2012 23:59:59 PI	M 👻				
Organization	All Organizations		•			
User login						
Event id				Select Events		
	P	0				

- 1. On the menu bar, click Utilities and then click the Audit Events icon
- 2. On the **Events** screen, enter information in the following fields:
 - Start date/time: The start date and time for the search. This is a required field.
 - End date/time: The end date and time for the search. This is a required field.
 - Organization: The Organization to search on. This is a required field.
 - User login: The user login associated with the events.
- 3. Click the magnifying glass. The **Events** screen displays the list of audit events that match the search criteria.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results 🖄
- An icon to save search results to a .csv file
 - i. Press the 🔳 icon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Audit Event messages

The list of audit event messages gives the date and time that each session start/end event occurred, the login name of the user who triggered the event, and the organization of that user. You can sort the list using any of the columns. For example: To sort the list by user account, click the **User Account** column heading. To reverse the sort order, click the column heading a second time.

The following table shows the four types of audit event messages that you may see:

Audit Event Message	Description
Session begins for user < <i>user name</i> >, application < <i>application name</i> >, on computer < <i>computer name</i> >	When the user logged on to the system
Session ends for user < <i>user name</i> >, application < <i>application name</i> >, on computer < <i>computer name</i> >	When the user logged out of the system
Session timed out for user < <i>user name</i> >, application < <i>application name</i> >, on computer < <i>computer name</i> >, session was idle for more than 10 minutes.	
Session refused for user < <i>user name</i> >, application < <i>application name</i> >, on computer < <i>computer name</i> >	When the user's attempt to log on to the system was not successful

Chapter 11: Managing update and license messages

After you set up your server, it automatically connects with servers at Nuance over the Internet. The servers send you notifications about update packages and licenses that are about to expire or that are being updated. This chapter explains how you receive notifications from these servers and how you review and respond to these notifications.

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Managing, enabling, and disabling product updates	. 305
Viewing unread messages and pending approvals	. 307
Receiving notifications from the Update Server	. 308
Responding to license expiration messages	. 310
Downloading and distributing command and medication updates to clients	. 311
Downloading Dragon updates to clients	. 312
Purging messages	. 312

Security of NuanceLink Update Servers

NuanceLink messages include descriptive information for a wide range of updates.

Prior to NMS 4.1, NuanceLink messages included the following descriptive information:

- NMC Medication Updates—Vocabulary update files that contain names of new medications
- NMC Command Updates—Command update files that contain new custom medical commands
- Dragon Client Updates—Update files for the Dragon client.
- Dragon Medical 360 | Network Edition—Update files for the DM360 Network Edition.

In NMS 4.1, each message contains the following details:

- Text of Message: A new software update for package <update_Type> has been delivered to your Nuance Management Server. Where update_Type is one of:
 - NMC Medication Updates
 - Software Updates
 - Notifications
 - NMC Command Updates
- Description: A description of the update.
- Details: (NMC Medication Updates and Software Updates only) The title and size of the update.
- File downloaded to: The file download location.

Managing, enabling, and disabling product updates

You can now receive and apply client updates through the Nuance Management Console (NMC). In addition, you can use the **Update Manager** screen to choose the types of updates the Nuance Management Console downloads. The **Update Manager** screen displays all the packages that the NMS can download or update.

If updates for a package type are turned off, the **Enable** button appears beside the package and the **Enabled** column is not checked. If updates for a package type are turned on, the **Disable** button appears beside the package and the **Enabled** column is checked.

You can enable or disable downloading one or more package types based on your organization's needs.

To use the Update manager, you must have the "Configure Update Manager" privilege.

Enabling and disabling product updates

1. In the ribbon in the Nuance Management Console, select Utilities.



2. In the **Updates** section, select **Update Manager**. The **Update Manager** screen displays the different packages updates the NMS can receive.

Jpdateable Packages			
Description	Enabled		
NMC Medication Updates	V	Disable	
NMC Command Updates	V	Disable	
Dragon 10 Client Updates	V	Disable	
Dragon Medical 360 Network Editic	V	Disable	

- 3. To allow the NMS to download a package type, click the **Enable** button beside the package.
- 4. To prevent the NMS from downloading a package type, click the **Disable** button beside the package.

- 5. To check for more updates, in the bottom right of the **Update Manager** screen, click **Check for Updates**.
- 6. When you are done, click **Close**.

Viewing unread messages and pending approvals

When you log into the Nuance Management Console, the main page contains indicators that show the number of unread messages and pending approvals that you have. The indicators appear in the upper right corner of the main page, to the left of the Help icon.

Messages(0) Approval(0)

The value in the parenthesis indicates the number of unread messages or pending approvals for you to review.

- To view unread messages, click **Messages**.
- To view pending approvals, click **Approval**.

Receiving notifications from the Update Server

You view messages sent to the NMS Server in the Messages tab in the Nuance Management Console.

The list of messages resembles an email inbox. The message list updates on login and every hour or when you manually refresh the list by clicking the **Refresh** link to the lower right.

Opening/viewing the list of messages

To open the list of messages that the NMS Server has received:

- 1. On the menu bar, click **Utilities**.
- 2. In the **Utilities** ribbon, click the **Messages** icon in the ribbon. A **Messages** screen opens below the ribbon, displaying a list of existing messages. Initially this list of messages shows only unread messages. To mark a message as read, check the box to the right of the message and click the **Mark complete** button on the right-side of the screen. The *NMS Server* hides the message to as long as you have the **Unread Messages** radio button (top-right of the screen) selected.
- 3. If you want to again view a message or messages that you marked complete and no longer see in the list, click the **All Messages** option to the far right above the list.
- 4. You can also sort the messages in the list by clicking the column heading that contains the information to sort by. You click the column heading once to sort in ascending order and click it.
- 5. Other actions you can perform with messages:
 - Check All—Click this button to select all messages in the Messages screen.
 - Uncheck All—Click this button to de-select all messages in the Messages screen.
 - Mark complete—Click this button to mark all selected messages as read.

Understanding types of messages NMS receives

NuanceLink messages include descriptive information for a wide range of updates.

Prior to NMS 4.1, NuanceLink messages included the following descriptive information:

- NMC Medication Updates—Vocabulary update files that contain names of new medications
- NMC Command Updates—Command update files that contain new custom medical commands
- Dragon Client Updates—Update files for the Dragon client.
- Dragon Medical 360 | Network Edition—Update files for the DM360 Network Edition.

In NMS 4.1, each message contains the following details:

- Text of Message: A new software update for package <update_Type> has been delivered to your Nuance Management Server. Where update_Type is one of:
 - NMC Medication Updates
 - Software Updates
 - Notifications
 - NMC Command Updates

- Description: A description of the update.
- Details: (NMC Medication Updates and Software Updates only) The title and size of the update.
- File downloaded to: The file download location.

The NMS Server also receives message that do not include packages:

- License expiration messages.
- License update messages.

Approving command and medication updates

The NMS Server downloads update packages only after you approve them.

Responding to license messages

The *NMS Server* automatically accepts and downloads licenses. You do not have to approve the licenses. For more information about these messages, see *Responding to license expiration messages* on page 310.

Responding to license expiration messages

A process that checks to see if you have licenses that are about to expire runs every day at 12:01 AM. When a user license is about to expire, you should receive a message in the **Messages** tab 30 days in advance of the expiration date.

To open the **Messages** tab:

- 1. On the menu bar, click **Utilities**.
- 2. Under the **Utilities** tab, click the **Messages** icon in the ribbon. A **Messages** tab opens below the ribbon, displaying a list of existing messages.
- 3. The **Message Text** column displays a message about a new software update having been delivered to the NMS server.
- 4. If you would like to indicate that you have read the message, check the box to the right of the message and click the **Mark complete** button on the right-side of the screen. The *NMS Server* hides the message to as long as you have the **Unread Messages** radio button (top-right of the screen) selected.
- 5. Other actions you can perform with messages:
 - Check All—Click this button to select all messages in the Messages screen.
 - Uncheck All—Click this button to de-select all messages in the Messages screen.
 - Mark complete—Click this button to mark all selected messages as read.
- 6. If you would like to renew the licenses before they expire, see the instructions under *Receiving expiration alerts and renewing licenses* on page 212.

Downloading and distributing command and medication updates to clients

The *Profile Optimizer Server* manages distribution of command and medication updates by integrating them with master user profiles on the machine hosting those profiles. In this section you learn about:

- Downloading command and medication updates on page 311
- Distributing command and medication updates to clients on page 311

Downloading command and medication updates

Before you approve the update, the *Update Server* has already downloaded it to your *NMS Server*. Once you have approved the command and medication updates, the *NMS Server* notifies the *Profile Optimizer Server*. The *Profile Optimizer Server* distributes the updates automatically to the master user profiles.

Each time the *NMS Server* notifies it of an approved update, the *Profile Optimizer Server* automatically creates jobs that the *Speech Nodes* run to integrate the new commands and medication names into the master user profile vocabularies for each healthcare provider.

Distributing command and medication updates to clients

Each time a provider logs on to the *Dragon Medical Client* to dictate, the *NMS Server* automatically downloads the latest master user profile to the client workstation. The client machine retains any incremental changes to the local cache user profile until the next opportunity for the *Profile Optimizer Server* to synchronize the master user profile and local cache user profile. As a result, the local cache copy of the user profile always contains the latest command and medication updates, without compromising quality of speech recognition that might be influenced by recently accrued dictation data.

Applying medication updates to clients

Before the Profile Optimizer Server applies a medication update to a master user profile, the server checks the profile to make sure it is not corrupt. The server considers a profile to be corrupt if the profile does not have a vocabulary or does not have any dictation sources.

If the Profile Optimizer Server determines that a master user profile is not corrupt, it applies the medication update to the profile. Otherwise, the server does not apply the medication update to the profile and the server logs an error for the task.

Downloading Dragon updates to clients

Each messages you receive from the *Nuance Update Server* includes the UNC path on the *NMS Server* where the *Dragon* update file was downloaded.

You can either use Microsoft's SMS or SCCM to download the client updates to all *Dragon* client installed workstations or you can install the updates manually.

Nuance advises that you carry out the update installations during off-hours, when providers are not dictating.

For more information on using SMS or SCCM in *Dragon Medical Client* installations, refer to the *Dragon Medical 360* | *Network Edition Installation Guide* and Microsoft's SMS or SCCM documentation.

Purging messages

The *NMS Server* purges messages about updates and approvals of updates from the **Messages** and **Approval** lists after 30 days by default.

This process occurs automatically and you receive an event message telling you that the action is beginning, then another telling you that it has completed. You can monitor event messages in the **Audit Events** page. The *NMS Server* also purges these **Event** messages after 30 days by default.

Messages that have not been read by you or another administrator are never deleted.

If you would like to retain messages for fewer or more than 30 days, you can change the schedule for purging messages.

Changing the Schedule for Purging Messages

To change the number of days to retain messages in the **Messages** and **Approval** screens or messages in the **Audit Events** tab, take these steps:

- 1. On the menu bar, click **Sites**, then click the **Organizations Overview** icon.
- 2. Select a site and in the Sites area, click the Details icon.
- 3. On the Organizations Details screen, click Products.
- 4. Expand the Nuance Management Server section.
- 5. Modify the number of days for retaining each type of message:
 - For Audit Event messages set Retain audit events for ____ days.
 - For Messages and Approval messages set Retain message events for ____ days

	Products
+ General	
+ DM360 Network Ed	ition
- Nuance Manageme	nt Server
Retain audit events f	or 30 days
Retain message even	ats for 30 days
Retain dictation uplo	ad history for 60 days
Notify administrator	on incomplete dictation uploads after 30 minutes
NMC Inactivity timeo	out in 0 minutes

5. Click **OK** to save the change.

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Chapter 12: Managing uploads to Nuance

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. This chapter explains how to upload data to Nuance.

Sending speech data to Nuance	316
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Sending speech data to Nuance

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. No personal information is ever sent to Nuance and participation in data collection is completely voluntary.

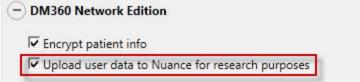
The process of accruing the speech data that Nuance can use is called *data collection*. When you turn on data collection, you let the *Dragon* clients collect up to 500 MB of text and data per user about optimizations performed and send it to the *Nuance Management Server* to be stored.

The *Nuance Management Server* then uploads the data every night at 2:00 AM. Only Nuance can change this schedule.

Turning on data collection for your site

To turn on data collection for your entire site, take these steps:

- 1. On the menu bar, click **Organizations** > **Search**.
- 2. Enter search criteria and click the magnifying glass.
- 3. To see your organization's information and add details to it, click the **Organization** > **Details** icon in the ribbon.
- 4. Select the **Products** tab.
- 5. Expand the DM360 Network Edition section.
- 6. Select the Upload user data to Nuance for research purposes option.



7. Click **OK** to save the change.

Turning on data collection for individual providers

You can also turn on data collection for individual healthcare providers in the **User Account Details** tab under the **Network Edition US** sub-tab:

- 1. On the menu bar, click the **User Accounts** ribbon, then click the **Search** icon in the ribbon under **User Accounts**.
- 2. When the name of the provider appears in the **User Accounts** screen, double click the name to open the **User Account Details** for that healthcare provider.
- 3. Click the Network Edition US tab.
- 4. Expand the User Account Options section.
- 5. Go to the bottom of the **User account** options section and click the **Upload dictation data to Nuance for research purposes** check box.
- 6. Click **Save** to save the change to the user account settings.
- 7. You can repeat these steps for selected individual user accounts in the NMS Server.

Privacy of your healthcare data and Nuance data collection

When you implement Data Collection it is for sending recognition data to Nuance to improve the accuracy of this and future products. Nuance works with collected data because our software can learn from experience about the language you, and your fellow professionals, use. We track the vocabulary, syntax, and pronunciation used by professionals in practice, and our experience makes our products more accurate and easier to use for you and others.

Nuance will never pass your recognition data on to anyone else or use it for any other purpose other than as set out in this notice.

Nuance will only collect recognition data (on behalf of your organization), and will collate and combine it with recognition data collected from other health professionals using Data Collection. We will not store the recognition data under your name, the medical practice or hospital or an individual's name, although the database will contain a search function enabling such terms to be searchable within the database.

Nuance will use the recognition data in accordance with your organization's instructions. We use it to conduct research in order to enhance and improve the accuracy of this and future products. Nuance recognizes that the data may include medical information about patients and your professional opinion in relation to those patients.

The only people with access to this data will be our employees, permitted agents, sub-contractors, etc. on a need to know basis, all of whom are bound by obligations of confidentiality to keep the data strictly confidential.

Nuance will transfer the personal data to its Data Collection sites that may be located outside of the EEA. However, Nuance shall ensure that any such transfer is compliant with the EU Data Protection Directive.

Our corporate policies and practices, and our contractual commitments to your organization, require us to take appropriate technical and organizational measures against unauthorized or unlawful processing of any personal data that you have provided to us and against accidental loss or destruction of, or damage to, that personal data.

Chapter 13: Managing the Nuance Management Server

This chapter presents information about managing multiple NMS Servers and configuring network traffic switch to ping NMS Servers for load balancing:

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Using and configuring the FileStore location for multiple NMS servers	321
Use a network traffic switch to balance the load on the Nuance Management Server	322

Managing multiple Nuance Management Servers

In a large network, you might choose to have multiple *NMS Servers*, one for every 1,000 dictating healthcare providers.

For some illustrations of larger DM360 Network Edition Networks and guidelines on when to deploy such a structure, refer to the DM360 Network Edition Planning and Deployment Guide.

On a large network, you should include a network traffic switch to help route server requests to the appropriate *NMS Server*. More details on configuring the network traffic switch to work with *NMS Servers* are provided in *Use a network traffic switch to balance the load on the Nuance Management Server* on page 322.

Using and configuring the FileStore location for multiple NMS servers

The NMS FileStore is a common location for files that need to be shared between the nodes/servers of the NMS system. If only one node/server is used, you can use the default FileStore location (which is the local system). If more than one node/server is used, you must create a common location for the nodes/servers to use as a FileShare.

You must configure each NMS node to use this common location. It is recommended that you not use one of the NMS nodes as the common location. If the server were to fail, the other nodes will not be able to access the FileShare location.

In DM360 Network Edition, the NMS System uses the FileStore to store temporary files that upload and download to the Nuance Management Console. For example, log files from various client applications.

Space requirements for the FileStore will depend on your system configuration.

You use the Nuance.NAS.Server.exe.config file to configure the FileStore location. There is a key in the "appSettings" section called FileStorePath that controls the location of the NMS FileStore.

Look for the following line:

```
<add key="FileStorePath" value="" />
```

A empty string ("") means to use the default. The default location is

%ALLUSERSPROFILE%\NMS\FileStore

where %ALLUSERSPROFILE% is an environmental variable.

The value of the environmental variable depends on the operating system. The following is a list of default locations for the environmental variable %ALLUSERSPROFILE% based on Operating Systems:

- Windows 2008: C:\ProgramData
- Windows 7: C:\ProgramData
- Windows Vista: C:\ProgramData
- Windows XP*: C:\Documents and Settings\All Users\Application Data

The NMS Server creates an Upload, Download, and Completed folder in the FileStorePath location.

For example. in Windows 2008, if "" is used in the configuration file, the NMS Server uses c:\ProgramData\NMS\FileStore as the location of the FileStore. If "D:\NMS\FileStore" is used, the NMS Server uses D:\NMS\FileStore as the FileStore location.

To change the FileStorePath:

- 1. Determine where you want to put the FileStorePath.
- 2. Shutdown the NMS Service. You can't move an existing FileStorePath while the service is running.

- 3. Create the FileStorePatch folder that you chose in step 1.
- 4. Copy the current ClientLogs, Completed, Download, and Upload folders to the folder you created in step 3.
- 5. Delete the current FileStore folder.
- 6. Modify the FileStorePath key value to use the folder you picked in step 1.
- 7. Save the FileStorePath key value.
- 8. Restart the NMS Service.

* The 2.x versions of DM360 Network Edition will be the last versions of the product to support Windows XP. DM360 Network Edition 2.1 continues to support Windows XP.

Use a network traffic switch to balance the load on the Nuance Management Server

If you have a large network with multiple *NMS Servers*, you can include a network traffic switch in your network to balance the load on the *NMS Servers*. The network traffic switch can be an F5 or similar switch.

To configure the network traffic switch to send a message to the *NMS Server* to see if the server is operational, you would have the network traffic switch send the following message in the URL line of the browser:

```
http://<NMS-Server-Name>:8051/Nuance.NMS.Services/
NMSServiceStatus/Rest/Status
```

The NMS Server delivers the following XML-formatted response to the network traffic switch:

```
<ServiceStatusResponse xmlns=
"http://schemas.datacontract.org/2004/07/Nuance.NAS.Connector.
DictationTranscription" xmlns:i="http://www.w3.org/2001/
XMLSchema-instance">
        <Status>Running</Status>
        <Status>Running</Status>
        <ServerDateTimeUTC>2010-12-13T20:50:13.0969590Z
        </ServerDateTimeUTC>
        <InterfaceType>basicHttpTransport</InterfaceType>
</ServiceStatusResponse>
```

If the *NMS Server* is down, the switch receives an error. If the network traffic switch makes this call and the *NMS Server* sends anything other than the expected response, the switch can tag that server as down and reroute the traffic accordingly.

Chapter 14: Backing up databases, user profiles, and logs

This chapter presents information about back ups of the NMS SQL Database and the Profile Optimizer Database, and also presents the structure of the master user profiles, in these sections:

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Backing up the Profile Optimizer SQL database	326
Backing up Master user profiles	327
Restoring a Master User Profile from backup	328
Removing a master user profile folder for a deleted user account	330

Backing up the Nuance Management Server database

When you look in the SQL Server explorer, to find the *NMS SQL Database*, look for a database named **NuanceMC** by default. If you name the database differently during the installation process, *NMS Server* retrieves the database name from SQL Server and uses its name as the root for the backup files.

During the installation process, the *NMS Server* creates the backup folder in the location you indicate or, by default, in the **C:\NMSDBBACKUP** folder.

The *NMS Server* automatically backs up the data you have entered into it on sites, users, groups, and other objects into the backup folder. It also backs up all Windows communication foundation service logs that it creates.

(For more information on logs that clients and servers in Dragon Medical 360 | Network Edition create, refer to *Viewing speech node*, *Dragon*, *Profile Optimizer Server*, and *Nuance Management Server logs* on page 410.)

Scheduled NMS log and database backups

The *NMS Server* schedules these backups:

- Transaction log backups—Scheduled hourly
- Differential database backups—Scheduled daily
- Full database backups—Scheduled weekly

The NMS Server stores up to one month of backups on its hard disk.

To retain more than one month of backups, you must copy the data before the month is over.

Disabling scheduled backups of the NMS database

You can set an option to turn off scheduled back ups of the NMS database. This is useful for sites that want to manage their own backups of the NMS database. When you set the option, the scheduled backups still run but do not do anything. To disable scheduled back ups of the NMS database:

1. In the Nuance Management Console, in **System Settings**, check **Disable scheduled NMS database backups**.

System Settings		×
- General		
☑ Disable scheduled NMS d	atabase backups	
LINQ to SQL trace output		
Cloud documentation root	http://www.nuance.com	
+ Nuance Management Cor	sole	
+ SMTP		
+ Data Collection FTP		
+ Reports		
0		
	Save Ca	ancel

2. Click Save.

File names of database backups

Each time it carries out a full database backup, the NMS Server takes the following steps:

- 1. Deletes database files older than 1 month.
- Renames the NuanceMCDump.BAK file currently in the folder to NuanceMCDump_YY_MM_DD_hh_mm_ss.BAK, using the current date- and timestamp.
- 3. Generates a new database backup and names it NuanceMCDump.BAK.

Backing up the Profile Optimizer SQL database

When you look in the SQL Server explorer, to find the *Profile Optimizer SQL Database* database, look for a database named **NuancePODB**.

At the beginning of the installation process, you create the *Profile Optimizer Server* database files folder and place it on the hard drive of the SQL Server. This file does not require a particular name, because you tell the server the name of the file later in the installation process. You might name it something that helps identify it, like **ProfOpt_DB**. The *Profile Optimizer Server* automatically backs up the data that it generates into this database files folder.

Note:

The server does not automatically back up *Dragon* log files and *Speech Node* service log files that it creates.

(For more information on logs that clients and servers in Dragon Medical 360 | Network Edition create, refer to *Viewing speech node*, *Dragon*, *Profile Optimizer Server*, and *Nuance Management Server logs* on page 410.)

Automatic Profile Optimizer log and database backups

The *Profile Optimizer Server* generates these backups after its **Profile Optimizer Server service** starts:

- Differential database backups—Created when the services first start up, then generated daily
- Transaction log backups—Generated hourly as long as the Profile Optimizer Server service is running
- Full database backups—Generated after the **Profile Optimizer Server service** has been running for a full week, then every time the service runs for a full week since the last full backup.

To retain more than one month of backups, you must copy the data before the month is over.

The Profile Optimizer Server stores up to one month of backups on the database server hard disk.

To retain more than one month of backups, you must copy the data before the month is over.

File names of database backups

Each time it carries out a full database backup, the Profile Optimizer Server takes the following steps:

- 1. Deletes database files older than 1 month.
- 2. Renames the NuancePODBDump.BAK file currently in the database files folder to NuancePODBDump _YY_MM_DD_hh_mm_ss.BAK, using the current date- and timestamp.
- 3. Generates a new database backup and names it NuancePODBDump.BAK.

Backing up Master user profiles

The master user profiles file structure follows a particular pattern. Understand this structure can help you better plan to back up the master user profiles.

Caution:

Nuance recommends that you:

- Back up all master user profiles weekly. You should retain these backups for several weeks in case you need them.
- Schedule an LMO process of every user profile weekly to ensure that the *Profile Optimizer* checks for a corrupted profile every week.
- Immediately after the *Dragon Medical Client* creates the user profile or after you associate the user profile with a user account, manually execute ACO and LMO processes on that profile.

The first backup of a user profile occurs the first time a user logs into the Dragon client. Afterwards, you can schedule ACO and LMO processes to run on that profile.

To force a backup of the user profile, you can execute manual ACO and LMO processes on the user profile. You execute an ACO or LMO manually by clicking the **Execute Now** button (**User Account Details > Network Edition US > Profile Optimizer Scheduler Settings > Configure**). For details, see *Scheduling optimization, medication, and command updates* on page 190

Each master user profile is stored in its own subdirectory of the *Master User Profiles Server* (can be a dedicated server or the *NMS Server*, *Profile Optimizer Server*, or database server), as shown below:

\\<ServerName>\<ProfilesDir>\<NMSuserLoginName>\last known good\
profile1

The first profile for the provider is under **profile1**. If the provider has more than one profile, the next is under **profile2**.

If a profile becomes corrupted, you receive a notification about it in the **Messages** box on the *NMS Server*, the *NMS Server* moves the profile to the following location:

\\<ServerName>\<ProfilesDir>\<NMSuserLoginName>\BAD\profile1

The next time the provider starts to dictate, the *Dragon Medical Client* automatically retrieves the restored user profile for that provider.

The corrupted profile remains on the *Master User Profiles Server* until you remove it. When you have any corrupted profiles (you receive a notification about them in the *Nuance Management Console* **Messages** box), you should contact Nuance, as these profiles are not automatically uploaded to the Nuance data collection site. Avoid removing these profiles until Nuance subsequently notifies you that it has retrieved the profiles for analysis.

To manually back up a User Profile

- 1. Log in to the Nuance Management Console and open the User Account ribbon.
- 2. Click the Search icon and search for DM360 Author user accounts.
- 3. When the list of user accounts appears, select a user account.
- 4. To backup the user profile perform one of the following steps:
 - i. Right-click the user account and select Backup user profiles.
 - ii. On the ribbon, under User Profile Management, select Backup.
 A dialog box appears, informing you that a User Profile Backup task is now scheduled. To view the status of the task, you can <u>View Profile Optimizer task details</u>.
- 5. Click **OK**.

Restoring a Master User Profile from backup

If a healthcare provider cannot log in to the *Dragon Medical Client*, it might be because the master user profile has become corrupted.

If the profile is corrupted or if you simply want to restore a back up of a user profile, you can open the user account for that provider and restore the profile. Restoring a user profile overwrites the current profile with the backup copy.

In the Nuance Management Console, the **Restore Last Known Good User Profile** button under **User Account Details** > **User Profile** is replaced by the following two items (see step 4 below):

- the **Restore user profiles** right-click option
- the Restore ribbon item in User Profile Management

To restore a user profile

- 1. Log in to the Nuance Management Console and open the User Account ribbon.
- 2. Click the Search icon and search for DM360 Author user accounts.
- 3. When the list of user accounts appears, select a user account.
- 4. To restore a user profile perform one of the following steps:
 - i. Right-click the user account and select Restore user profiles.
 - ii. On the ribbon, under User Profile Management, select Restore.
 A dialog box appears, informing you that a User Profile Restore task is now scheduled. To view the status of the task, you can <u>View Profile Optimizer task details</u>.
- 5. In the dialog, click **OK**.

You can now open the **Messages** list in the **Utilities** ribbon to view a message that indicates that you initiated a request to restore the profile. When the restoration is successful, you receive two more messages, **Executing restore** and **Restore complete**, as illustrated below:

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results 🖄
- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Messages

lark Complete	Date	Message Text
	1/26/2011	Profile Status Message for User <henry thoreau=""> Login <hthoreau> : Restore complete for profile HThoreau</hthoreau></henry>
<	1/26/2011	Profile Status Message for User <henry thorecou=""> Loc; in <hthorecou> : Executing user initiated restore of profile HThorecou</hthorecou></henry>
	1/26/2011	Nuance Management Console initiated a request to Restore the DM Profile to the Last Known Good Version for User <henry thoregu=""> Login <hthore< td=""></hthore<></henry>

Note:

To ensure that a known good profile is available soon after the provider begins dictating, as soon as you have associated a user profile with the provider's user account, Nuance recommends that you immediately execute manual ACO and LMO processes on that user profile. (Note that you can execute the processes on an entire group of user profiles as well.)

To force a backup of the user profile, you can execute manual ACO and LMO processes on the user profile. You execute an ACO or LMO manually by clicking the **Execute Now** button (**User Account Details > Network Edition US > Profile Optimizer Scheduler Settings > Configure**). For details, see *Scheduling optimization, medication, and command updates* on page 190

Clicking the **Execute Now** button initiates a backup of the user profile and, if no previous backup existed, forms the *first* known good user profile, then available to restore.

Removing a master user profile folder for a deleted user account

Before you delete a user account, you should be sure to export the user profile for the account first. Exporting the user profile saves the information accrued about that particular provider's voice and speech patterns. Should you ever need that user profile again, you can then import the exported user profile to bring the provider back up to speed more quickly.

In DM360 Network Edition, Service Pack 2, when you try to delete a user account, the Nuance Management Console displays a dialog that lets you choose to either delete the account and its user profile at the same time, or, export the profile before deleting the account. If you want to export the profile before deleting the user account, select **No** and export the profile. Then you can go back and delete the user account. In Dragon Medical 360 | Network Edition, 2.1, you use the Dragon client to export and import user profiles. For details, see the Dragon Help and the Dragon user guide.

For details on how to export a user profile, then delete the associated user account, refer to the sections indicated for each task below:

- To export the user profile: see the Dragon Help or the Dragon user guide.
- Viewing, modifying, and deleting user accounts

After you delete a user profile and user account from the NMS Server (in the Nuance Management Console), the folder for that provider's user profile remains in the master user profiles directory.

To later reuse the deleted user account's login name for another user account, you must first remove the original user profile folder with that name from the master user profiles directory. You can copy it to a **Deleted** or similar folder, so that you can restore it if the need arises.

Chapter 15: Working with Text and Graphics/auto-texts and custom words

This chapter describes how administrators and providers create and manage Text and Graphics/auto-texts and custom words in the Nuance Management Console.

Overview of managing Text and Graphics/auto-texts and custom words	332
Creating shared and personal Text and Graphics/auto-texts and custom words	334
Importing Text and Graphics/auto-texts and custom words	339

Overview of managing Text and Graphics/auto-texts and custom words

The management behavior for Text and Graphics/ auto-texts and custom words are virtually identical.

Note: Text and Graphics and Text and Graphics DragonTemplates are supported. Text and Graphics with Lists are supported if they are in Command Sets.

- Centralized management for ALL users across all client applications. If you create a Text and graphics/auto-text or a custom word in the NMS, it is immediately available to all users regardless of the client application they use.
- Increased standardization of documentation. By centrally defining profile customizations, administrators can ensure that all users are documenting in a standardized manner.
- Increased control and granularity:
 - Common customizations (Text and graphics/auto-text, custom words, speech settings) can be defined at the Site level to enforce standardization.
 - Customizations can be added at the group level to support practice or location specific customizations.
 - Personal customizations can be created at the physician level.
- Common Text and Graphics/auto-texts and custom words that are shared by multiple users should be exported from DM360 Network Edition and imported into the NMS at the Site or Group level.
- Any new shared Text and Graphics/auto-texts and custom words should be created in the Nuance Management Console at the Site or Group level.
- An administrator can define and manage Text and Graphics/auto-texts and custom words at the Site, Group, or personal (user) level using the Nuance Management Console. This impacts the Text and Graphics/auto-texts and custom words that are available to other providers.
- A provider defines and manages "personal" Text and Graphics/ auto-texts and custom words using the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application). This does not impact the Text and Graphics/ autotexts and custom words that are available to other providers.
- An administrator can view all shared and personal Text and Graphics/auto-texts and custom words that are associated with a provider.
- Text and Graphics/auto-texts and custom words that are available to a provider depend on that provider's Site and Group membership. For example, a provider that belongs to Group-1 in Site-1 can "see" all Text and Graphics/auto-texts defined at the Site level for Site-1, all Text and Graphics/auto-texts at the Group level for Group-1 and any Text and Graphics/auto-texts defined at the personal level.
- When a provider logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application), the application queries the cloud NMS for a list of all shared Text and Graphics/auto-texts and custom words that the provider

can access (based on the providers Site and Group membership) and adds these customizations to the provider's local profile. The client application uploads personal Text and Graphics/auto-texts and custom words to the NMS. The provider can access and use all shared Text and Graphics/auto-texts and custom words based on their group memberships and permissions. The provider can use all of their personal Text and Graphics/auto-texts and custom words.

- Any commands that are marked as protected are not uploaded to the NMS from the Dragon client. If you wish to share protected commands with end-users in a site or group, you should place the commands in a Command Set.
- Text and Graphics/ auto-texts and custom words with the same name can be defined at the Site, Group, or Personal (user) levels. The only requirement is that the names of the Text and Graphics/auto-texts and custom words must be unique within the level it is defined in.
- If "duplicate" names exist in the list of Text and Graphics/auto-texts and custom words that a provider can use, the NMS will return the most specific objects. For example, the NMS returns personal Text and Graphics/auto-texts before group Text and Graphics/auto-texts.

Creating shared and personal Text and Graphics/auto-texts and custom words

A special note about synchronizing auto-texts after importing a user profile

After a user imports a User Profile, to synchronize their auto-texts with the Nuance Management Server (NMS), they must log out of the Dragon client. This does not have to occur right after the profile import unless they want to synchronize the auto-texts immediately after the profile import.

If the Dragon client logs the user out due to a period of inactivity, their auto-texts will still synchronize with the NMS the next time they load the profile.

Administrators create and manage common shared Text and Graphics/auto-texts and custom words

An administrator uses the cloud based Nuance Management Console to create and manage common Text and Graphics/auto-texts and custom words at the Group or Site levels. These objects are available to all providers that are part of these sites and groups. The Administrator changes speech settings that impact speech recognition behavior and formatting. As an administrator adds, or edits Text and Graphics/auto-texts and custom words, the changes are captured by NMS in the cloud.

When a provider logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application), the application queries the cloud NMS for a list of all Text and Graphics/auto-texts and custom words that the provider can access. The NMS makes all of the common Text and Graphics/auto-texts and custom words available to the provider. The NMS applies settings that impact speech recognition and formatting to all recognized text for the provider.

Workflow - Administrator adds individual Text and Graphics/autotexts and custom words

- 1. An administrator adds Text and Graphics/auto-texts and custom words at the Site / Group or User level using the cloud Nuance Management Console.
- 2. The cloud NMS marks these Text and Graphics/auto-texts and custom words as "interactive", since they were loaded in a non-batch fashion.
- 3. A provider logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 4. The client application queries the cloud NMS for all available common "interactive" Text and Graphics/auto-texts and custom words.
- 5. The client application adds the new Text and Graphics/auto-texts and custom words to a temporary local 'voc' file.

6. Custom Text and Graphics/auto-texts and custom words are available to the provider for dictation.

The next time that the profile optimizer runs on the provider's user profile, the Text and Graphics/auto-texts and custom words from the temporary 'voc' file are added to the user profile.

Workflow - Administrator deletes Text and Graphics/auto-texts and custom words

The administrator can delete either "batch" or "interactive" Text and Graphics/auto-texts and custom words from a custom auto-texts, commands, and custom words list.

Since the same Text and Graphics/auto-texts and custom words can exist at the Site, Group or Personal level, deleting an instance of Text and Graphics/auto-texts and custom words does not remove it from all user vocabularies.

For example:

Actors:

- Provider-A is defined in Site-1, no Group
- Provider-B is defined in Site-1, Group-1
- Provider-C is defined in Site-2, Group-2

Pre-conditions:

- Text and Graphics/auto-texts AT-X is defined at the Site-1 level
- Text and Graphics/auto-texts AT-X is defined at the Group-1 level
- Text and Graphics/auto-texts AT-X is defined at the personal level for Provider-C
- 1. An administrator uses the cloud Nuance Management Console and deletes AT-X at the Site level
- 2. Provider-A logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 3. Provider-A attempts to dictate auto-text; AT-X.
- 4. AT-X is not recognized / incorrectly recognized.
- 5. AT-X is available to Provider-B and Provider-C.
- 6. Administrator deletes AT-X from Group-1 level
- 7. Provider-B logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 8. Provider-B attempts to dictate auto-text; AT-X.
- 9. AT-X is not recognized / incorrectly recognized.
- 10. AT-X is available to Provider-C.
- 11. Administrator deletes AT-X from personal for Provider-C
- 12. Provider-C logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 13. Provider-C attempts to dictate AT-X.
- 14. AT-X is not recognized / incorrectly recognized.

Providers create and manage personal Text and Graphics/auto-texts and custom words

In addition to "shared" customizations such as group level Text and Graphics/auto-texts and custom words, individual providers may further customize their speech experience by creating and managing "personal" Text and Graphics/auto-texts and custom words. The provider still has full access to Site and Group level customizations, in addition to their personal customizations. A provider can create personal auto-text and custom words using Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application.

If an administrator makes changes to Text and Graphics/auto-texts and custom words, Dragon settings, those changes are available to the NMS in the cloud whenever a provider session is "refreshed". The NMS automatically refreshes a session after period of provider/user inactivity or when a user logs out and back into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).

When a provider creates Text and Graphics/auto-texts and custom words, the objects are stored locally and in the cloud NMS. The next time the provider logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application), the application queries the hosted NMS for a list of all Text and Graphics/auto-texts and custom words that the provider can access and makes them available to the provider. The personal (user level) Text and Graphics/auto-texts and custom words are visible to administrators in the Nuance Management Console.

Workflow - Provider deletes Text and Graphics/auto-texts and custom words

Provider's can maintain their own vocabulary by deleting Text and Graphics/auto-texts and custom words that are not useful or required for their dictations.

A provider can only delete Text and Graphics/auto-texts and custom words from their personal vocabulary. If Text and Graphics/auto-texts and custom words are defined at the site or group level, they must be deleted by an administrator.

For example:

Actors:

- Provider-A is defined in Site-1, no Group
- Provider-B is defined in Site-1, Group-1
- Provider-C is defined in Site-1, Group-1

Pre-conditions:

- Text and Graphics/auto-texts AT-X is defined at the Site-1 level
- Text and Graphics/auto-texts AT -Y is defined at the Group-1 level
- Text and Graphics/auto-texts AT -Z is defined at the personal level for Provider-C

- 1. Provider-A logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 2. Provider-A deletes AT-X from their vocabulary.
- 3. Provider-A attempts to dictate AT-X.
- 4. AT-X is not recognized / incorrectly recognized.
- 5. AT-X is available to Provider-B and Provider-C in the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 6. Provider-B logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 7. Provider-B deletes AT-Y from their custom vocabulary
- 8. Provider-B attempts to dictate AT-X.
- 9. AT-X is not recognized / incorrectly recognized.
- 10. AT-X is available to Provider-C in the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 11. Provider-C logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 12. Provider-C attempts to dictate AT-X.
- 13. AT-X is not recognized / incorrectly recognized.

Workflow - Provider adds custom Text and Graphics/auto-texts and custom words

A provider adds custom Text and Graphics/auto-texts and custom words to their personal profile.

For example:

Actors:

- Provider-A
- Provider-B
- Provider-C

This example uses auto-texts. However, the same steps apply to and custom words.

- 1. Provider-A logs into Dragon.
- 2. Provider-A adds new auto-text AT-A.
- 3. Dragon adds AT-A to the local 'voc' file.
- 4. Dragon stores AT-A in the cloud NMS.
- 5. The cloud NMS marks AT-A as an "interactive" word since it was not added in batch fashion.
- 6. Provider-A logs into Dragon Medical 360 | Direct.
- 7. Provider A adds a new auto-text AT-B.
- 8. 360 SpeechAnywhere stores AT-B in the cloud NMS.
- 9. The cloud NMS marks AT-B as an "interactive" word since it was not added in batch fashion.
- 10. Provider-A logs into a SpeechAnywhere Services powered third party application.
- 11. Provider A adds a new auto-text AT-C.

- 12. The SpeechAnywhere Services powered third party application stores AT-C in the cloud NMS.
- 13. The cloud NMS marks AT-C as an "interactive" word since it was not added in batch fashion.
- 14. Provider-A logs into Dragon.
- 15. Dragon queries the cloud NMS for all available custom Text and Graphics/auto-texts.
- 16. The NMS returns AT-A, AT-B, and AT-C.
- 17. The Provider dictates with AT-A, AT-B, and AT-C.
- 18. Dragon recognizes all Text and Graphics/auto-texts.
- 19. Provider-A logs into Dragon Medical 360 | Direct.
- 20. 360 SpeechAnywhere queries the cloud NMS for all available custom Text and Graphics/auto-texts.
- 21. The NMS returns AT-A, AT-B, and AT-C.
- 22. The Provider dictates with AT-A, AT-B, and AT-C.
- 23. 360 SpeechAnywhere recognizes all Text and Graphics/auto-texts.
- 24. Provider-A logs into a SpeechAnywhere Services powered third party application.
- 25. The SpeechAnywhere Services powered third party application queries the cloud NMS for all available custom Text and Graphics/auto-texts.
- 26. The NMS returns AT-A, AT-B, and AT-C.
- 27. The Provider dictates with AT-A, AT-B, and AT-C.
- 28. The SpeechAnywhere Services powered third party application recognizes all Text and Graphics/auto-texts.f
- 29. An administrator logs into the cloud Nuance Management Console and <u>searches for auto-texts</u> for Provider-A.
- 30. The Nuance Management Console returns AT-A, AT-B, and AT-C.

The next time that the profile optimizer runs, any Text and Graphics/auto-texts in the local 'voc' are added to the provider's permanent user profile.

Importing Text and Graphics/autotexts and custom words

Importing common shared Text and Graphics/auto-texts and custom words

Note: You can only import XML files. You cannot import .DAT files.

Administrators use the cloud Nuance Management Console to import Text and Graphics/autotexts and custom words from an export of a Dragon user profile and make the Text and Graphics/auto-texts and custom words available to providers.

The first time a provider logs into the Dragon client application, Dragon uploads the customizations from the local profile to the cloud NMS.

In the subsequent logins, redundant personal Text and Graphics/auto-texts and custom words are deleted in favor of the common Text and Graphics/auto-texts and custom words at the Site or Group level. These redundant Text and Graphics/auto-texts and custom words can either be deleted using the cloud Nuance Management Console (by an administrator) or using the client application (by a provider).

Workflow - Importing common shared Text and Graphics/auto-texts and custom words

Pre-conditions:

• Customer has previously purchased and installed Dragon Medical 360 | Network Edition and is using the product.

After these steps, a provider logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application) and has access to all "common" Text and Graphics/auto-texts and custom words.

- 1. Organization Management from Nuance logins into the cloud Nuance Management Console and creates a new organization in the cloud NMS with the same organization ID as the on-premise NMS.
- 2. Professional services from Nuance and/or an organization's administrator models the organization in the cloud Nuance Management Console by defining Sites and Groups
- 3. Professional services from Nuance and/or an organization's administrator defines a standard documentation strategy for each Site and Group. For example, the customer may want a standard H&P template defined at the Site level that everyone uses and also create a MRI template for the radiology group.
- 4. Professional services from Nuance and/or an organization's administrator reviews common Text and Graphics/auto-texts and custom words that are already defined by examining the Text and Graphics/auto-texts and custom words that are defined in a typical Dragon user profile.
- 5. Professional services from Nuance and/or an organization's administrator exports <u>the common</u> <u>auto-texts</u> and custom words from the client application into an XML export file.

- 6. Professional services from Nuance and/or an organization's administrator imports <u>the common auto-texts</u> and custom words into the cloud Nuance Management Console at the appropriate Site or Group level so they can be shared by multiple providers that use Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application.
- 7. Professional services from Nuance and/or an organization's administrator defines any remaining common Text and Graphics/auto-texts and custom words at the Site or Group level using the cloud Nuance Management Console.

Importing custom Text and Graphics/auto-texts and custom words

An administrator may need to import a large number of Text and Graphics/auto-texts and custom words to augment the standard vocabulary.

The cloud NMS determines the Text and Graphics/auto-texts and custom words that a provider should receive; including Site, Group, and User level Text and Graphics/auto-texts and custom words . The NMS only returns the Text and Graphics/auto-texts and custom words that the provider can access based on the provider's group and site membership.

Workflow - Importing custom Text and Graphics/auto-texts and custom words

- 1. An administrator imports <u>a large number of auto-texts</u> and custom words at the Site / Group or User level using the cloud Nuance Management Console.
- 2. The Nuance Management Console marks these Text and Graphics/auto-texts and custom words as "batch", since they were loaded in an "en-masse" fashion.
- 3. Provider A logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 4. The client application queries the cloud NMS for all available common "interactive" Text and Graphics/auto-texts and custom words.
- 5. The NMS does not return any Text and Graphics/auto-texts and custom words because the large vocabulary was loaded in "batch" fashion.
- 6. The profile optimizer, running at a pre-scheduled time, queries the cloud NMS for all new "batch" custom Text and Graphics/auto-texts and custom words.
- 7. The NMS returns a list of Text and Graphics/auto-texts and custom words that were imported by the administrator.
- 8. The profile optimizer adds these custom Text and Graphics/auto-texts and custom words to the profiles for all eligible providers
- 9. Provider A logs into the client application (Dragon, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application).
- 10. The client application queries the cloud NMS for all available common "interactive" Text and Graphics/auto-texts and custom words.
- 11. The provider dictates one or more custom Text and Graphics/auto-texts and custom words that were added by the administrator.
- 12. The client application recognizes all "batch" custom Text and Graphics/auto-texts and custom words as they were added to their profile by the profile optimizer.

Importing vendor or third-party Text and Graphics/auto-texts and custom words

Dragon Medical 360 | Network Edition has Third-party vendors / integrators that create productivity packages that contain proprietary Text and Graphics/auto-texts and custom words. The cloud NMC and server based customization sharing provides an efficient way to distribute and manage third-party/vendor packages.

Workflow - Importing vendor or third-party Text and Graphics/autotexts and custom words

Pre-Conditions:

- Customer has installed and configured Dragon Medical 360 | Network Edition
- Customer has purchased a customization package from Integrator-X
- 1. Professional services from Nuance and/or an organization's administrator imports auto-texts and custom words from a customization package into the cloud Nuance Management Console at the Site or Group level.
- 2. The cloud NMS marks the imported Text and Graphics/auto-texts and custom words as "readonly" - they cannot be modified or exported.

Chapter 16: Working with Text and Graphics/auto-texts

This chapter describes how to work with and manage Text and Graphics/auto-texts.

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Overview of Text and Graphics/autotexts

This section provides general information about Text and Graphics/auto-texts.

The Text and Graphics/auto-texts feature enables you to define standard blocks of text (in Rich Text Format (RTF)) that your users can insert into their document with a short voice command. Text and Graphics/auto-texts often consists of one or more paragraphs, also called 'normals' or 'canned text'. Using Text and Graphics/auto-texts reduces the time the user needs to dictate and improves the consistency of documentation.

If the application that your users are using supports the Text and Graphics/auto-texts filtering feature, you can also specify that certain Text and Graphics/auto-texts should only be active for certain documents or forms.

Important: When defining Text and Graphics/auto-texts, it is strongly recommended that you give it a distinctive name that cannot be misinterpreted as speech to be recognized. This helps to ensure that the Text and Graphics/auto-texts is correctly inserted.

Text and Graphics/auto-texts enable a user to say a command that inserts text (in Rich Text Format (RTF)) into a form with multiple fields, a document in a text editor such as Microsoft Word, or a single line text field. The text can be plain text or formatted text. A sequence of keystrokes is a custom command rather than Text and Graphics/auto-texts. For this discussion, we refer to the inserted text or data as 'auto-text content'.

In the Nuance Management Console, an administrator creates Text and Graphics/auto-texts and associates each Text and Graphics/auto-texts with 'auto-text content'. Afterwards, a user can say the name of the Text and Graphics/auto-texts to insert the associated 'auto-text content' at the cursor position. For example, an administrator creates Text and Graphics/auto-texts called "normal chest" and associates it with the text "PA and lateral views of the chest revealed a normal-sized heart." When a user says "insert", the associated text is inserted at the cursor location.

When an administrator creates Text and Graphics/auto-texts, they should choose a name for the Text and Graphics/auto-texts that is easy to remember; and pronounce, and that reflects the 'auto-text content' that is associated with the Text and Graphics/auto-texts.

For more information about how to use Text and Graphics/auto-texts, see your product's s user documentation.

Administrators associate Text and Graphics/auto-texts with sites, groups and users. If Text and Graphics/auto-texts with the same name exist on more than one level (site, group, or user) in an organization, the lower level settings override the higher level settings. For example, Text and Graphics/auto-texts settings at the user level override Text and Graphics/auto-texts settings at the group level.

Dragon Text and Graphics/auto-texts

Dragon stores Text and Graphics/auto-texts locally and synchronizes them with the cloud NMS.

Text and Graphics/auto-texts greater than 4 MB in size do not synchronize with the cloud NMS.

Only global Text and Graphics/auto-texts are synchronized; Text and Graphics/auto-texts for Application or Window are not synchronized

Dragon considers Text and Graphics/auto-texts as Global if they were created in the Nuance Management Console or another client application.

Valid characters and size limitations for Text and Graphics/auto-texts names and spoken forms

Valid characters for Text and Graphics/auto-texts names

The following are valid characters you can enter in the fields for Text and Graphics/auto-texts:

Name:

- all alpha characters.
- all numbers
- apostrophes
- periods
- hyphens
- opening and closing angle braces
- blank characters
- spaces

Description: all characters and blanks

Spoken Phrase: all spaces, periods, apostrophes, hyphens, numbers and letters.

Display String: all characters and blanks

Content: all characters and blanks

Valid characters for Text and Graphics/auto-texts spoken forms

All characters and numbers, including blank characters, except for EMEA using the Speech Magic engine with 360 SpeechAnywhere Services.

- spaces
- periods
- apostrophes
- hyphens
- numbers
- letters
- Underscores

Size limitations for Text and Graphics/auto-texts names

The following are the maximum lengths of fields for Text and Graphics/auto-texts and do not apply to other types of commands.

- Name: The maximum is 80 characters.
- **Description**: The maximum is 1024 characters.
- Spoken Phrase: The maximum is 80 characters.
- **Display String**: The maximum is 80 characters.
- **Content**: Configurable by an NMC super-user only, The maximum is 4 MB. The minimum maximum is 1 MB. If a client application sends the NMS an auto-text with a body that is greater than the configured maximum size, the NMS does not accept the auto-text and marks the auto-text as deleted .
- Prefix/Postfix Keywords: The maximum is 25 characters.

Defining Text and Graphics/autotexts

Scenario

- Your users are radiologists who frequently read chest x-rays. Most of these are normal and the doctors frequently say "PA and lateral views of the chest revealed a normal-sized heart. The lungs are clear of any active infiltrations".
- You define Text and Graphics/auto-texts called 'normal chest' that contains this information.
- A doctor says the voice command "auto-text normal chest" to insert the information.

Procedure

For more information on creating Text and Graphics/auto-texts, see <u>Creating an Text and Graph-ics/auto-texts</u>.

Remarks about creating Text and Graphics/auto-texts

- To set the **Owner name** to the site that users are assigned to, in the left folder panel, select the site.
- The **Name** field contains part of the voice command that users must say to insert the Text and Graphics/auto-texts; make sure it is unambiguous and easy to pronounce.

For example, you enter "normal chest" in the **Name** field; when a user says "auto-text normal chest" or "insert normal chest" the text 'PA and lateral views of the chest revealed a normal-sized heart. The lungs are clear of any active infiltrations.' is inserted into their document (the Text and Graphics/auto-texts name is not inserted into the document).

Adding and managing keywords for auto-texts

Overview of keywords for Text and Graphics/autotexts

A keyword for Text and Graphics/auto-texts consists of a leading keyword and trailing keyword.

The leading keyword is placed before the auto-text/Text-and-Graphic and the trailing keyword is placed after the auto-text/Text-and-Graphic.

For Text and Graphics/auto-texts created using the Nuance Management Console, Dragon Medical 360 | Direct, or SpeechAnywhere Services, the Text and Graphics/auto-texts automatically adds the leading keyword to the spoken form phrase. To use the auto-text/Text-and-graphic, endusers must say the leading keyword followed by the name of the auto-text/Text-and-graphic.

Notes:

The leading keyword and trailing keyword are optional.

- Auto-texts created using the Dragon client (Dragon Medical 360 | Network Edition) do not get a leading keyword.
- If a leading keyword is configured (in the Organization Details Products tab) for the language that is chosen when creating the Text and Graphics/auto-texts, the Text and Graphics/ auto-texts created using the Nuance Management Console, Dragon Medical 360 | Direct, or SpeechAnywhere Services, get a prefix.
- The NMS stores keywords as part of the Text and Graphics/auto-texts.
- Text and Graphics/auto-texts only includes a keyword if it has been configured to include one.
- Editing Text and Graphics/auto-texts created using the Nuance Management Console or Dragon Medical 360 | Direct preserves the existing keywords.
- DM360 Network Edition ignores keywords. The Dragon client has the ability to alter, edit and remove the keywords for Text and Graphics/auto-texts. When Dragon sends the auto-text to the NMS, the NMS inserts the auto-text as is and does not add a keyword.
- You can create keywords in the Nuance Management Console and they appear as leading and trailing keywords when viewing auto-text in Nuance Management Console. In Dragon, you also see these same keywords but they just appear as part of the auto-text in Dragon.
- Updating organization keywords updates all Text and Graphics/auto-texts in the NMS for the organization.
- The Text and Graphics/auto-texts automatically places keywords in the **leading keyword** and **trailing keyword** columns. The keyword values are not be editable in these columns.

Change keywords for an organization

Updating a keyword for a language, for an auto-text/Text-and-graphic, updates the keyword for all Text and Graphics/auto-texts in an organization for that language.

- 1. In the Nuance Management Console, select **Organizations** > **Search**.
- 2. In the Search Organizations screen, enter search criteria and click the magnifying glass.
- 3. Select an organization and click **Details** in the **Organizations** area.
- 4. Click the **Products** tab.
- 5. In the **General** area, click **Keywords**. The Nuance Management Console displays the **Keywords** grid:

Keywords

Prefix	Postfix	
		-
insert		
<u>,</u>		
<u>.</u>		
<u></u>		
ľ		
<u>,</u>		

- 6. On one of the language rows, enter a prefix in the **leading keyword** column. The maximum number of characters for a prefix is 25. The default value for US English is "insert".
- 7. Enter a postfix in the **trailing keyword** column. The maximum number of characters for a post-fix is 25. The default value is "".
- 8. Click Save.
- 9. Click **OK**.

Change keywords for an organization

- 1. In the Nuance Management Console, select **Organizations** > **Search**.
- 2. In the Search Organizations screen, enter search criteria and click the magnifying glass.
- 3. Select an organization and click **Details** in the **Organizations** area.
- 4. Click the **Products** tab.
- 5. In the **General** area, click **Keywords**. The Nuance Management Console displays the **Keywords** grid:

anguage	Prefix	Postfix	
català [ca]			
dansk [da]			
Vederlands [nl]			
English (Canada) [en-CA]			1
English (United Kingdom) [en-GB]			
English (United States) [en-US]	insert		
suomi [fi]			
Vlaams [vls]			
français [fr]			
français (Canada) [fr-CA]			
Deutsch [de]			
Deutsch (Österreich) [de-AT]			
magyar [hu]			
italiano [it]	·		
norsk (bokmål) [nb]			
norsk (nynorsk) [nn]	·		
Português [pt]			

Save Cancel

- 6. On one of the language rows, edit the value in the **leading keyword** column. The maximum number of characters for a prefix is 25. The default value for US English is "insert".
- 7. Click Save.

- 8. In the Update Keywords dialog box, type 'CHANGE KEYWORD' and click OK.
- 9. Edit the value in the **trailing keyword** column. The maximum number of characters for a post-fix is 25.
- 10. Click Save.
- 11. In the Update Keywords dialog box, type 'CHANGE KEYWORD' and click OK.
- 12. Click **OK**.

Searching for auto-texts, sites, groups, or users

When you first open the **Manage Auto-texts** screen, the **Organization** field displays the name of the currently managed organization. You can change the value in this field. Changing the value will change the data that the **Manage Auto-texts** screen displays.

NMS introduces changes to the **Manage Auto-texts** screen to help you manage and find the auto-texts in an organization.

- 1. In the Nuance Management Console, select **Speech Recognition**.
- 2. In the Auto-texts section, click Manage.
- 3. To view all the hierarchy levels that are associated with the auto-texts, click **Display all levels**.
- 4. To view auto-texts that have been disabled, click **Show disabled auto-texts**.
- 5. To view details about a specific auto-text, double-click the name of the auto-text in the **Auto-text Name** column.

The left side of the Manage Auto-texts screen displays a tree-like structure:

- The first element in the tree is the Auto-texts element. To view all the auto-texts in the organization, click the Auto-texts element.
- The second element in the tree is the sites element. To view the sites in the current organization, expand the sites level. To view all the auto-texts that are associated with a particular site, click a site.
- If groups exist in the organization, the third element in the tree is the groups element. To view the groups in the current organization, expand the groups level. To view all the auto-texts that are associated with a particular group, click a group.
- If users exist in the organization, the fourth element in the tree is the users element. To view the users in the current organization, expand the users level. To view all the auto-texts that are associated with a particular user, click the user.

To view information about auto-texts that are part of a site in the organization, part of a group in the organization, or associated with a particular user, in the tree, select the site, group, or user.

The right side of the **Manage Auto-texts** screen displays the following information about each auto-text:

- Auto-text Name: The name of the auto-text.
- **Spoken Phrase**: The spoken phrase for the auto-text. If there is more than one phrase for the auto-text, this column displays "{multiple}".
- Language: The language of the auto-text.
- **Owner Type**: The hierarchy level associated with the auto-text; one of site, group, or user.
- Owner Name: The name of the site, group, or user that is associated with the auto-text.
- **Description**: Information that describes the auto-text.
- **Application Target**: The name of the application associated with the auto-text. For example, "Microsoft Word".

- Command Set: The name of the Command Set that contains the auto-text.
- **Protected**: Whether the auto-text can or cannot be viewed in the Nuance Management Console.
- **Status**: The state of the auto-text.
- Modified: The last time the auto-text was modified.

Steps for searching for auto-texts, sites, groups, or users

The tree structure on the left side of the **Manage Auto-texts** screen contains an element called 'Click here to search'. This item is at the same level as the Auto-texts element in the tree. Use the 'Click here to search' item to search for auto-texts, sites, groups, and users in an organization.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Auto-texts section, click Manage.
- 3. Click the 'Click here to search' item. A search field appears to the right of this item.
- 4. In the search field, enter search criteria. Search for auto-texts, sites, and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for an auto-text, enter the name of the auto-text.
- 5. After you enter the search criteria, click the magnifying glass.
- 6. The **Manage Auto-texts** screen displays the search results under the 'Click here to search' item as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Auto-texts (x)
- 7. To view sites, groups, users, or auto-texts that matched the search criteria, under the 'Click here to search' item, expand the Sites, Groups, Users, or Auto-texts level.
- 8. To view the auto-texts that are associated with one of these expanded objects (Sites, Groups, Users Commands), click on the object.
- 9. To view all the hierarchy levels that are associated with the auto-texts, click **Display all levels**.
- 10. To view auto-texts that have been disabled, click Show disabled auto-texts.
- 11. To view details about a specific auto-text in the search results, double-click the name of the auto-text in the **Auto-text Name** column.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Viewing Text and Graphics/auto-texts details

If you have the "Product – Manage DM360 Network Edition" right but do not have the "Product – Manage Speech Anywhere" right:

- The **Display String** column is not visible
- The **Auto-text** screen displays only one row DM360 Network Edition Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product - Manage Speech Anywhere" right:

-The Auto-text screen displays the Display String column

-The **Auto-text** screen displays a grid that can contain up to five rows of spoken forms for an Text and Graphics/auto-texts and their display strings. 360 Speech Anywhere Services Text and Graphics/auto-texts can have up to five different spoken forms.

To view details about Text and Graphics/auto-texts, you must first search for the Text and Graphics/auto-texts.

- 1. Search for Text and Graphics/auto-texts by performing the steps described <u>here</u>. To view details about a specific Text and Graphics/auto-texts, perform one of the following actions:
 - In the search results, double click the name of the Text and Graphics/auto-texts in the **Auto-text Name** column.
 - In the search results, select the Text and Graphics/auto-texts. On the ribbon, select **Auto-text Details** in the **Auto-text** section, click **Details**.

The **Auto-text** tab displays the following information:

Auto-text					
Auto-text Meta Data					
Name		Description		Language	English (United States) [en-US]
Prefix	Spoken Phrase			Display String	
🕂 insert	I		end	J	
x 🗈 🔁 🤊 🝽		• • B I	U = = = !::)= 🔜	
Save	Save & New	Cancel			

- Name: The name of the Text and Graphics/auto-texts.
- **Description**: Information that describes the Text and Graphics/auto-texts.
- Language: The language associated with the Text and Graphics/auto-texts. Enter an IETF language tag, for example, "en-US" for U.S English.

- leading keyword: A keyword that appears before an auto-text/Text-and-graphic. For details, see Adding and managing keywords for auto-texts.
- trailing keyword: A keyword that appears after an auto-text/Text-and-graphic. For details, see Adding and managing keywords for auto-texts.
- **Spoken Phrase**: The value from the **Name** field. 360 | SpeechAnywhere Services recognizes spoken phrases as the spoken forms of the auto-text. For Dragon Medical 360 | Network Edition, the **Auto-text** screen only displays the single/primary spoken form for the auto-text/Text-and-Graphic.
- **Display String**: The text to display.

Note: If you have the "Product – Manage DM360 Network Edition" right but do not have the "Product – Manage Speech Anywhere" right:

- The "Display String" column is not visible
- The Auto-text screen displays only one row DM360 Network Edition Text and Graphics/auto-texts can only have one spoken form.

You can modify characteristics of the Text and Graphics/auto-texts in the lower part of the **Auto-text** screen. See Editing Text and Graphics/auto-texts for details.

Creating Text and Graphics/autotexts

If you have the "Product – Manage DM360 Network Edition" right but do not have the "Product – Manage Speech Anywhere" right:

• The Auto-text screen displays only one row DM360 Network Edition Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product - Manage Speech Anywhere" right:

- The Auto-text screen displays the Display String column.
- The Auto-text screen displays a grid that can contain up to five rows of hold spoken forms for each Text and Graphics/auto-texts and their display strings. 360 Speech Anywhere Services Text and Graphics/auto-texts can have up to five different spoken forms.

To create Text and Graphics/auto-texts, perform the following steps:

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Auto-texts section, click Manage.
- 3. Find and select a site, group, or user by performing the steps described here.
- 4. In the Auto-texts section, click Add.
- 5. In the **New Auto-text** screen, set the following fields:

New Auto-text Home						
Auto-text Meta Data						
Name		Description		Language	English (United States) [en-US]	•
Leading Keyword	Spoken Phrase		Display String			
insert					X	
X 🗈 🔁 🔊 (*		B I	U = = = =	😑 🔜 📋 🗆 Plair	n Text	
			NG GALLER O			
Save	Save & New	Cancel				

• Name: The name of the Text and Graphics/auto-texts. When the user says "insert" followed by the name of the Text and Graphics/auto-texts, the application inserts the Text and Graphics/auto-texts content at the current cursor position. In the **Auto-text** screen, the Text and Graphics/auto-texts content is the text in the field under the formatting bar. See <u>Overview of Text and Graphics/auto-texts</u> and your product's administrator documentation for details about how to define a good Text and Graphics/auto-texts name.

- Make sure you enter valid characters into this field. For details, see <u>Valid</u> characters for Text and Graphics/auto-texts names and spoken forms.
- **Description**: Information that describes the Text and Graphics/auto-texts.
- Language: The language associated with the Text and Graphics/auto-texts. Enter an IETF language tag, for example, "en-US" for U.S English.
- 6. In the rich text field under the formatting buttons, enter the Text and Graphics/auto-texts content. In NMS 3.0 and higher, you can now add tables, (audio, xls, movies) to Text and Graphics/auto-texts.
- 7. To set the format of the Text and Graphics/auto-texts as plain text, check the **Plain Text** option.
- 8. When you enter text in the Name field, the Nuance Management Console updates the Spoken Phrase field in the first grid row with the text The Nuance Management Console automatically places the system prefix and postfix (if available) in the leading keyword and trailing keyword columns for the spoken phrase. For DM360 Network Edition only, the Auto-text screen only displays the single/primary spoken form for the auto-text/Text-and-Graphic. To add a spoken phrase for the Text and Graphics/auto-texts, you must have the Product Manage NSA right. Perform the following steps:
 - i. Click the plus sign on the left side of the grid. The Nuance Management Console adds a new row to the spoken phrase grid and automatically places the system prefix and postfix (if available) in the **Leading Keyword** and **Trailing Keyword** columns for the new spoken phrase.
 - ii. In the **Spoken Phrase** column, enter a phrase that the end user says to trigger the Text and Graphics/auto-texts. 360 | SpeechAnywhere Services supports multiple spoken phrases per auto-text.
 - Make sure you enter valid characters into this field. For details, see <u>Valid</u> characters for Text and Graphics/auto-texts names and spoken forms.
 - iii. (Optional) In the **Display String** column, enter text to display. This field can be blank.
- 9. For Text and Graphics/auto-texts to be available to EPIC users on Cantu or Hiaku, perform the procedures in <u>Special information for EPIC users</u>.
- 10. Click **Save**. You can also click **Save & New** to save your changes and create new Text and Graphics/auto-texts. The **Save** and **Save & New** buttons are not enabled until at least one spoken phrase is added to the Text and Graphics/auto-texts.

Example Text and Graphics/auto-texts: normal chest

In <u>Defining Text and Graphics/auto-texts</u>, we outline a scenario for 'normal chest'. To create this Text and Graphics/auto-texts:

- 1. On the Nuance Management Console, select **Speech Recognition**.
- 2. Under Auto-texts, click Add.
- 3. In the **New Auto-text** tab, set the following fields:

- Name: Enter 'normal chest 1234'.
- The Nuance Management Console auto-fills the **Spoken Phrase** field in the first row of the spoken phrase grid with 'normal chest'.
- **Description**: Enter 'An auto-text for normal chest x-rays'.
- Language: Enter 'en'.
- 4. In the rich text field under the formatting buttons, enter "PA and lateral views of the chest revealed a normal-sized heart. The lungs are clear of any active infiltrations".
- 5. Click **Save**. You can also click **Save & New** to save your changes and create new Text and Graphics/auto-texts. The **Save** and **Save & New** buttons are not enabled until at least one spoken phrase is added to the Text and Graphics/auto-texts.

Editing Text and Graphics/auto-texts

If you have the "Product – Manage DM360 Network Edition" right but do not have the "Product – Manage Speech Anywhere" right:

- The **Display String** column is not visible.
- The Auto-text screen displays only one row DM360 Network Edition. Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product – Manage Speech Anywhere" right:

- The Auto-text screen displays the Display String column.
- The **Auto-text** screen displays a grid that can contain up to five rows of hold spoken forms for each Text and Graphics/auto-texts and their display strings. 360 Speech Anywhere Services Text and Graphics/auto-texts can have up to five different spoken forms.

Note: You cannot modify an auto-text that is linked to a Command Set. The **Delete**, **Cut**, **Copy**, and **Export** buttons are disabled in the Nuance Management Console.

To edit Text and Graphics/auto-texts, perform the following steps:

- 1. In the Nuance Management Console, select **Speech Recognition**.
- 2. In the Auto-texts section, click Manage.
- 3. Find and select a Text and Graphics/auto-text by performing the steps described here.
- 4. In the Auto-texts section, click Details.
- 5. In the **Auto-text** tab, modify one or more of the following fields:

Auto-text						
Auto-text Meta Data						
Name		Description		Language	English (United States) [en-US]	•
Prefix	Spoken Phrase		Postfix	Display String		
insert			end		×	
		-				
X 🗈 🔁 🄊 (*		• • B I				_
Save	Save & New	Cancel				

• Name: The name of the Text and Graphics/auto-texts. When the user says "insert" followed by the name of the Text and Graphics/auto-texts, the application inserts the Text and Graphics/auto-texts content at the current cursor position. In the **Auto-text** screen, the Text and Graphics/auto-texts content is the text in the field under the formatting bar. See <u>Overview of Text and Graphics/auto-texts</u> and your product's administrator documentation for details about how to define a good Text and Graphics/auto-texts name.

- Make sure you enter valid characters into this field. For details, see <u>Valid</u> characters for Text and Graphics/auto-texts names and spoken forms.
- **Description**: Information that describes the Text and Graphics/auto-texts.
- 6. In the rich text field under the formatting buttons, modify the Text and Graphics/auto-texts content. In NMS 3.0 and higher, you can now add tables, (audio, xls, movies) to Text and Graphics/auto-texts.
- For DM360 Network Edition only, the Auto-text screen only displays the single/primary spoken form for the auto-text/Text-and-Graphic. To add a spoken phrase for a Text and Graphics/auto-texts, you must have the Product – Manage NSA right. Perform the following steps:
 - i. Click the plus sign on the left side of the grid. The Nuance Management Console adds a new row to the spoken phrase grid and automatically places the system prefix and postfix (if available) in the **leading keyword** and **trailing keyword** columns for the new spoken phrase.
 - ii. In the **Spoken Phrase** column, enter a phrase that the end user says to trigger the Text and Graphics/auto-texts. 360 | SpeechAnywhere Services supports multiple spoken phrases per auto-text.
 - Make sure you enter valid characters into this field. For details, see <u>Valid</u> characters for Text and Graphics/auto-texts names and spoken forms.
 - iii. (Optional) In the **Display String** column, enter text to display. This field can be blank.
 - iv. Click Save.
- 8. To modify a spoken phrase for the Text and Graphics/auto-texts, you must have the Manage DM360 Network Edition right. Perform the following steps:
 - i. Edit the text in the Spoken Phrase column
 - ii. Edit the text in the **Display String** column.
 - iii. Click Save.
- 9. To delete a spoken phrase, you must have the Product Manage NSA right. If there is only one Spoken Phrase in the list, you cannot delete it. Perform the following steps:
 - i. On the same row as the spoken phrase, click the red X.
 - ii. Click Save.
- 10. For Text and Graphics/auto-texts to be available to EPIC users on Cantu or Hiaku, perform the procedures in <u>Special information for EPIC users</u>.
- 11. Click **Save**. You can also click **Save & New** to save your changes and create a new Text and Graphics/auto-texts. The **Save** and **Save & New** buttons are not enabled until at least one spoken phrase is added to the Text and Graphics/auto-texts.

Using Text and Graphics/auto-texts

Scenario

- A doctor is working on a form with the cursor in the **Impression** field.
- The doctor says "auto-text normal chest", the text you defined is inserted.
- The doctor has saved time and the information is written consistently every time.

Procedure

For more information on how to insert Text and Graphics/auto-texts, see your product's end user documentation.

Setting a filter for Text and Graphics/auto-texts

This topic is only for Dragon Medical 360 | Direct and 360 | SpeechAnywhere Services. Dragon Medical 360 | Network Edition does not use meta data.

If you only log into the Nuance Management Console with the DM360 Network Edition license, you cannot view or use the **Meta Data** tab.

A system with many Text and Graphics/auto-texts can be complex for users; they might have difficulty remembering all the Text and Graphics/auto-texts names and which ones are relevant for them. They might mistakenly insert Text and Graphics/auto-texts that is not relevant for their field of medicine. You can filter specific Text and Graphics/auto-texts to be active for specific forms.

Note: Your application must support the Text and Graphics/auto-texts filtering feature. For more information, see the documentation delivered with the application.

Scenario

- Your application supports Text and Graphics/auto-texts filter with key 'modality' and values 'x-ray', 'CT', and 'MRI' and it will set this filter for all radiology reports.
- You want to set the 'normal chest' Text and Graphics/auto-texts to be active for x-rays only.

Procedure

If you only log into the Nuance Management Console with the DM360 Network Edition license, you cannot view or use the **Meta Data** tab.

- 1. Search for the 'normal chest' Text and Graphics/auto-texts.
- 2. Open the Meta Data tab and click Add.
- 3. In the Name field, enter "modality"; in the Value field, enter "x-ray".
- 4. Click **OK** and then **Save**.

The 'normal chest' Text and Graphics/auto-texts is now only active for forms with a 'modality' that has the value 'x-ray'.

For more information, see <u>Adding or removing meta data for Text and Graphics/auto-texts</u> in the Nuance Management Console documentation.

Remarks

- If your users are using an application that does not support the Text and Graphics/auto-texts filtering feature, setting metadata values in Nuance Management Console has no effect. Contact your application vendor to enable this feature.
- The metadata names and values that are used for filtering are defined by the application vendor. For more information, see the documentation delivered with the application. Contact your application vendor if the documentation does not specify the names and values.
- By default, Text and Graphics/auto-texts are always active. Be aware that:

- If no Text and Graphics/auto-texts filter has been set for a document or form, all Text and Graphics/auto-texts that have been defined in the system will be active.
- All Text and Graphics/auto-texts that you do not define metadata entries for will always be active.
- If a Text and Graphics/auto-texts filter with a specific name has been set for a document or form but no corresponding metadata entry with this name has been applied to the Text and Graphics/auto-texts, then the Text and Graphics/auto-texts will always be active.
- Text and Graphics/auto-texts are deactivated (filtered out) for a specific document or form only if:
 - The application has defined a filter with a specific name and value for the document or form.
 - You have set a metadata entry for the Text and Graphics/auto-texts with this name but with a different value.

Adding or removing meta data

This topic is only for Dragon Medical 360 | Direct and 360 | SpeechAnywhere Services. Dragon Medical 360 | Network Edition does not use meta data.

If you only log into the Nuance Management Console with the DM360 Network Edition license, you cannot view or use the **Meta Data** tab.

Add meta data information to Text and Graphics/auto-texts or commands

- 1. Find the Text and Graphics/auto-texts or commands.
- 2. Open the Text and Graphics/auto-texts or commands.
- 3. Click the **Meta Data** tab. The **Meta data** grid displays the list of meta data name-value pairs that are associated with the Text and Graphics/auto-texts or commands.
- 4. Click Add.
- 5. In the Name field, enter a name for the meta data name-value pair.
- 6. In the Value field, enter a value for the meta data name-value pair.
- 7. Click **OK**.
- 8. Repeat these steps to associate more meta data pairs with the Text and Graphics/auto-texts or commands.

Remove meta data information from Text and Graphics/auto-texts or commands

If you only log into the Nuance Management Console with the DM360 Network Edition license, you cannot view or use the **Meta Data** tab.

- 1. Find the Text and Graphics/auto-texts or commands.
- 2. Select the Text and Graphics/auto-texts or commands.
- 3. Click the **Meta Data** tab.
- 4. In the Meta data grid, select a meta data pair.
- 5. Click Delete.
- 6. In the confirmation dialog, click Yes to delete the meta data pair. Click No to cancel the action.

Delete Text and Graphics or autotexts

You can delete Text and Graphics/auto-texts at the group, site, or user level.

To delete Text and Graphics/auto-texts

- 1. Search for the Text and Graphics/auto-texts by performing the steps described here.
- 2. Select one or more Text and Graphics/auto-texts.
- 3. In the **Auto-texts** section of the ribbon, click **Delete**.
- 4. In the dialog, click **Yes**.

Cutting, copying, and pasting Text and Graphics/auto-texts or words

In Dragon Medical 360 | Network Edition, version 2.1, Dragon Medical 360 | Direct 1.4, and 360 | SpeechAnywhere Services, Text and Graphics/auto-texts and words are stored in the cloud Nuance Management Server (the NMS hosted in the Nuance data center) and shared between healthcare products.

An administrator can use the Nuance Management Console to copy or cut and then paste Text and Graphics/auto-texts and words from one level (user, group, or site) to another level.

Notes:

You cannot cut and paste Text and Graphics/auto-texts and words into a new level if:

- Text and Graphics/auto-texts and words with the same name already exist there.
- The spoken phrase of the Text and Graphics/auto-text or word are the same as the spoken phrase of the Text and Graphics/auto-texts or word in the paste location.

In the above two cases, the **Cut** button is grayed out/disabled and the source Text and Graphics/auto-texts and words are not deleted.

• If you select Text and Graphics/auto-texts or words, click **Cut**, and proceed to modify or delete the Text and Graphics/auto-text or words, none of these actions are taken into account by the cut operation. The cut Text and Graphics/auto-texts or words do not reflect any of these operations.

You cannot copy and paste Text and Graphics/auto-texts or words into a new level if:

- Text and Graphics/auto-texts or words with the same name already exist there.
- The spoken phrase of the Text and Graphics/auto-text or words are the same as the spoken phrase of the Text and Graphics/auto-texts or words in the paste location.

In the above two cases, the **Copy** button is grayed out/disabled and the source Text and Graphics/auto-texts or words are not copied.

• If you select Text and Graphics/auto-texts or words, click **Copy**, and proceed to modify or delete the Text and Graphics/auto-texts or words, none of these actions are taken into account by the copy operation. The copied Text and Graphics/auto-texts or words do not reflect any of these operations.

Cutting or copying and pasting Text and Graphics/auto-texts or words

- 1. Use the Nuance Management Console to create one or more Text and Graphics/auto-texts or words. The Text and Graphics/auto-texts or words are saved to the NMS.
- 2. Use the **Manage Auto-texts** screen or **Manage Words** screen to view and select one or more Text and Graphics/auto-texts or words.

- 3. In the **Auto-texts** area or the and **Words** area, click **Cut** or **Copy**. You can also right-click the Text and Graphics/auto-texts or words and selects **Cut** or **Copy**. The Nuance Management Console stores the list of Text and Graphics/auto-texts and words selected for the cut operations.
- 4. Use the left navigation panel to select a new location for the Text and Graphics/auto-texts or words.
- 5. Click **Paste** or right-click the Text and Graphics/auto-texts or words and select **Paste**.
- 6. Click Yes.
- 7. In the dialog box, click **OK**.
- 8. The Nuance Management Console cuts or copies the selected Text and Graphics/auto-texts or words from the source level to the target level. If this is a cut operation, the Text and Graphics/auto-texts or words are removed from the source level. If this is a copy operation, the Text and Graphics/auto-texts or words are retained at the source level.

Importing or exporting Text and Graphics/auto-text

In the Nuance Management Console, you can import and export Text and Graphics/auto-texts using an XML schema based file.

Import Text and Graphics/auto-texts

Note: You can only import an auto-text if it is part of a Command Set.

To import a list of Text and Graphics/ auto-texts from an XML file, perform the following steps:

- 1. In the Nuance Management Console, select the Speech Recognition tab.
- 2. In the Auto-texts section, select Import.
- 3. On the File To Import screen:
 - i. To import Text and Graphics/auto-texts information exported from DM360 Network Edition, select **DM360 Network Edition format(XML)**.
 - ii. To import Text and Graphics/auto-texts information exported from the Nuance Management Console, select **Nuance Management Server format(XML)**.
 - iii. Click the magnifying glass and select an XML file that contains the Text and Graphics/autotexts information.
 - iv. Click Open.
 - v. Click Next.
- 4. On the Auto-Texts to Import screen, select the auto-texts to import.
- 5. Click Next.
- 6. On the Level screen, choose a level for the imported auto-texts: Site, Group, or User.
- 7. In the drop-down list beside the level you selected, choose a specific site, group, or user to associate with the imported auto-texts.
- 8. On the Ready to Import screen, click Next.
- 9. On the Importing Auto-texts screen, when the progress bar is full, click Next.
- 10. On the **Results** screen, verify the information.
- 11. Click Finish.

Export Text and Graphics/auto-texts

To export a list of Text and Graphics/auto-texts to an XML file, perform the following steps:

- 1. Search for Text and Graphics/auto-texts by performing the steps described here.
- 2. Select one or more Text and Graphics/auto-texts.
- 3. On the ribbon, in the Auto-texts section, select Export.
- 4. In the Export Auto-text dialog, to select a location to save the file, click the magnifying glass.
- 5. Select a location and click **OK**.

- 6. Click **Export**. The Nuance Management Console saves the file with the following filename: exportedAutoTexts_<YYYYMMDD>.xml
- 7. When the **Export Auto-text** dialog displays the message "Export successful", click **Close**.

Chapter 17: Working with custom words

This chapter describes how to work with and manage custom words.

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Overview of custom words

NMS provides support for custom words for multiple Nuance products, including Dragon Medical 360 | Network Edition, Dragon Medical 360 | Direct, or a SpeechAnywhere Services powered third party application). The client applications for these products obtain custom words from the cloud NMS and add them to an end-user's vocabulary.

Words are associated with users and are added to all user vocabularies.

Like with auto-texts, custom words must be unique in each level (Site, Group, User) in the NMS. For example, word X can exist at the Site level and at the Group level, but only one instance of word X can exist at each level.

An administrator can delete words but not necessarily for large quantities.

Batch and Interactive words

Batch words are words that are imported "en masse" using the Nuance Management Console word import tool.

The words are tagged as batch to prevent DM360 Network Edition from downloading these words.

The Profile Optimizer manages the importing of large word lists.

Batch words may not be immediately available to a client application user (such as a Dragon user). They become available after the Profile Optimizer runs the scheduled batch process. This may take a few hours.

"Interactive" words are words that are created using:

- DMNE Dragon client
- The NMC single "add word" interface
- Dragon Medical 360 | Direct

The Dragon client and words

The Dragon client allows users to create and manage words. Users can create words by specifying the written and spoken forms of a word in the word browser or by importing words.

Users use the vocabulary editor to set word properties or train words. As well, the Words menu on the DragonBar provides many options for working with words.

For details, see the Dragon Help.

The first time a user launches Dragon from Dragon Medical 360 | Network Edition, 2.1, all custom words that exist in the user's vocabulary are sent to the NMS for storage.

The next time the user launches Dragon, Dragon obtains all words from site, group, and user levels (that the user can access) and makes the words available to the user.

Upgrading vocabularies that contain custom words to DM360 Network Edition 2.1.

In DM360 Network Edition, version 2.1, you use the word sharing feature instead of the Data Distribution Tool (DDT) to share custom words across your organization.

When you upgrade a user profile to DM360 Network Edition 2.1, any custom words from the profile's vocabulary that were created using the DDT are shared with the Nuance Management Server (NMS). This occurs the first time the end-user logs into the DM360 Network Edition Dragon client with the profile that uses the vocabulary.

If an end-user has an additional vocabulary, the NMS shares custom words or words added to the upgraded profile's vocabulary with the additional vocabulary. This occurs when the end-user logs into DM360 Network Edition and loads the additional vocabulary.

If your organization has used the DDT to share custom words, before you upgrade to DM360 Network Edition 2.1, you should <u>import these DDT custom commands</u> into the NMS. This can prevent the NMS from unnecessarily sharing custom words to a user's vocabulary. Sharing a large number of custom words can delay the loading of a user's profile and thus slow down the login process.

It is important that the end-user save the profile after word sharing occurs. This action prevents the word sharing process from repeating unnecessarily in the future and ensures login delays only occur once per vocabulary for each word added or deleted.

Neglecting to save a profile after the word sharing process will result in the words sharing process having to occur again the next time the vocabulary is loaded.

Searching for custom words, sites, groups, or users

When you first open the **Manage Words** screen, the **Organization** field displays the name of the currently managed organization. You can change the value in this field. Changing the value will change the data that the **Manage Words** screen displays.

NMS introduces changes to the **Manage Words** screen to help you manage and find the words in an organization.

- 1. In the Nuance Management Console, select **Speech Recognition**.
- 2. In the **Words** section, click **Manage**.
- 3. To view all the hierarchy levels that are associated with words, click **Display all levels**.
- 4. To view words that have been disabled, click **Display disabled words**.
- 5. To view words that have been deleted, click **Display deleted words**.
- 6. To view details about a specific word, double-click the written form of the word in the **Written** form column.

The left side of the Manage Words screen displays a tree-like structure:

- The first element in the tree is the Words element. To view all the words in the organization, click the Words element.
- The second element in the tree is the sites element. To view the sites in the current organization, expand the sites level. To view all the words that are associated with a particular site, click a site.
- If groups exist in the organization, the third element in the tree is the groups element. To view the groups in the current organization, expand the groups level. To view all the words that are associated with a particular group, click a group.
- If users exist in the organization, the fourth element in the tree is the users element. To view the users in the current organization, expand the users level. To view all the words that are associated with a particular user, click the user.

To view information about words that are part of a site in the organization, part of a group in the organization, or associated with a particular user, in the tree, select the site, group, or user.

The right side of the Manage Words screen displays the following information about each word:

- Written Form: The text description for the word.
- **Spoken Form**: The phrase that a user speaks to apply the word.
- Language: The language that is associated with the word.
- Level: One of site, group, or user.
- **Status**: The state of the word.
- **Modified**: The last time the word was modified.
- Batch: Indicates if the word was processed by a batch process or interactively.

Steps for searching for words, sites, groups, or users

The tree structure on the left side of the **Manage Words** screen contains an element called 'Click here to search'. This item is at the same level as the Words element in the tree. Use the 'Click here to search' item to search for words, sites, groups, and users in an organization.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Words section, click Manage.
- 3. Click the 'Click here to search' item. A search field appears to the right of this item.
- 4. In the search field, enter search criteria. Search for words by their written form. Search for sites and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for a word, enter the written form of the word.
- 5. After you enter the search criteria, click the magnifying glass.
- 6. The **Manage Words** screen displays the search results under the 'Click here to search' item as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Words (x)
- 7. To view sites, groups, users, or words that matched the search criteria, under the 'Click here to search' item, expand the Sites, Groups, Users, or Words level.
- 8. To view the words that are associated with one of these expanded objects (Sites, Groups, Users Commands), click on the object.
- 9. To view all the hierarchy levels that are associated with words, click **Display all levels**.
- 10. To view words that have been disabled, click **Display disabled words**.
- 11. To view words that have been deleted, click **Display deleted words**.
- 12. To view details about a specific word in the search results, double-click the written form of the word in the **Written form** column.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Re-synchronize words between a DM360 Network Edition User Profile and the Nuance Management Server

In Dragon Medical 360 | Network Edition, an administrator may need to re-synchronize custom words between the NMS and a user profile after:

- Importing profiles
- Exporting profiles
- Associating a user profile using the Profile Association tool
- An end-user works off-line with a local profile
- A user profile is restored Automatically by the NMS Backup/Restore feature.
- User profile corruption issues
- DM360 Network Edition fails while writing data to a user profile

Re-synchronization examines all custom words in a user profile that are not stored in the NMS and upload those words to the NMS.

Re-synchronization also looks at all custom words in the NMS that do not exist in the user profile and adds them to the profile.

You must have the "Dragon - Resync user words" role to perform the following steps.

The "Dragon – Resync user words" role is part of the NMC Administrators role and granted to all NMC administrators that currently have the "Manage DM360 Network Edition" right.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Words section, click Manage.
- 3. Find and select a user by performing the steps <u>here</u>.
- 4. Right-click the user and select **Resync User Words**.
- 5. The Nuance Management Console displays the **Resync User Words** dialog box dialog. Click **Yes**.



Creating custom words

Both the written form and the spoken form of a word:

- are case sensitive
- can only contain one consecutive space
- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Words section, click Manage.
- 3. Find and select a site, group, or user by performing the steps <u>here</u>.
- 4. In the **Words** section, click **Add**. If you selected a site, the Nuance Management Console adds the word to that site. If you selected a group, the Nuance Management Console adds the word to the Group.
- 5. In the **Word** screen, set the following fields:
 - Written Form: The text version of the word.
 - Spoken Form: The phrase that a user speaks to apply the word.
 - Language: The language associated with the word. Enter an IETF language tag, for example, "en-US" for U.S English.
- 6. To save the new word, click Save or Save & New.

Delete or enable custom words

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Words section, click Manage.
- 3. Find and select a site, group, or user by performing the steps <u>here</u>.
- 4. In the search results area, select a word.
- 5. Perform one of the following actions:
 - i. To delete the word, in the **Word** section, click **Delete**.
 - ii. To enable the word, in the Word section, right-click the word and select Enable Word.
- 6. In the dialog, click **Yes**.

Importing or exporting custom words

In the Nuance Management Console, you can import and export words using a TXT file with:

For individual words: each word on a separate line.

For phrases: multiple words on each line. For example, "Pittsburgh Press".

For spoken forms: the word followed by a backslash and the spoken form. For example, "John Doe/jdoe"

Import words

To import a list of words from a text file, perform the following steps:

- 1. In the Nuance Management Console, select the **Speech Recognition** tab.
- 2. In the Words section, select Import.
- 3. On the File To Import screen, click the magnifying glass.
- 4. Select a text file to import.
- 5. Click Open.
- 6. Click Next.
- 7. On the **Words to Import** screen, select the word(s) to import.
- 8. Click Next.
- 9. On the Level screen, choose a level for the imported words: Site, Group, or User.
- 10. In the drop-down list beside the level you selected, choose a specific site, group, or user to associate with the imported words.
- 11. Click Next.
- 12. On the **Language** screen, in the **Language** drop-down list, select a language for the imported words.
- 13. Click Next.
- 14. On the **Ready to Import** screen, click **Next**. The Nuance Management Console imports the words. The words are tagged as batch words. The progress bar on the **Performing Import** screen displays the status of the import action.
- 15. When the screen displays 'Speech words import successfully completed'. click **Next** to view the import results.
- 16. After you view the import results, click Finish.

Export words

To export a list of words to a text file, perform the following steps:

- 1. Find and select one or more words by performing the steps here.
- 2. On the ribbon, in the Words section, select Export.
- 3. In the **Export Words** dialog, select a location to save the file.

- 4. Click **Export**. The Nuance Management Console saves the file with the following filename: exportedWords_<YYYYMMDD>.txt.
- 5. When the **Export Words** dialog displays "Export successful", click **Close**.

Chapter 18: Working with Command Sets

This chapter describes how to work with and manage command sets.

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Overview of Command Sets

A command set is a collection of voice commands and lists:

- Voice Commands
 - Text and Graphics/auto-texts (from mycmds.dat), DragonTemplates
 - Step by Step commands
 - Macro Recorder commands
 - Advanced Scripting commands
 - DVCKeys
 - DVCscript
- Lists
 - All the above commands that include lists

The NMS stores these objects at the site and group levels.

Text and Graphics/auto-texts commands contained in command sets are not shared between the NMS and the Dragon client.

Objects that are part of a Command Set cannot be modified or deleted individually. However, you can delete a Command Set. This action deletes all the objects that are associated with the Command Set.

Auto-texts and Commands that are tagged as protected in a .DAT/.XML file cannot be exported or be viewed in the Nuance Management Console.

Command sets at the group level override command sets at the site level. For example, say we have Site 1 that contains Group X. Site 1 contains command set 'A'. Group X also contains a command set called 'A'. When a user that is a member of Group X logs into DMENE, they receive and can use the group level command set 'A'.

The actions an administrator can perform with command sets are similar to the actions available for auto-texts and words.

Advantages of using Command Sets instead of creating Auto-text commands in the NMC

To distribute commands to users, you have two options:

- Place commands into a Command set and apply the set to a site or group
- Create individual commands and apply them to a site, group or user

The first time a user logs into DMNE through the Dragon client, the client interacts with the NMS to process and share commands or command sets with the user.

If individual commands were created by an administrator in the NMC, and there hundreds of these commands, the user login process may take longer than expected.

To share a set of commands, consider placing commands into Command Sets.

The NMS processes and shares Command sets faster than individual commands. This will speed up the user login time.

Advantages of using Command Sets instead of the Dragon Data Distribution Tool

The Data Distribution Tool in the Dragon client and Command Sets use command .dat files to distribute commands to end-users. However, there are advantages of using Command Sets instead of the Data Distribution Tool

Command files created using the Data Distribution Tool are placed in a specific directory, typically a network location that is 'unmanaged'. When an end-user logs into DM360 Network Edition, Data Distribution Tool downloads the files to the DM360 Network Edition system.

Command Set files are command files that are created, uploaded and managed in Nuance Management Console. They can be assigned to sites and groups, and updated, and removed from a central database managed from the Nuance Management Console.

Upon login to NMC the set of assigned files are downloaded to the DMNE client and placed in the user's profile but they are kept separate from custom commands. The files and the commands within them can be updated and removed, as needed, without affecting the custom commands.

The main drawback to the DDT workflow is that once completed, all of the commands are now part of the user's custom commands (MyCommands) and it is difficult to manage these commands or remove these commands at a later time without manually deleting them from the user's profile.

Searching for Command Sets, sites, or groups in the Nuance Management Console

When you first open the **Manage Command Sets** screen, the **Organization** field displays the name of the currently managed organization. You can change the value in this field. Changing the value will change the data that the **Manage Command Sets** screen displays.

NMS introduces changes to the **Manage Command Sets** screen to help you manage and find the command sets in an organization.

- 1. In the Nuance Management Console, select **Speech Recognition**.
- 2. In the **Command Sets** section, click **Manage**.
- 3. To view all the hierarchy levels that are associated with command sets, click **Display all levels**.
- 4. To view details about a specific command set, double-click the name of the command set in the **Command Set Name** column.

The left side of the Manage Command Sets screen displays a tree-like structure:

- The first element in the tree is the Command Sets element. To view all the command sets in the organization, click the Command sets element.
- The second element in the tree is the sites element. To view the sites in the current organization, expand the sites level. To view all the command sets that are associated with a particular site, click a site.
- If groups exist in the organization, the third element in the tree is the groups element. To view the groups in the current organization, expand the groups level. To view all the command sets that are associated with a particular group, click a group.

To view information about command sets that are part of a site in the organization or part of a group in the organization, in the tree, select the site or group.

The right side of the **Manage Command Sets** screen displays the following information about each command set:

- Command Set Name: The name of the Command Set.
- Language: The language associated with the Command Set.
- Owner Type: The hierarchy level associated with the Command Set; one of site or group.
- **Owner Name**: The name of the site or group that is associated with the Command Set.
- **Description**: Information that describes the Command Set.
- Modified: The last time the Command Set was modified.

Steps for searching for command sets, sites, or groups

The tree structure on the left side of the **Manage Command Sets** screen contains an element called 'Click here to search'. This item is at the same level as the Command Sets element in the tree. Use the 'Click here to search' item to search for command sets, sites, or groups in an organization.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the **Command Sets** section, click **Manage**.
- 3. Click the 'Click here to search' item. A search field appears to the right of this item.
- 4. In the search field, enter search criteria. Search for command sets, sites, and groups by their name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a command set, enter the name of the command set.
- 5. After you enter the search criteria, click the magnifying glass.
- 6. The **Manage Command Sets** screen displays the search results under the 'Click here to search' item as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Command Sets (x)
- 7. To view sites, groups, or command sets that matched the search criteria, under the 'Click here to search' item, expand the Sites, Groups, or Command Sets level.
- 8. To view the command sets that are associated with one of these expanded objects (Sites, Groups, Command Sets), click on the object.
- 9. To view all the hierarchy levels that are associated with command sets, click **Display all levels**.
- 10. To view details about a specific command set in the search results, double-click the name of the command set in the **Command Set Name** column.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Viewing Command Set details in the Nuance Management Console

- 1. Perform the steps described in Searching for Command Sets, sites, or groups.
- 2. To view details about a specific Command Set, perform one of the following actions:
 - In the search results, double click the Command Set.
 - In the search results, select the Command Set. On the ribbon, in the **Command Sets** section, click **Details**.
- 3. The Nuance Management Console displays the **Speech Command Set** screen. The screen displays the following information about the Command Sets:
 - Name: The name of the Command Set.
 - **Description**: Information that describes the Command Set.
 - Language: The language associated with the Command Set.
 - File: The .dat or xml file that contains the Command Set information.

Considerations before creating or importing commands or command sets

Recommended naming conventions for a command set

When you create a command set, give the command set a descriptive name that indicates the organization, group, application, or department it is meant for:

OrgID_Department_App_Commands

Where:

--OrgID is the organization ID for the overall organization

--Department is the specific department the Command Set is meant for

--App is the application that the commands apply to.

For example: 123456_Radiology_EMR_Commands

Recommended naming conventions for a list

When you create a new list, give it a name that is specific to its deployment context.

During a DM360 Network Edition dictation session, active command set commands, custom commands, and built-in commands are loaded into memory.

For commands with lists, if two lists have the same name but are from different command sets, then they could potentially conflict. To minimize list name conflicts, it is recommended that lists within each command set have their own prefix or extension.

The complexity of the prefix or extension depends on the context of the intended deployment and parent command set.

Recommended naming conventions for a command

Check for naming conflicts between commands and especially conflicts between lists used by commands, both in the name of the lists and the contents of the lists.

Try to make command names very unique and specific, especially if they are likely to conflict with other commands.

To avoid conflicts between Command Sets and with custom and built-in commands, it is important that the name (and spoken form) of the command be different from other commands that are at the same availability level (global, application-specific, window-specific).

Try to avoid generic command names, especially for global commands where the chance of unintended conflicts is higher.

Cross-Department Commands and Lists

You should add a short organizational ID for all lists within the intended organization, including 'global' commands and commands that are for applications and windows that are available for multiple (or all) departments\groups.

For example:

mgh_referral_source

In this case, 'mgh' is the organization id and 'referral_source' is the root name of the list.

Department-specific commands and lists

For command set lists that are unique to specific departments or groups within the organization, you should add an additional ID to minimize conflicts between the groups.

For example:

mgh_rad_position

In this case, 'rad' is the department and 'position' is the root name of the list.

Application-specific commands and lists

For lists that are intended for specific applications, you should add an ID for that application to minimize conflicts between applications.

For example:

mgh_rad_ehr_function

In this case 'ehr' (i.e. - 'electronic health record') could be the prefix for a specific EHR system used at the organization and 'function' is a list of specific functions to access in that EHR.

Update existing Command Sets instead of creating new ones

Before you create a new Command Set, consider adding the new commands to an existing Command Set.

This is especially recommended if:

- you need to add new commands for users
- the commands are logically related.
- the commands use the same lists.

This can help minimize the occurrence of list conflicts. The lists in different Command Sets should hopefully have different names and contents.

How conflicts between commands are identified and displayed

Conflict Checking in the Dragon client when loading Command Sets

The commands can conflict by having the same name and availability or by using a conflicting list name. The contents of a command (For example, steps or text) do not have to be the same to cause a conflict. Commands that are identical to Command Set commands (name, availability, type, and contents) can be identified using the 'Purge Identical MyCommands' tool in the Dragon Client. For details, see the Dragon Help.

When comparing commands from different command sets or with MyCommands, the names of lists used by the command are ignored so that the keywords and 'signature' of the command are compared. This avoids conflicts in cases where the only difference is the values within the lists, which could have conflicting values and unintended results when loaded into the vocabulary. This comparison is performed because list-value-level conflicts can be expensive to determine, and this type of conflict detection is currently not supported.

Example 1:

CmdSet1: Do this <list1> then <list2>

CmdSet2: Do this <list3> then <list4>

CmdSet3: Do this then

CmdSet4: Do this

Dragon treats the commands as follows when comparing across Command Sets:

CmdSet1: Do this <> then <>

CmdSet2: Do this <> then <> // Conflicts with CmdSet1 command

CmdSet3: Do this then

CmdSet4: Do this

In this case, the command in CmdSet2 conflicts with the CmdSet1 command because the only difference is the name of the lists.

If the first two commands were defined in the SAME command set then this restriction would be loosened, as the chances for an unintended conflict are lower.

The goal is to avoid unexpected results when commands from different command sets (including MyCmds) end up resulting in the same spoken form in the vocabulary due to conflicting list values.

To avoid these problems the commands and lists from each command set need to be distinct, as much as possible.

Example 2:

An important exception to the above comparison rules is the case when the commands are listonly, and have no other keywords. For example:

CmdSet1: <list5> <list6>

CmdSet2: <list7> <list8>

CmdSet3: <list5> <list6>

These commands have no keywords other than the list values themselves. If the list names are eliminated the command signatures would look like this:

CmdSet1: <> <> CmdSet2: <> <> CmdSet3: <> <>

In this case, all of the two-list-only commands would look exactly the same and there is no other context to differentiate them, other than comparing the list values.

We do not want to consider all commands with this pattern to be in-conflict, so a direct comparison with the list names is performed.

Example 3:

Commands with different list names are not considered to be in conflict as long as the remaining spoken form of the command does not match another command in a previously loaded command set or in MyCommands (have the same 'signature'). However, the resulting commands in the vocabulary could conflict at the list-value-level with unpredictable results.

So in the above case, the commands are treated as follows:

CmdSet1: <list5> <list6> // Loaded first. No Conflict.

CmdSet2: <list7> <list8> // Differs from CmdSet1, so no conflict.

CmdSet3: <list5> <list6> // Conflicts with command from CmdSet1

The command in CmdSet3 conflicts with the previously loaded command from CmdSet1, so there is a conflict and the command is treated as Not Active.

Conflict checking sequence for Command Sets

The following is the typical conflict checking sequence performed for Command Set commands:

- 1. As each Command Set is loaded (in alphabetical order), the commands and lists in the currently loading Command Set are compared against previously loaded commands and lists.
- 2. Commands with the same name and availability (Global, Application, Window) conflict as will commands that use a list with the same name as a list that is from a different, previously loaded, Command Set.
- 3. If a conflict is detected, the commands that are in-conflict are marked as 'not active' and are not loaded into the vocabulary. The first command loaded with the same name/availability is the 'active' one.

4. Once all of the Command Set commands are loaded into the 'Master Command Set', the entire collection of commands is then compared to any custom commands that are defined in MyCommands (MyCmds.dat). If there is a conflict, the command in MyCommands is treated as the active command.

Custom commands in MyCommands override any conflicting commands and lists from the command sets.

Conflict Detection during a Session

If changes are made to custom commands (MyCommands) during a user session, the commands in the 'Master Command Set' collection are reevaluated to determine if the active state of any of the commands should change.

If a new command conflicts with commands in the Command Sets, then those Command Set commands become inactive.

If a command is removed from MyCommands, it is possible for Command Set commands to become active without requiring the end-user to log in again. An exception to this is that deleting a command that uses a list that is conflicting with Command Sets does not immediately remove the list from the vocabulary, even if the deleted command is the last command to use the list. In this case the unused list is removed when MyCommands is reloaded the next time the end-user logs in.

Command Sets 'New Copy' and Avoiding Command and List Conflicts

One way to create a custom command is to use 'New Copy' on an existing Command Set command from within the Command Set view of the Command Browser (Dragon client). It is important to remember that the custom command that is created may now conflict with an existing command in the Command Sets and cause a previously active Command Set command to become not active.

Make sure to give the new command a name that does not conflict with existing Command Set commands. If you are copying a command that uses lists you need to rename the lists to something other than a name of an active Command Set list or the copied list will conflict with the Command Set list and cause commands to become inactive.

Removing duplicate custom commands

In the Dragon client, the **Purge Identical MyCommands** feature finds and deletes duplicate custom commands that are also available in the loaded Command Sets.

To access this feature, a user must have at least one command set loaded on their Dragon workstation. Otherwise, the **Purge Identical MyCommands** menu item is disabled.

For details including step-by-step instructions, see 'Purging identical MyCommands in the Dragon client' in the Dragon Help.

Viewing information about Command and Command Set conflicts

When loading command sets, commands that are found to be in-conflict are marked as not active and are not be loaded into the vocabulary. You can view information about the conflicts in two places:

- The Command Browser 'Active' column
- The Dragon log

The Command Browser 'Active' column

In the Command Browser, the **Command Sets' View/Mode** has columns that display the 'Command Set' for the command that was loaded and an **Active** column that displays the status of the command (active or not active). In addition to the 'Yes' or 'No' value, if you hover the mouse cursor over the **Active** column of a command that displays 'No', Dragon displays a tool tip that contains information about the conflict.

- Command Conflict information displays when there is another command with the same name and availability in a previously loaded Command Set or in MyCommands (MyCmds.dat).
- List Conflict information displays when the command uses a list that has the same name as a list in a previously loaded Command Set or in MyCommands (MyCmds.dat).

One or both conflict types can occur for a command.

Example 1: A command conflicts with one other command

Active: No

Command Conflict: LP Note Commands.dat

List Conflict: <pressure>: LP Note Commands.dat, <volume>: LP Note Commands.dat

The first line **Active**: No', means that there is a conflict and the command is not active in the current vocabulary.

The second line 'Command Conflict: LP Note Commands.dat' means that a command with the same name and availability was already defined in a previously loaded command set 'LP Note Commands.dat'.

The third line 'List Conflict: <pressure>: LP Note Commands.dat, <volume>: LP Note Commands.dat', means that the command uses a list called 'pressure' that was already defined in 'LP Note Commands.dat' and also a second list called 'volume' that was already defined in 'LP Note Commands.dat'.

Example 2: A command conflicts with more than one command

In the case of a conflict with more than one Command Set, multiple Command Set conflicts are displayed:

Active: No

Command Conflict: LP Note Commands.dat, MyCmds.dat

List Conflict: <pressure>: LP Note Commands.dat, <volume>: LP Note Commands.dat, <pressure>: MyCmds.dat, <volume>: MyCmds.dat

The first line 'Active: No', means that there is a conflict and the command is not active in the current vocabulary.

The second line '**Command Conflict**: LP Note Commands.dat, MyCmds.dat', means that a command with the same name and availability was already defined in the previously loaded command set 'LP Note Commands.dat', as in the first case, and is also defined in 'MyCmds.dat' (MyCommands).

The third line 'List Conflict: <pressure>: LP Note Commands.dat, <volume>: LP Note Commands.dat, <pressure>: MyCmds.dat, <volume>: MyCmds.dat', is similar to the first case in that there are two lists, 'pressure' and 'volume', that were already defined in 'LP Note Commands.dat', but additionally states that these lists were also defined in 'MyCmds.dat' (MyCommands).

The Dragon Log

The Dragon.log file contains information about conflicts encountered during Command Set loading during DM360 Network Edition user login. The Dragon.log file is located in the current Windows User folder.

For example:

C:\Users\<username>\AppData\Roaming\Nuance\NaturallySpeakingxx\Dragon.log'

Log Entries prefixed with '[Command Sets]' show command set file loading information and '<Command Conflict>' and '<List Conflict>' warnings for conflicts that occurred. This data can be used to troubleshoot conflicts between Command Sets and also with custom commands (MyCommands).

Creating Command Sets In the Dragon Client

Note: You, the administrator, perform the steps in this topic in the Dragon client. However, if an end-user has useful commands that would be useful to others, you may ask the end-user to export those commands to a .dat file. The end-user's .dat file can then be imported to your profile and combined with other commands to create the final Command Set file or can be used as a Command Set file itself, if deemed appropriate.

Command Sets are groups of custom commands that you, the administrator, can upload to the Nuance Management Server for distribution to multiple users. You cannot edit existing command sets in the Dragon client, but you can create new ones by exporting commands to a .dat file that you later use to create a new Command Set.

You must also determine:

- The commands that will go into a new Command Set.
- The name the Command Set.
- The commands to add to the Command Set.
- The directory to export those commands to.

A Command Set is created by exporting selected commands from a group of custom commands that are contained in a user profile. This user profile is typically a profile created specifically for administrative reasons to avoid altering a non-administrator's user profile and also to minimize end-user command conflicts once the Command Set is deployed. The commands for a Command Set can be created by importing existing commands, creating new commands in the Command Browser, or by copying a command from an existing Command Set. See "Creating new commands in the Command Browser" in the Dragon Help for instructions on how to create custom commands.

To create a Command Set .dat File

- 1. Open the Command Browser (say "Command Browser" or click **Command Browser** on the **Tools** menu of the **DragonBar**).
- 2. Select **Mode** > **Manage** from the Command Browser menu bar. A list of available commands appears.
- 3. Create any commands that you need to be in the Command Set that do not already exist in the list of available commands (via import, create, edit, or copy).
- 4. Select the commands that you want to be in the Command Set.
- 5. Click the **Export** button, located in the **Task** pane. The **Export Commands** dialog box appears.
- 6. Use the Export Commands dialog to browse to the directory that you will export the commands to.
- 7. Enter the name of the Command Set in the **Name** field.
- 8. Click **Save** to save the Command Set.

Note: If a Command Set contains commands with the same names and availability as commands that an end user created or copied on his local machine, or if the Command Set contains commands that have lists in them, and those lists have the same name as lists contained in custom commands that an end user created on his local machine, this will cause a conflict.

In this case, the version of the command that the end user created takes precedence over the version in the Command Set, and the Command Set version will be inactive. For more details, see "Organizing Command Sets by Availability" in "Viewing Command Sets in the Dragon Client" in the Dragon Help.

If the user's custom commands contains commands that are exactly the same as commands available in Command Sets, these duplicate commands can be deleted using the Purge Identical MyCommands feature. For more details, see "Purging Identical MyCommands" in the Dragon Help.

Adding Command Sets in the Nuance Management Console

When you import a Command Set, the commands contained within the Command Set (auto-text, step by step, advanced scripting) are linked to that Command Set.

When you import a Command Set at a particular level, the Nuance Management Server (NMS) stores the objects that are associated with the set at that same level. For example, if you import a Command Set at the Site level, the NMS stores the objects in that Command Set at the Site level.

When you import a Command Set, if a command name contains angle brackets (e.g. "insert normal <whatever>"), the NMS identifies the command as containing an associated list.

A Command Set import job will fail if:

- The set contains objects with names with unsupported characters.
- Imported objects have the same name as existing objects at the level you are importing into.

When a Command set is imported, the Nuance Management Console displays a message in the **Messages** section that indicates if the import was successful or if there was an error.

Updating a Command Set

You can use the Command Set import process to update a previously imported command set, for example, to update and add commands to a command set after it was deployed.

When you update a Command Set by importing a new Command Set, all the objects that are associated with the Command Set are updated.

Steps for adding Command Sets

Note: Before you perform the following steps, it is recommended that you create or use a special user profile explicitly for creating command sets and testing commands. This is to avoid adversely affecting an end-user's profile. You must log into DM360 Network Edition with this profile and import Command Sets into the profile. If the profile is an end-user's profile, be sure to remove commands created for the Command Set process and return the profile to its previous state.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the **Command Sets** section, click **Manage**.
- 3. Find and select a site or group by performing the steps in <u>Searching for Command Sets</u>, <u>sites</u>, <u>or</u> <u>groups</u>.
- 4. In the **Command Sets** section, click **Import**. If you selected a site, the Nuance Management Console adds the Command Set to that site. If you selected a group, the Nuance Management Console adds the Command Set to the Group.
- 5. In the **Speech Command Set** screen, the **Name** field is automatically filled with the name of the .dat/.xml file. For example, if the imported file is my_command_set.xml, then the **Name** field will contain my_command_set.xml. Set the following fields:
 - **Description**: Information that describes the Command Set.

- Path to .DAT/.XML file: The .dat or xml file that contains the Command Set information.
- 6. Click Import Dragon Command Set.
- 7. In the Import Command Set dialog box, click OK.

Modifying Command Sets in the Nuance Management Console

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the **Command Sets** section, click **Manage**.
- 3. Find and select a site or group by performing the steps in <u>Searching for Command Sets</u>, <u>sites</u>, <u>or</u> <u>groups</u>.
- 4. Select a Command Set.
- 5. In the **Command Sets** section, click **Update**.
- 6. In the **Update Command Set** dialog box, browse to the .dat or .xml file to replace the existing command set.
- 7. Click Update.
- 8. In the Update Command Set dialog box, click OK.

Deleting Command Sets in the Nuance Management Console

You can delete Command Sets at the site or group level.

To delete Command Sets

- 1. Search for the Command Set by performing the steps in <u>Searching for Command Sets</u>, <u>sites</u>, <u>or</u> <u>groups</u>.
- 2. Select one or more Command Sets.
- 3. In the **Command Sets** section of the ribbon, click **Delete**.
- 4. In the dialog, click Yes.

Chapter 19: Working with Lists

This chapter describes how to work with and manage Lists.

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Overview of Lists

Lists are text noted by open/close angle bracket, ("< >") in the Dragon client. When a command set is imported from Dragon, any command that had an embedded list in the MyCommand Name field, is tagged in the List section under Speech Recognition in the Nuance Management Console. You can view the list contents in this section in the Nuance Management Console.

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the Nuance Management Console.

When you upgrade the Nuance Management Server to NMS 4.1, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all Nuance Management Server administrator groups that have a Dragon Medical 360 | Network Edition.

Searching for Lists, sites, or groups

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the Nuance Management Console.

When you upgrade the Nuance Management Server to NMS 4.1, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all Nuance Management Server administrator groups that have a Dragon Medical 360 | Network Edition.

When you first open the **Manage Lists** screen, the **Organization** field displays the name of the currently managed organization. You can change the value in this field. Changing the value will change the data that the **Manage Lists** screen displays.

The Manage Lists screen helps you manage and find the Lists in an organization.

- 1. In the Nuance Management Console, select **Speech Recognition**.
- 2. In the Lists section, click Manage.
- 3. To view all the hierarchy levels that are associated with Lists, click **Display all levels**.
- 4. To view details about a specific List, double-click the list in the List Name column.

The left side of the Manage Lists screen displays a tree-like structure:

- The first element in the tree is the Lists element. To view all the Lists in the organization, click the Lists element.
- The second element in the tree is the sites element. To view the sites in the current organization, expand the sites level. To view all the Lists that are associated with a particular site, click a site.
- If groups exist in the organization, the third element in the tree is the groups element. To view the groups in the current organization, expand the groups level. To view all the lists that are associated with a particular group, click a group.

To view information about lists that are part of a site in the organization or part of a group in the organization, in the tree, select the site or group.

The right side of the Manage Lists screen displays the following information about each list:

- List Name: The text description for the List.
- Language: The language that is associated with the List.
- **Owner Type**: One of site or group.
- **Owner Name**: The name of the site or group.
- Command Set: The name of the Command Set that contains the List.
- **Modified**: The last time the List was modified.
- Contents: The objects (auto-texts, commands, etc.) that are part of the List.

Steps for searching for Lists, sites or groups

The tree structure on the left side of the **Manage Lists** screen contains an element called 'Click here to search'. This item is at the same level as the Lists element in the tree. Use the 'Click here

to search' item to search for Lists, sites or groups in an organization.

- 1. In the Nuance Management Console, select Speech Recognition.
- 2. In the Lists section, click Manage.
- 3. Click the 'Click here to search' item. A search field appears to the right of this item.
- 4. In the search field, enter search criteria. Search for Lists, sites, and groups by their name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a List, enter the name of the List.
- 5. After you enter the search criteria, click the magnifying glass.
- 6. The **Manage Lists** screen displays the search results under the 'Click here to search' item as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Lists (x)
- 7. To view sites, groups, or Lists that matched the search criteria, under the 'Click here to search' item, expand the Sites, Groups, or Lists level.
- 8. To view the Lists that are associated with one of these expanded objects (Sites, Groups), click on the object.
- 9. To view all the hierarchy levels that are associated with Lists, click Display all levels.
- 10. To view details about a specific List in the search results, double-click the name of the List in the List Name column.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Viewing list details

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the Nuance Management Console.

When you upgrade the Nuance Management Server to NMS 4.1, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all Nuance Management Server administrator groups that have a Dragon Medical 360 | Network Edition.

- 1. Perform the steps described in Searching for Lists, sites, or groups.
- 2. To view details about a specific List, in the search results, double click the name of the List in the List Name column.
- 3. The Nuance Management Console displays the **Manage Lists** screen. The screen displays the following information about the Lists:
 - List Name: The text description for the List.
 - Language: The language that is associated with the List.
 - **Owner Type**: One of site or group.
 - **Owner Name**: The name of the site or group.
 - Command Set: The name of the Command Set that contains the List.
 - Modified: The last time the List was modified.
 - Contents: The objects (auto-texts, commands, etc.) that are part of the List.

Chapter 20: Troubleshooting issues

This chapter provides information on how to troubleshoot issues using the Nuance Management Console.

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Analyzing audit events

To track events that occur on the Nuance Management Server, perform the following steps:

- 1. On the menu bar, click Utilities.
- 2. In the **View** area, click the **Audit Events** icon.
- 3. On the **Events** screen, fill out the search criteria fields.
- 4. To select a specific event ID to search for, click the **Select Events** button, located to the right of the **Event id** field.
 - i. The **Audit Events** dialog appears. Click the audit event that you want to search for.
 - ii. Click OK. The audit event ID appears in the Event id field.
- 5. Click the magnifying glass. The Events window displays a list of events. Click **Refresh** to update the information on the screen.

The types of message you might see in the list are delineated below, along with how the message will be worded, to give you an idea how much information it provides.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results 🖄
- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Types of Event Messages

Session Start

Session begins for user *name*, application Nuance Management Console on computer *machine-name*. Indicates that a user successfully authenticated and logged into the Nuance Management Server.

Session End

(for DM360 Network Edition) Session ends for user *name*, application Nuance Management Console on computer *machine-name*. Indicates a successful logout from the Nuance Management Server. The NMS only creates this message when a user logs out of the Dragon client.

Session Refused

Session refused for user *name*, application Nuance Management Console on computer *machine-name*. Indicates that a user did not successfully authenticate with the NMS. Reasons for authentication failure could be:

- Invalid login (Invalid Credentials)
- Invalid Password (Invalid Credentials)
- Invalid License status -- No License or Expired License (Invalid License)

This Audit message is for Server Side login failures. If a user enters the wrong server name and receives an error about not being able to connect to the server, an event message is not generated.

Session Timed Out

Session timeout for user *name*, application Nuance Management Console on computer *machine-name*. In DM360 Network Edition, Service Pack 2, the NMS Server does not create this type of audit message.

View log files for a variety of products and product components

View client logs for a variety of products

You use the Client Logs screen to view log files for a variety of products and items.

The screen allows you to search for log files using a user login, within a date range, and one or all products.

You must first upload the log before you can access it in the Nuance Management Console.

Upload a Dragon client log

- 1. Log into the Nuance Management Console.
- 2. Under User Accounts, click Search.
- 3. On the User Accounts screen, enter search criteria.
- 4. Click the magnifying glass.
- 5. Right-click a user and select **Request Dragon logs**.
- 6. Enter start and end dates for the logs.
- 7. Click **OK**. The request is sent to the Profile Optimizer Server. The server processes the request and uploads the logs to the Nuance Management Server. It may take a few minutes for the logs to appear in the Nuance Management Console.

View a client log

Perform these steps to view a client log, including a Dragon client log.

- 1. Click Utilities.
- 2. In the **View** area, click **Client Logs**.
- 3. On the **Client Logs** screen, fill in the following fields:
 - i. To search by user login name, enter a value in the User Login field.
 - ii. In the **From** and **To** fields, enter the date range for the search.
 - iii. In the **Product** field, select one of the following options:
 - All
 - DM360 Mobile Recorder
 - DM360 Network Edition
 - DM360 Recorder
 - Nuance Management Console
 - EHRi
 - MiniDragon (Vsync)
 - The Cloud Migration Tool
- 5. Click the magnifying glass.

- 6. In the search results, select a log.
- 7. To view the log, press Ctrl+O or right-click the log and select View.
- 8. To download the log:
 - i. Double-click the log or right-click the log and select Download.
 - ii. In the **Download Client Log** dialog box, in the **Download to** field, select a location for the log file and press **OK**.
 - iii. Click Start.
 - iv. When you see 'Download Complete', close the dialog box.

View server logs for a variety of products

Prior to NMS 3.0, administrators needed to VPN into the Nuance data center to find server log files. They may also have had to check multiple node machines for log files.

In NMS 3.0 and higher, the NMS stores log files; allowing administrators to easily find and down-load them.

To save all current server logs in the NMS, click Store current logs now.

- 1. Log into the Nuance Management Console.
- 2. Click Utilities.
- 3. In the **View** area, click **Server Logs**.
- 4. In the **Product** field, select a product:
 - Nuance Management Server
 - NMS Call Forwarder
 - Profile Optimizer
- 5. If you select 'Profile Optimizer', the **Type** field appears. Select the type of Profile Optimizer log file:
 - Server
 - Speech Node
 - Task / PO
 - Task / Dragon
- If you select 'Profile Optimizer' and 'Task / PO' or 'Task / Dragon', the Task ID field appears. To search for a Profile Optimizer or Dragon log file by task id, enter the id in the Task ID field.
- 7. In the **Start date/time** field, select the start date and time for the query.
- 8. In the **End date/time** field, select the end date and time for the query.
- 9. Click the magnifying glass.

Viewing speech node, Dragon, Profile Optimizer Server, and Nuance Management Server logs

To troubleshoot issues, you can view logs that servers and Dragon clients in Dragon Medical 360 | Network Edition generate.

Upload Profile Optimizer Server logs

- 1. In the Nuance Management Console, click Utilities.
- 2. In the **Profile Optimizer** section, click **Dashboard**.
- 3. Search for a Profile Optimizer Server.
- 4. Right-click a Profile Optimizer Server and select Request logs.
- 5. Enter start and end dates for the logs.
- 6. Click **OK**. The request is sent to the Profile Optimizer Server. The server processes the request and uploads the logs to the Nuance Management Server. It may take a few minutes for the logs to appear in the Nuance Management Console.
- 7. To view the logs, under Utilities, click Server Logs.

Dragon and Profile Optimizer Speech Node logs

The Profile Optimizer Speech Node generates two log files for each ACO and LMO task it carries out:

- Dragon log file—Dragon Medical SDK Client writes this file
- Speech Node service log file—Profile Optimizer services write these files

The *Profile Optimizer Server* stores these files for 30 days. After 30 days, the *Profile Optimizer* purges old log files. If you would like to preserve them, you can back them up.

In DM360 Network Edition, Service Pack 2, the job log files on the Profile Optimizer Server are no longer use Guids as a file name. The file names are now based on the Job Id (which is now an integer), the profile name, the job type, and the type of log file (Speech node service log file or Dragon log file).

The names of Job log files use the following form:

jobId_profileName_JobTypeId.logFileType

If multiple log files exist for the same jobId, the names of the log files are named jobId(n)_... where 'n' increments sequentially from 1.

Example:

jobId(1)_User1_JobTypeId.logFileType

jobId(2)_User1_JobTypeId.logFileType

jobId(10)_User1_JobTypeId.logFileType

Upload Speech Node service logs

You must upload the logs before you can view them in the Nuance Management Console.

- 1. In the Nuance Management Console, click Utilities.
- 2. In the **Profile Optimizer** section, click **Status**.
- 3. Right-click a speech node and select Request logs.
- 4. Enter start and end dates for the logs.
- 5. Click **OK**. The request is sent to the Profile Optimizer Server. The server processes the request and uploads the logs to the Nuance Management Server. It may take a few minutes for the logs to appear in the Nuance Management Console.
- 6. To view the logs, under Utilities, click Server Logs.

View Speech Node service logs

You can view the Dragon log files and Speech Node service log files in the Nuance Management Console

To view the *Speech Node* service log file by taking these steps:

- 1. On the Menu bar, click the **Utilities** tab.
- 2. Click the **Profile Optimizer** > **Tasks** icon.
- 3. In the Search Criteria section, enter information into the fields.
- 4. Click the magnifying glass.
- In the Profile Optimizer Tasks screen, double click on the task of the Speech Node whose log you would like to view. For details, see <u>Viewing status of scheduled and automatic optimizations</u>. The Profile Optimizer Task Log opens and displays a history of the actions the Speech Node has taken.

Save search results to a .csv file

On screens that display search results, you can save the search result data to a .csv file for future use.

A .csv file is a text file that contains comma-separated values that can be imported into another application, such as a spreadsheet application.

A status bar at the bottom of the screen displays:

- The number of rows on the screen, for example: Items: 104
- An icon that refreshes the search results
- An icon to save search results to a .csv file
 - i. Press the licon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.

Viewing Dragon logs

To view the Dragon log files, refer to Viewing Dragon log files on page 414.

NMS Server logs

The *NMS Server* generates a Windows communication foundation service log file for each individual *NMS* user account. You can find the files on the *NMS Server* under a separate path for each user account:

On Windows Server 2008:

```
C:\ProgramData\NMS\Logs\NMS Server\
```

On Windows Server 2003:

```
C:\Documents and Settings\All Users\Application Data\NMS\Logs\NMS Server
```

If you call Technical Support, you might be asked to provide one or more of these logs to help Nuance engineers work on any issues with your network.

Nuance Management Console logs

The Nuance Management Console stores user session data in a Nuance Management Console log file. The log file includes data that could be useful for troubleshooting Nuance Management Console exceptions or issues.

If an administrator performs an action that causes a Nuance Management Console error or crash, the next time the Nuance Management Console starts, it sends the Nuance Management Console Log file to the NMC server. Technical support can then analyze the log file. An administrator can also manually upload the Nuance Management Console log file to the NMS.

A Nuance Management Console log file is kept until it becomes larger than 10 MB in size. At that time, the Nuance Management Console discards the log file and creates a new one. The Nuance Management Console also creates a new log file after it uploads the current one to the NMS.

Upload the Nuance Management Console log file to the NMS

- 1. In the Nuance Management Console, click the Nuance icon (top left of the screen).
- 2. Select Upload NMC Log File.

Viewing Dragon log files

To help you diagnose specific problems, the *Dragon Medical* client creates a file named **Dragon.log** for each healthcare provider. You can view this file in the *Nuance Management Console*. In this file *Dragon Medical* records all of its actions during each dictation session that the provider dictated. If you contact *Nuance* Technical Support, you may be asked to supply this file.

Note: To have the *Dragon Medical Client* place the log files in a location where they are accessible for viewing on the *Nuance Management Console*, you must enable the option **Copy DM360 Network Edition log to network** located under (**Site > DM360 Network Edition > Master user profile**). For details, see <u>Setting site master user profile General settings</u>.

To view Dragon log files

Use the following procedure for versions of Dragon Medical 360 | Network Edition that are earlier than Service Pack 5.

In Service Pack 5, you cannot view Dragon log files in the Nuance Management Console.

- On the User Accounts screen, search for the provider whose log files you want to view. See Viewing, modifying, and deleting user accounts.
- 2. Select the provider in the list and click the **DM360 Network Edition Client Logs** icon on the ribbon.
- 3. The DM360 Network Edition Client Logs tab opens and displays a list of log files.
- 4. Double click on the log file you want to view.

The log file opens and displays user activity information.

Finding Dragon log files in the file system

You can also find the Dragon logs in the file system. Note that the location of the files depends on the operating system. The paths on Windows Server 2008 and Windows XP are shown below:

Location of Dragon logs on Windows Server 2008:

C:\Users\Administrator\AppData\Local\Temp\dgnsetup.log

```
C:\Users\Administrator\AppData\Roaming\Nuance\Dragon SDK Client
Edition10\dragon.log
```

Location of Dragon logs on Windows XP:

```
C:\Documents and Settings\<user_account_login>\Local Settings\Temp\
dgnsetup.log
```

```
C:\Documents and Settings\<user_account_login>\Application Data\
Nuance\NaturallySpeaking12\Dragon.log
```

Viewing client device usage information

You can create a report and view session usage data per client computer. When a Dragon sessions starts on a client computer, the NMS captures the computers name and starts capturing session information. You use the Nuance Management Console to view information about the computer-specific session.

You can view session usage information per computer for the following license types:

- Physician Author
- NMC Administrator
- Non-physician Author
- Speech Anywhere
- DM360 Mobile Recorder
- Clintegrity 360 | CAPD
- CLU
- DM360 Recorder
- CAC

To generate and view the usage report, you must have the proper administrative rights in the Nuance Management Server (NMS).

- 1. Open the Nuance Management Console.
- In the Trends section, under Usage, select Device Use.
 The Nuance Management Console displays the Device Use view.

Device Use		
Search Criteria		

Organization	17
License type	Physician Author
Start Date/Time	06/17/2013 00:00:00 AM
End Date/Time	06/17/2013 23:59:59 PM
	\wp

3. Select the search criteria for the report:

- i. The **Organization** field is greyed out.
- ii. In the **License type** field, select a license type.
- iii. In the **Start Date/Time** field, select a start date and time.
- iv. In the End Date/Time field, select an end date and time.
- 5. Click the magnifying glass.

The Nuance Management Console generates a report using data from the Nuance Management Server.



The Nuance Management Console displays the report as a grid with the following information:

- **Device Name** The name of the computer or device.
- Last Login The date and time when a user last logged into the system from the computer or device.
- Days Since Last Login The number of days since the last date a user logged into the system from the computer or device.
- Total Login Count The total number of times a user logged into the system from the computer or device between the Start Date/time to the End date/time.

Viewing Speech Recognition Metrics

In NMS 3.0, the NMS translates data from binary format used by Dragon Medical 360 | Direct to a new table format on a nightly basis. Speech metrics run against the new table format data to create reports.

In the Nuance Management Console, you can design and run queries about speech metrics for users.

The queries let you view the following speech recognition metrics:

- The length of dictation(s) in minutes
- The total number of characters in the dictation(s)
- The total number of Text and Graphics/auto-texts in the dictation(s)
- The total number of characters in the auto-texts
- The total number of dictation sessions.

You can group the metrics by selecting up to three of the following group criteria:

- Organization
- Partner
- User
- Application
- Period: Month
- Period: Day

Selecting group criteria allows you to specify the speech recognition metrics that the query displays.

Creating a speech recognition metrics query

- 1. Log into the Nuance Management Console.
- 2. In the Trends area, under Speech Trends, select Speech Usage.
- 3. On the **Speech Usage** screen, to view specific speech recognition metrics, set one or more of the following items:
 - Application Name: Search for speech recognition metrics created by a specific dictation application.
 - Start Date/Time: Search for speech recognition metrics create on or after a specific date and time.
 - End Date/Time: Search for speech recognition metrics create on or before a specific date and time.
 - **Partner**: Search for speech recognition metrics that are associated with a specific partner the organization has a license for.
 - Group by (first): Specify the first sort level for the query results one of:
 - Organization
 - Partner

- User
- Application
- Period: Month
- Period: Day
- Group by (second): Specify a second sort level for the query results one of:
 - Organization
 - Partner
 - User
 - Application
 - Period: Month
 - Period: Day
- Group by (third): Specify a third sort level for the query results one of:
 - Organization
 - Partner
 - User
 - Application
 - Period: Month
 - Period: Day
- 4. Click the magnifying glass. The **Speech Usage** screen displays the results of the query.

Example one: You create a speech metric query that groups data by organization and by user. The query retrieves and displays metrics as follows:

- First column: **Organization** the name of the organization
- Second column: Login Id the login of the user
- Third column: **Sessions** total number of dictation sessions for the user
- Fourth column: Length (minutes) total number of minutes of dictation for the user
- Firth column: Total Chars total number of characters in the dictation
- Sixth column: Auto Texts total number of auto-texts in the dictation
- Seventh column: Auto Text Chars total number of characters in the auto-texts

Example two: You create a speech metric query that groups data by application, by user, and by organization. The query retrieves and displays metrics as follows:

- First column: Application the name of the application used for dictation
- Second column: Login Id the login of the user
- Third column: **Organization** the name of the organization
- Fourth column: Sessions total number of dictation sessions for the user
- Fifth column: Length (minutes) total number of minutes of dictation for the user
- Sixth column: Total Chars total number of characters in the dictation
- Seventh column: Auto Texts total number of auto-texts in the dictation
- Eight column: Auto Text Chars total number of characters in the auto-texts

Viewing Speech Recognition Metrics for DM360 Network Edition

In Dragon Medical 360 | Network Edition, 2.1, the Dragon client sends usage metrics to the Nuance Management Server (NMS).

In the Nuance Management Console, you can design and run queries about speech metrics for DM360 Network Edition users.

You can view usage metrics in daily, monthly, quarterly and yearly reports.

Report criteria is dynamic; when you select a site, the NMC automatically makes available the appropriate (visible) groups for the site.

You can also export the Dragon usage metrics to a comma delimited files.

The queries let you view the following metrics:

- Minutes of live dictation:
 - Per User
 - Per Group
 - Per Site
 - Per day
 - Per Week
 - Per Month
- Number of Words Recognized:
 - Per User
 - Per Group
 - Per Site
 - Per day
 - Per Week
 - Per Month

You can group the metrics by selecting up to two of the following group criteria:

- Group by (first)
 - Organization
 - Site
 - Group
 - User
- Group by (second)
 - None
 - Organization
 - Site

- Group
- User

Group by fields display on the left hand side of each report.

Selecting group criteria allows you to specify the usage metrics that the query displays.

Creating a speech recognition metrics query for DM360 Network Edition

To perform the following steps, you must have the Manage DM360 Network Edition right.

- 1. Log into the Nuance Management Console.
- 2. In the Trends area, under Speech Trends, select DMNE Speech Usage.
- 3. On the **DMNE Speech Usage** screen, to view specific speech recognition metrics, set one or more of the following items:
 - **Organization**: The organization associated with the speech metric.
 - Last Name: The organization associated with the speech metric.
 - First Name: The organization associated with the speech metric.
 - Start Date/Time: Search for speech recognition metrics create on or after a specific date and time.
 - End Date/Time: Search for speech recognition metrics create on or before a specific date and time.
 - Site: The site associated with the speech metric.
 - **Group**: The group associated with the speech metric.
 - One of the following radio buttons: Hour, Day, Week, or Month.
 - Group by (first): Specify the first sort level for the query results one of:
 - Site
 - Group
 - User -when you select this option, the first and last name of the user appear in the results
 - Group by (second): Specify a second sort level for the query results one of:
 - None
 - Site
 - Group
 - User -when you select this option, the first and last name of the user appear in the results
- 4. To display search results in a grid:
 - i. Select **Display results in a grid format by**.
 - ii. Select one of the following options:
 - Hour
 - Day
 - Week
 - Month

- 5. To display search results in a graph:
 - i. Select **Display results in a graph format by**. When you select this option, the **Group by** (second) options is disabled.
 - ii. Select one of the following options:
 - Words
 - Minutes
 - Characters
- 4. Click the magnifying glass. The **Speech Usage** screen displays the results of the query.
- 5. If you chose to view the results in a graph, the system displays a graph with the following information:
 - Y axis The words, minutes or characters.
 - X Axis Bars representing the site, group or users as selected in the search screen.

Example one: You create a speech metric query that groups data by organization and by user. The query retrieves and displays metrics as follows:

- Login Id The login of the user that performed the dictation.
- Week- The week the dictation occurred.
- Length (minutes) The total number of minutes of dictation for the user (to two decimal places).
- Total Words The total number of words in the dictation.
- Total Characters The total number of characters in the dictation.

Enable or disable the Dragon vSync connection notification

In DM360 Network Edition Service Pack 2 and Hot fix 7, Dragon displays a notification in the tray area if there are connection issues between Dragon and vSync on a Citrix server.

In DM360 Network Edition Service Pack 3, you can enable or disable the notification. The option is enabled by default.

- 1. In the Nuance Management Console, select a site.
- 2. On the Site view, select DM360 Network Edition.
- 3. Expand the Miscellaneous section.

Prompt users to le	og out after 30 minutes
Log out users who	o do not respond after 60 seconds
Insert Text & Grap	phics command using Type keys (Shift+Insert)
LDAP authenticat	ion Disabled
Enable SSO aut	,
Disable automa	tic switching of dictation source to an available default
 Display vSync St 	tatus Tray Icon
vSync: Full Text	Control
Master user pro	file

- 4. To enable the vSync connection notification, check **Display vSync Status Tray Icon**.
- 5. To disable the notification, uncheck Display vSync Status Tray Icon.
- 6. Click Save.

Restoring vSync support after updating a Citrix client

Dragon uses vSync support to provide Dragon users with Full Text Control when they work with applications published from a Citrix server. An administrator updates or reinstalls one or more Citrix ICA clients on a workstation with Dragon.

Updating or reinstalling a Citrix ICA client deletes and un-registers Dragon Citrix client and vSync components. This disables and removes vSync support.

The vSync Restoration Patch provides a quick and simple way to reinstall vSync support after updating or re-installing a Citrix ICA client. After updating or reinstalling a Citrix ICA client on a workstation, run the patch on the workstation or push the patch install to the workstation.

In DM360 Network Edition Service Pack 3, only use the vSync Restoration Patch to repair damaged vSync client components or to install the vSync client components for the first time.

To upgrade vSync client components. use the patch installer. Do not use the vSync Restoration Patch to upgrade these components.

Note: You must upgrade vSync on your Citrix servers before you upgrade vSync on Dragon client computers.

The patch can be run on a 32-bit or 64-bit workstation where all, some, or none of the vSync components are installed. The patch installer can also be run in 'silent' mode.

When you run the patch installer, it successfully patches and re-registers the relevant dll and component files. The installer also displays messages about installation success or errors.

You can run or push the vSync Restoration Patch using any version of the DM360 Network Edition Dragon client (Service Pack 1 or higher). If you do not have Service Pack 1, you must install it before you can install the patch.

Pre-requisites for installing the DM360 Network Edition vSync Restoration Patch

Ensure the following items are met before you run the patch. Otherwise, the patch installation will fail and log error messages to the DgnSetup log file.

- The Dragon client must be installed on the workstation
- Dragon must not be running on the workstation
- A Citrix ICA client must be installed on the workstation
- Citrix ICA Client Engine process must not be running on the workstation

You can install the patch even if the vSync components in the patch are the same version as the vSync components currently installed on the workstation.

Steps for installing the DM360 Network Edition vSync Restoration Patch on a workstation

Perform the following steps after updating or reinstalling a Citrix ICA client on a workstation.

- 1. Ensure all the installation pre-requisites are met. See <u>Pre-requisites for installing the DM360</u> <u>Network Edition vSync Restoration Patch</u> for details.
- 2. On the DVD, find and run the vSyncRestore.exe file on the Dragon client workstation. Alternately, you can push the patch install to the workstation.

DM360 Network Edition vSync Restoration Patch Logging

When you run the vSync Restoration Patch, it logs success and error messages to the DgnSetup log. It also logs the version numbers of the currently installed Citrix support components and the components in the patch.

Receiving notifications of vSync timeouts

When vSync starts, it attempts to identify windows hosted on the Citrix server. vSync may timeout if it is unable to communicate with the Citrix server after a certain number of attempts. Dragon users are unable to use Full Text Control functionality with an application published from a Citrix server.

NMS Administrators can now receive notification when a Dragon client cannot establish a vSync connection to a Citrix server. Administrators can use a vSync timeout notification tool, a standalone command line tool, to receive notifications when network issues cause vSync to timeout. The notifications contain information about the number of users in a site that experienced vSync timeouts and the names of those users.

The vSync timeout notification tool searches the Dragon log in the Master Profile Directory for a special log statement that the Dragon client Citrix components generate when a certain number of attempts to communicate with the Citrix server timeout.

The tool generates notifications (as a WMI events) about the network issues. Administrators can write an MOF script to detect the event and take some action when the event occurs, for example, send an email or SMS, or write an event to the NT Event Log.

The generated WMI notifications contain information about the number of users that experienced vSync timeouts and a list of the users that experienced vSync timeouts.

Administrators can use the Windows Task Scheduler to configure the vSync timeout notification tool to run according to a schedule and to receive periodic notifications of vSync timeouts. Administrators should schedule the tool to run once a day.

Distribution of the vSync timeout notification tool

Dragon administrators can obtain the vSync timeout notification tool from Nuance through an ftp connection. Administrators receive a zip file that contains the vsync_notifier.exe, a readme.txt file, and a sample MOF script with the name 'vsync_event_consumer_example.mof'. The Readme.txt file and the sample contain information about the event properties that an MOF script must use to detect and react to vSync timeouts.

The Readme.txt file contains prerequisites and requirements for the vSync timeout notification tool. Readme.txt also contains instructions for installing, un-installing, and using the vSync time-out notification tool.

Contacting Technical Support

When you purchase Dragon Medical 360 | Network Edition, you also purchase a *Dragon Medical Premium Support* maintenance contract. This maintenance contract gives you access to the Technical Support center, which provides our customers with coverage 24-hours a day, seven days a week. We provide direct remote support, product operational assistance and corrective action. The Technical Support Center is the place for customers to call with technical questions — either

in response to a problem, or simply when assistance is needed. This organization can offer assistance via a remote on-line connection to your systems, and is available toll-free at **800 833-7776** via our "Say Anything" menu, so say "Dragon Medical" at the prompt. Or save the call and access our Technical Support Center through **iSupport**, our premium support website at <u>https://isupport.nuance.com</u>.

When you call our support line or access iSupport via the Web, you will need to provide the unique customer ID number that Nuance supplied to you.

If you are calling in relation to an issue, you may want to gather some information first, so that Technical Support can assist you more efficiently. Print this page and collect the following information. If you can't find the information, Technical Support can help you locate it.

If your issue is Nuance Management Console-related you will need this information	Add information here
Your <i>NMS Server</i> license information (located on Licenses > View Licenses > Licenses Summary tab)	
What you were doing when the problem happened (For example: Configuring group settings, checking Audit Events, or Using the Profile Optimizer Scheduler.)	
The text of any error message	
Operating system	
Processor type and speed	
Amount of memory (RAM)	
Amount of free hard-disk space	
Nuance Management Server operating system	
Operating system of the computer where the Nuance Man- agement Console is running	
Internet browser being used to view the client, for example, Internet Explorer version 7 or 8 or FireFox version 3.6).	
SQL Server version	

If your issue is related to Dragon Medical you will also need this information:	Add information here
What you (or the Dragon Medical user) were doing when the problem happened (checking your microphone, training the program, and so on)	
The text of any error message	
Operating system	
Processor type and speed	
Amount of memory (RAM)	
Amount of free hard-disk space	
Sound card name and model	
Microphone name and model	

If your issue is related to Dragon Medical you will also need this information:	Add information here
Program log file (Dragon.log). To find the Dragon.log, see <i>Viewing Dragon log files</i> on page 414. Attach the log file if you send e-mail to technical support.	

Additional support on the Web

- <u>http://www.nuance.com/dragonmedical/</u> This is the customer information page for *Dragon Medical* and includes links to useful downloads and the *Dragon Medical* ListServ.
- For developer support, go to http://support.nuance.com/

Chapter 21: Appendix

This section presents information on Basic Text Control support through vSync, options you set in the *Nuance Management Console* or the *Dragon Client*, support for edit controls, and support for EMRs and utility programs.

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Applications with Basic Text Control support through vSync

While vSync supports Full Text Control with certain applications published from Citrix, there are some applications where vSync provides only Basic Text Control support. If you use Dragon with these published applications over a vSync connection, features such as using voice to correct text and move the cursor may not work as expected. The Dragon user may need to use the DictationBox to make corrections and move the cursor.

The following is a non-exhaustive list of common applications where only Basic Dictation Control is available over a vSync connection If you are using Dragon from a client computer and these applications are published from a Citrix server, you can only use Basic Dictation Control with these applications.

- Microsoft Outlook (with Microsoft Word as the editor)
- Microsoft Excel

Note: You can use Full Text Control with these applications if Dragon is on the Citrix server that the applications publish from.

Support for edit controls

When a user dictates into an application that is local or published from a Citrix server, they are working with text in the edit controls of the application. Edit controls are areas in applications that accept text input.

You can use either Basic Text Control or Full Text Control with an edit control. To use Full Text Control with an application published from a Citrix server, the vSync feature must be enabled.

Enable Full Text Control with a Hyperspace 2014 HTML edit control

In the NMC, you can set an option to enable Full Text Control with an Epic Hyperspace 2014 HTML edit control. When the option is enabled, a Dragon end-user can dictate into the edit control with Full Text Control functionality in a local application (an application running on the same computer as Dragon).

Enable Full Text Control in a Hyperspace 2014 HTML edit control for a group of users

- 1. Navigate to Groups > Details > Network Edition US > Commands.
- 2. Check Enable HTML custom API.

Enable Full Text Control in a Hyperspace 2014 HTML edit control for a user

- 1. Navigate to User Accounts > User Account Details > DM360 Network Edition > User Account Options.
- 2. Check Enable HTML custom API.

Windows Presentation Framework controls

You can use Full Text Control in Windows Presentation Framework (WPF) edit controls in applications on the local client and in applications published from a Citrix server (and accessed through a vSync connection).

You can also use Full Text Control in WPF edit controls when both Dragon and an application run on the Citrix server.

Support for WPF edit controls is off by default. To enable support for this edit control, contact Nuance Technical support. If support for WPF edit controls is enabled, you must set the TEXT_SERVICE_SUPPORT flag to 1 when you upgrade Dragon.

For details about how to enable Full Text Control support for Windows Presentation Framework controls, in both local and Citrix published applications, see "Configuring support for Windows Presentation Framework controls" in the Installation Guide.

Supported Edit controls

You can use Full Text Control (formerly Select-And-Say) with the following edit controls:

Edit Control	Description	Dragon support
Edit (NotePad)	A Microsoft edit control	Yes
EmrTerClass (version 9.2.2 and	A Ter edit control from GE	Yes
higher)		
EpicTer78Class	An Epic edit control	Yes
EpicTer81Class	An Epic edit control	Yes
EpicTer79Class (EPIC 2012)	An EPIC 2012 edit control	Yes
Epic 2014 Hyperspace	An Epic edit control	Yes
Excel	A Microsoft edit control for Excel	Yes (up to 2013)
IE_S	A Microsoft edit control for Internet Explorer Server	Yes
INKTEXTBOX	A Microsoft edit control	Yes
INKEDIT	A Microsoft edit control	Yes
McKesson Paragon	McKesson Corporation	Yes (local and vSync)
Meditor	A Meditech edit control	Yes
RichEdit20A	A Microsoft rich edit control	Yes
RichEdit20W	A Microsoft rich text box edit control	Yes
RichEdit50W (Word Pad)	A Microsoft rich edit control	Yes
RichEdit20WPT	A Microsoft Outlook edit control	Yes
RichTextWndClass	A Microsoft RichTextBox edit control	Yes
TEdit	An edit control from Borland International	Yes
ThunderRT5TextBox	A Visual Basic edit control	Yes
ThunderRT6TextBox	A Visual Basic edit control	Yes
TMemo	An edit control from Borland International	Yes
TRichEdit	An edit control from Borland International	Yes
Ter13 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter14 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter15 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter16 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter17 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter32 Class	A TE edit control from Sub Systems, Inc.	Yes
Tern17 version 17.0.6.8 or higher edit controls	An edit control from Sub Systems, Inc.	Yes
TX10 / Txedit10	A TX text control from Text Control GmbH	Yes
TX11 / TXedit11	A TX text control from Text Control GmbH	Yes
TX12 / TXedit12	A TX text control from Text Control GmbH	Yes
TX13 /TXedit13	A TX text control from Text Control GmbH	Yes
TX14 / TXedit14	A TX text control from Text Control GmbH	Yes
TX15 / TXedit15	A TX text control from Text Control GmbH	Yes
TX15.1 / TXedit15.1	A TX text control from Text Control GmbH	Yes
TX16/ TXedit16	A TX text control from Text Control GmbH	Yes
TX17/TXedit17	A TX text control from Text Control GmbH	Yes
TX18 / TXedit18	A TX text control from Text Control GmbH	Yes
TX32 / TXedit32	A TX text control from Text Control GmbH	Yes
Windows edit	A Microsoft Windows edit control	Yes

Edit Control	Description	Dragon support
Windows rich edit	A Microsoft Windows rich edit control	Yes
Word	A Microsoft Word edit control	Yes - up to 2013
WPF	A Windows Presentation Framework edit control	Yes

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