Configuration and client installation guide

For:

Nuance®
Dragon® Professional
Group

Nuance®
Dragon® Legal
Group

NUANCE

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Notice

Nuance Communications, Inc. is strongly committed to creating high quality voice and data management products that, when used in conjunction with your own company's security policies and practices, deliver an efficient and secure means of managing confidential information.

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 Group 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.

Contents

Document Versions

Version Number	Date
Initial version for Dragon Group 14.0	2/22/2016

Introduction to Dragon Group

This guide is for administrators installing and configuring Dragon Group products, which include Dragon Professional Group and Dragon Legal Group. When we talk about these products in this guide, we'll simply refer to them as "Dragon Group."

Dragon Group is available in NMS in the Cloud or Stand-Alone mode.

NMS in the Cloud includes a centralized server, hosted by Nuance, which you can access via the Web-based Nuance Management Console (NMC). Use this guide to install the Dragon Client on your end-user machines and configure them to connect to the server. See the *Nuance Management Server Administrator Guide*, available at http://www.nuance.com/product-urls/default.asp?f=products-1.xml&p=dragonprogroup&v=1&c=support&l=0, to learn how to manage your users and settings in the NMC.

Stand-Alone users must manage their Dragon Clients on the end-user machines. Once you have installed the Dragon Client on your end-user machines, skip to "Scheduling Optimization Tasks" on page 43. Additional information can be found in the Dragon Help, accessible through the Dragon Client interface or at http://www.nuance.com/products/help/dragon/dragon-for-pc/enx/professionalgroup/main/Content/GetStart1.htm

> **Note:** Some product features might have changed since this manual was printed. A current version of this book is always available on Nuance's iSupport portal, in PDF format. Contact your Nuance representative about accessing that portal to retrieve the latest copy.

Chapter 1: Overview of NMS in the Cloud

Overview of Nuance Management Server in the Cloud

Dragon Group with Nuance Management Server (NMS) in the Cloud introduces a client-server architecture to Dragon Group.

NMS in the Cloud allows you to administer all of your Dragon Clients at once from a centralized server hosted by Nuance. You can access the server via the Web-based Nuance Management Console (NMC).

NMS in the Cloud stores your installation's data objects in a cloud-based server that is hosted by Nuance. Stored data includes:

- User accounts
- User licenses
- Text and Graphics/Auto-texts
- Custom words
- Custom Command Sets

If your organization uses multiple Nuance products, NMS in the Cloud allows you to share data across multiple Nuance applications. For example, if an administrator at an organization creates an Auto-text in the Management Console, that organization's users can see and use that object with Dragon Group, as well as any application that uses Dragon Anywhere.

What will be different when you use NMS in the Cloud?

You can take cross-network action on Dragon Clients from the NMC:

- Create user accounts for end-users.
- Grant, revoke, and manage all dictating users and administrator licenses, including how many licenses of each type are available and how many are in use.
- Divide users into multiple Sites and assign a backup location, Roaming user profile storage location, and allotted archive storage/playback space to all users on one Site.
- Assign users to Groups and assign entire Groups to one or more Sites.
- Manage Text and Graphics/Auto-texts and words. This can be done at the Site, Group or user level.
- Search for Groups or users associated with a particular Site.
- Audit session events, such as which users have logged on, across the entire network for a specific time period or user.
- Display a complete list of all downloaded updates and approve or deny their installation—all from a single window.
- Choose to upload speech data to Nuance's Research department for particular users or all users in your organization.

Overview of Configuring NMS in the Cloud

This section provides an overview of how to configure Dragon Group with NMS in the Cloud.

Before you begin

Before you begin, Nuance will send you a welcome email containing the information that you need to install and configure NMS in the Cloud, including:

- The URL for NMS in the Cloud
- Your Organization ID
- Your administrator username and password
- Your license key

Keep this information on hand as you install and configure Dragon Group.

Set up Master Roaming user profile storage (optional)

Set up the machine that will store your Roaming user profiles. For more on setting up Master Roaming user profiles, see "Roaming feature setup checklist" on the Dragon Help site.

Install the Local Authenticator (optional)

If you want to use Active Directory Single Sign-On for your authentication, you must install the NMS Local Authenticator. See "Installing the Local Authenticator" on page 19 for details.

If you want to use Dragon's native authentication, you do not need to install the Local Authenticator.

Install and configure Dragon Group Clients

To install Dragon Group on end-users' machines, see "Initial Installation of the Dragon Client" on page 26.

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Logging in to 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 Dragon Group, including reporting. You will need to be able to log in to configure Sites, Groups, and user accounts, (see the *Nuance Management Server Administrator Guide*) and to set up Active Directory services (see "Setting up the Nuance Management Server to Run Active Directory Services" on page 14).

Log in to the Management Console

1. Go to any workstation and open a browser window.

2. In the Address bar, enter the URL of NMS in the Cloud. You should have received this URL in your welcome email. Then hit the **Enter** key.

3. When the Nuance Management Console login screen appears, enter the administrator user and password that you received in your welcome email, then click **Log on**.

4. The End-User License Agreement will be displayed. Click **Accept** to enter the NMC.

5. The homepage appears, showing links to the various features of the NMC:
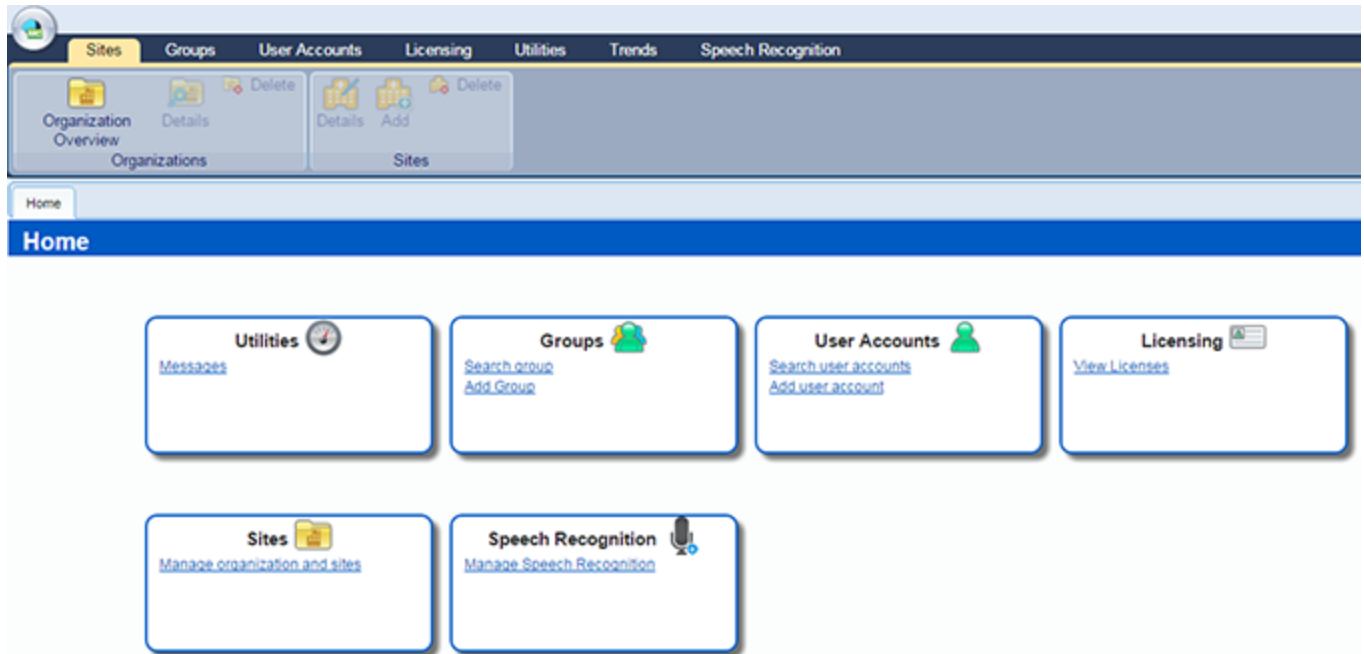
Migrating Users to NMS in the Cloud

You can add user accounts to NMS in the Cloud individually, or use a comma-delimited text file to import them in bulk. See "Import multiple users into the NMS server" in the *Nuance Management Server Administrator Guide* for details.

Organizations using NMS native credentials

If you are using NMS native logins to authenticate users, each user login must be unique. Any conflicts with existing user logins need to be resolved before users can be migrated to NMS in the Cloud. For example, if you are upgrading "Bob" to the Cloud, and user login "Bob" already exists in the NMS in the Cloud, this is a naming conflict. You must change the user login before you can move that user account to the Cloud. The Local Authenticator is not required.

Organizations using Active Directory

If you use Active Directory to authenticate users, there should be no conflicts when moving to the Cloud. NMS in the Cloud uses a "domain" along with the login, which maps to a unique organization.

For a new user, 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," NMS generates the folder name: `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.

Chapter 2: Preparing to Install Dragon Group

System Requirements for Dragon Group

Dragon Client hardware recommendations

The Dragon Client installer checks your system for minimum requirements. If the minimum requirements are not met, the Dragon Client will not be installed.

Supported Operating Systems

- Microsoft Windows 10, 32-bit and 64-bit
- 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 Server 2008 R2
- Microsoft Windows Server 2012 (64-bit only)

RAM

Minimum 2 GB for the 32-bit versions of Microsoft Windows 7, Windows 8, Windows 8.1, and Windows 10

Minimum 4 GB for all other supported operating systems

CPU

Minimum 2.2 GHz Intel® dual core or equivalent AMD processor

> **Note:** Faster processors yield faster performance.

Free hard disk space

4 GB (8 GB recommended)

Audio devices

- A sound card supporting 16-bit recording
- A Nuance-approved microphone: headset microphone (USB or not), Bluetooth microphone (Enhanced/wideband works best), or user-facing built-in laptop microphone (single or multiple element) (See http://support.nuance.com/compatibility/)
- If you wish to make recordings for Dragon to transcribe: a voice recorder or smartphone app supporting one of these formats: `.mp3, .m4a, .wav, .wma, .dss` or `.ds2`

Other requirements

- Internet Explorer 9 or higher, or the current version of Chrome or Firefox, for online Help
- A DVD-ROM drive for initial installation
- An Internet connection to automatically activate the software (a quick anonymous process) and, if you purchased the Dragon web installer instead of a DVD, to install the software

Supported Virtual Desktop Infrastructure Applications

- XenDesktop 7.6
- XenApp 7.6

Supported Software

Once you have installed Dragon Group, you can use it to control the following applications using your voice:

- WordPad
- NotePad
- Microsoft Word 2010 (32 & 64-bit), 2013 (32 & 64-bit), 2016 (32 & 64-bit)
- Microsoft Outlook 2010, 2013, and 2016
- Microsoft Excel 2010, 2013, and 2016
- Internet Explorer 9, 10, 11 (11 supported when Enhanced Protective Mode is disabled)
- Mozilla® Firefox® version 24 or later
- Google Chrome

Dragon File Structure

During installation, Dragon sets up the following default folders for application and data storage.

> **Note:** Upgrading Dragon from an earlier version automatically relocates some directories and files.

Windows 7, Windows 8.x, and Windows 10

Dragon setup log (dgnsetup.log)

```
C:\ProgramData\Nuance\NaturallySpeaking14\logs
```

Dragon log

```
C:\ProgramData\Nuance\NaturallySpeaking14\logs\<Windows_User_Name>
```

User profiles

```
C:\ProgramData\Nuance\NaturallySpeaking14\Users
```

Upgrade log

```
C:\Users\<Windows_User_Name>\AppData\Roaming\Nuance\NaturallySpeaking14
```

Local Roaming user profiles

```
C:\ProgramData\Nuance\NaturallySpeaking14\RoamingUsers
```

Vocabularies and Acoustic Models

```
C:\ProgramData\Nuance\NaturallySpeaking14\Data
```

Custom words and commands

```
C:\ProgramData\Nuance\NaturallySpeaking14\custom\<language>\
```

Program files

For 32-bit systems	For 64-bit systems
`C:\Program Files\Nuance\Nat-urallySpeaking14\Program`	`C:\Program Files (x86)\Nuance\Nat-urallySpeaking14\Program`

Help

For 32-bit systems	For 64-bit systems
`C:\Program Files\Nuance\Nat-urallySpeaking14\Help`	`C:\Program Files (x86)\Nuance\Nat-urallySpeaking14\Help`

Interactive Tutorial

For 32-bit systems	For 64-bit systems
`C:\Program Files\Nuance\Nat-urallySpeaking14\itutorial`	`C:\Program Files (x86)\Nuance\Nat-urallySpeaking14\itutorial`

Accessing program files

The Dragon Client and many associated utilities can be accessed through the **Start** menu. Their location varies by operating system:

- Windows 7: Select **Start** > **All Programs** > **Dragon**.
  - Some utilities are located inside the **Dragon Tools** subfolder.
- Windows 8.x: From the **Start** screen, click the down arrow to show all applications. Scroll to find **Dragon**.
- Windows 10: Select **Start** > **All apps** > **Dragon**.

Assigning Access to Clients and Roaming User Profile Locations

Caution:

To ensure that your Dragon Group network components can communicate with each other and that the network can function properly, you must assign permissions to all appropriate directories and access rights to administrator and user accounts on servers and clients as indicated in the table below.

Locations each dictating end-user client needs to access		
Location or Registry Key	**Permissions level or type of access rights**	**Users affected**
Roaming user profiles folder	Full read/write/modify permissions	Windows user accounts for all end-users dictating on Dragon Clients
Locations on the workstation where the user dictates with Dragon Client		
`C:\ProgramData\Nuance` folder and all sub-folders	Full read/write/modify permissions	Windows user accounts for all end-users dictating on Dragon Clients
`C:\Users\<Windows User ID>\AppData\` folder and all sub-folders	Full read/write/modify permissions	
Locations in Registry of the workstation where the user dictates with Dragon Client		

`HKEY_LOCAL_MACHINE\SOFTWARE\Nuance`
 	
`HKEY_CURRENT_USER\SOFTWARE\Nuance`
	Rights to update the registry to read/write to these keys	Windows accounts used on workstations running Dragon Client

Assigning permissions to NMS component files, clients, and Roaming user profiles

Caution:

Clients: To ensure every dictating user has appropriate access to his or her user profile, you must give full read/write/modify permissions to all files and directories housing the Roaming user profiles, even through `http` or `https` connections. This level of permission/access ensures that when the user dictates, Dragon can interact with the Roaming user profiles effectively.

Each Windows user account that logs in to the Dragon Client workstation should also have read/write/modify access to the Roaming user profiles, since the Dragon Client frequently modifies these profiles.

Roaming user profiles: Be sure that when you set up the Roaming user profiles directory, you locate it either on a Windows machine or on a device connected to a Windows machine with .NET Framework 4.0 installed on it.

In NMS 5.0, the NMS supports deployments on standard ports (443/80). The NMS examines the standard ports to see if they are available. If they are not, it defaults back to the normal custom ports (8051 and 8731).

Configuring Client Workstations

Turning off Windows Automatic Updates

After you set up each physical server or workstation you plan to use in the network, be sure to turn off Windows Automatic Updates. For each update Windows sends, install it first on a single test machine; update other machines only after you have determined that it will not disrupt the network.

Once you have determined an update is not going to negatively affect the network, install the update during off-hours and, if required, reboot each machine during those hours to ensure that requests to reboot do not disrupt the servers or workstations during peak hours of dictation.

Anti-virus recommendations

Nuance recommends anti-virus software on all Dragon Group servers and clients to protect the system from potential downtime due to viruses. However, be aware of the recommended restrictions.

You should exclude from the anti-virus scan any files found in the folders indicated below or with the extensions listed below.

- `C:\Program Files\Nuance\` and all sub-folders

- `C:\ProgramData\Nuance\` and all sub-folders

- `C:\<Windows user_ID>\AppData\` and all sub-folders

- `C:\Documents and Settings\All Users\Application Data\Nuance\` and all sub-folders

- `C:\Documents and Settings\Windows user_ID\Local Settings\Temp\`

- Files with these extensions:
  ```
  BD, BIN, DAT, DVC, ENH, GSB, GRM, GRX, INI, LCK, NWV, SIG, SVC, USR, VER, VOC,
  WAV, XML, LOG
  ```

Recommended virtual memory settings

Nuance recommends that you set virtual memory to the levels specified below on servers and workstations in the Dragon Group network.

Server Virtual Memory

Nuance recommends that the virtual memory for all servers be set to three times the physically installed RAM.

Dragon Client Workstation Virtual Memory

Set Virtual Memory to 4092, or to the maximum possible setting on workstations that have 4 GB of RAM.

Required Skills for Installing Dragon Group

Before you begin the installation, you should evaluate your own system installation skill set. To select the appropriate hardware and install the Dragon Group software, you should have adequate skills and experience to:

- Create a network domain/user account with full read/write access rights across all servers

- Set Windows user rights and directory permissions

- Edit XML configuration files

Chapter 3: Setting up Active Directory Services

Setting up the Nuance Management Server to Run Active Directory Services

Optionally, you can use Active Directory Services to manage your Dragon Group network. If you do not want to use Active Directory, you can skip to "Initial Installation of the Dragon Client" on page 26.

> **Note:** Because enabling Active Directory Services requires specific steps during the Dragon Group installation process, it is best if you decide to use Active Directory Services before you install the Dragon Clients. However, it is possible to enable Active Directory Services after you have installed the Dragon Group network.

Creating an NMC Administrator account for Active Directory

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

1. Log in to the Nuance Management Console. For details, see "Logging in to the Nuance Management Console" on page 4.

2. Before you set up user accounts required for Active Directory, in the NMC:

   - Change the name of the default Organization to your Organization's name. See details on modifying the Organization information in the *Nuance Management Server Administrator Guide* under "Finding and managing organization data."

   - Change the name of the default Site in that organization to your Site's name. See details on how to edit a Site in the *Nuance Management Server Administrator Guide* under "Configuring a site in your facility."

3. On the Menu bar, click on **User Accounts**:

4. In the **User Accounts** ribbon, click the **Add** icon. The **User Account Details** window opens.

5. Configure the settings in the tabs:

- **Details**—The highlighted text boxes indicate required data (First Name, Last Name and Login). You can fill in the other fields later, if desired.

  Caution:

  The **Login** you enter must match a login that exists in Active Directory.

- **Address**—Enter the user's physical address (not required).
- **Group Memberships**—Add the Active Directory administrator to a Group.
- **Messaging**: Configure email settings to enable the NMS to send messages to users and administrators (not required).
- **Dragon Professional**—Configure user settings in the Dragon Client. For now, you can skip this step – the default settings will be applied. For more information, refer to "Configuring user settings" in the *Nuance Management Server Administrator Guide*.
- **User Profile**—Ignore these settings. They will be provided by the Dragon Client.

6. Click **Save** to save the user account settings.

7. When you save the user account, you will see a dialog box displaying the available licenses:
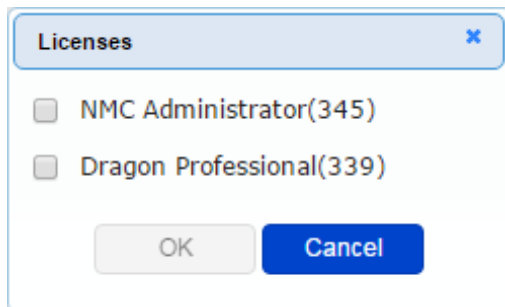
8. Check **NMC Administrator**. The number of licenses available is shown in parentheses after the license type. If no licenses of a particular type are available, that type of license is grayed out. If no administrator licenses are available, contact your Nuance representative.

9. You can create other user accounts at this time, or you can create them later. Make sure every NMS user account login you assign matches an existing login in Active Directory. For details on creating user accounts, see "Creating user accounts" in the *Nuance Management Server Administrator Guide*.

Note: The original admin user that Nuance provided will not work within Active Directory. After you have completed the steps above, log out of the NMC, then log in using the NMC administrator user account you created for the Active Directory administrator. You can now revoke the NMC administrator license of the original admin user and grant that license to another user account.

Set the Active Directory Connection String

1. In the NMC menu bar, click **Sites**, then click the **Organization Overview** icon. Click on the name of the organization that you want to configure, then click the **Details** icon in the **Organizations** area at the top of the screen:
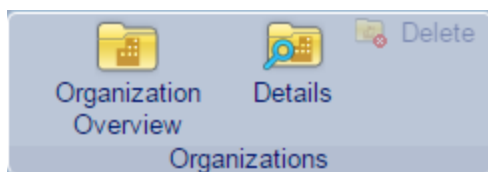
2. The **Organization Details** screen appears. Click the **Domains** tab:

3. Click **Add**. The **Domain** dialog box appears.

4. Enter the domain name in the **Name** field, and the Active Directory connection string for that domain in the **Active directory connection strings** field:

5. Click **Save**.

6. Repeat steps 3-5 as needed for every domain that you want to set up.

Once Active Directory is on, NMS in the Cloud sends all authentication requests to the server you specified in the **Active directory connection strings** field. You can then set up and manage your network using Active Directory Services.

For information on using Active Directory Services, refer to the documentation Microsoft provides.

Configuring User Accounts for Active Directory

When you implement Active Directory Single Sign-On, end-users are automatically logged in to Dragon when they have logged in to Windows. This allows end-users to avoid entering their login and password multiple times.

During the process of creating user accounts in the NMC (see "Creating user accounts" in the *Nuance Management Server Administrator Guide*), you will need to configure your user accounts to work with Active Directory.

Single Sign-On user logins

Each user login must exactly match that user's Windows Domain login.

> **Note:** 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.

On the User Account Details screen (click **User Accounts** in the menu bar, then click the **Add** icon), enter the user's Windows Domain login name in the **Login** field:

For example, enter "John_Doe" in the **Login** field if the user's Windows Domain login name is one of the following:

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

After you have installed the Dragon Client, follow the steps in "Associating Dragon with the Nuance Management Server or Local Authenticator" on page 41. Be sure to set the **Login Options** radio button to **Use Windows Single Sign-On**.

Active Directory user credentials

Complete the following steps in the User Account Details screen for each user you want to configure for Active Directory authentication.

1. In the **Credentials** tab, click the **NTLM** tab:

2. Click **Add** to add a new domain mapping. The **New NTLM Credential** dialog appears:

3. The **User name** and **Organization name** are automatically filled in. Use the **Domain** dropdown to choose the user's domain, and enter that user's login for the selected domain in the **Login** field.

4. Click **Save** to close the dialog.

Chapter 4: Installing the Local Authenticator

About the Local Authenticator

If you want to use Active Directory Single Sign-On for your authentication with NMS in the Cloud, you must install the NMS Local Authenticator.

NMS in the Cloud cannot test Active Directory credentials inside your organization. The NMS Local Authenticator fills this gap by testing Active Directory credentials. If they pass verification, the Local Authenticator sends the credentials to NMS in the Cloud for processing.

Install the Local Authenticator on a local server that is accessible to both NMS in the Cloud and your Dragon Clients. Once a client authenticates with the Local Authenticator, NMS in the Cloud is used for all other client requests, using the session the client was granted during authentication.

If you want to use Dragon's native authentication, you do not need to install the Local Authenticator. Skip to "Initial Installation of the Dragon Client" on page 26.

Before you begin

- You will need an organization token (see below).
- You must configure the user accounts that will use Local Authenticator to use Active Directory login credentials. See "Active Directory user credentials" on page 17 for instructions.
- You must have administrator privileges on the machine where you are installing the Local Authenticator.
- You must have the latest version of the Microsoft .NET framework installed on the machine where you are installing the Local Authenticator.

Creating Organization Tokens

To install the Local Authenticator, you will need to enter an organization token. Complete the following steps to create an organization token:
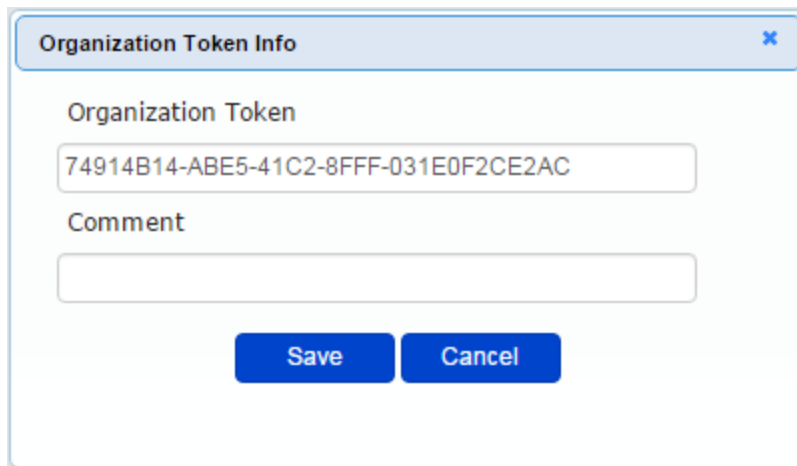
1. In the Nuance Management Console, go to **Sites** > **Organization Overview**.

2. Select the organization that you want to create a token for, and in the **Organizations** area at the top of the screen, click **Details**:
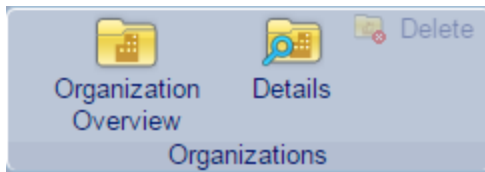
3. The **Organization Details** screen appears. In the **Organization Tokens** tab, click **Add** to generate a new organization token:
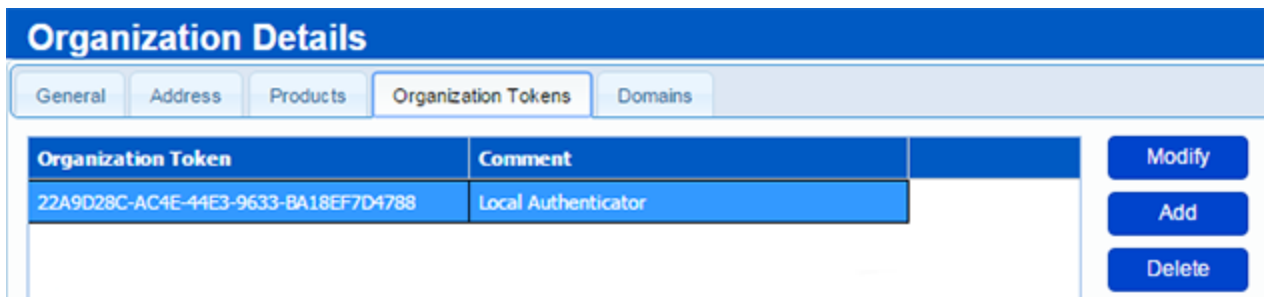
4. The Organization Token Info dialog pops up. The **Organization Token** field is pre-filled. Optionally, enter a value in the **Comment** field:

Organization Token Info   ✖

Organization Token

74914B14-ABE5-41C2-8FFF-031E0F2CE2AC

Comment

[Save   ]   [Cancel   ]

5. Click **Save**.

6. The new token appears in the **Organization Token** table. Copy or make a note of this value.

Installing the Local Authenticator

On the machine where you are installing the Local Authenticator:
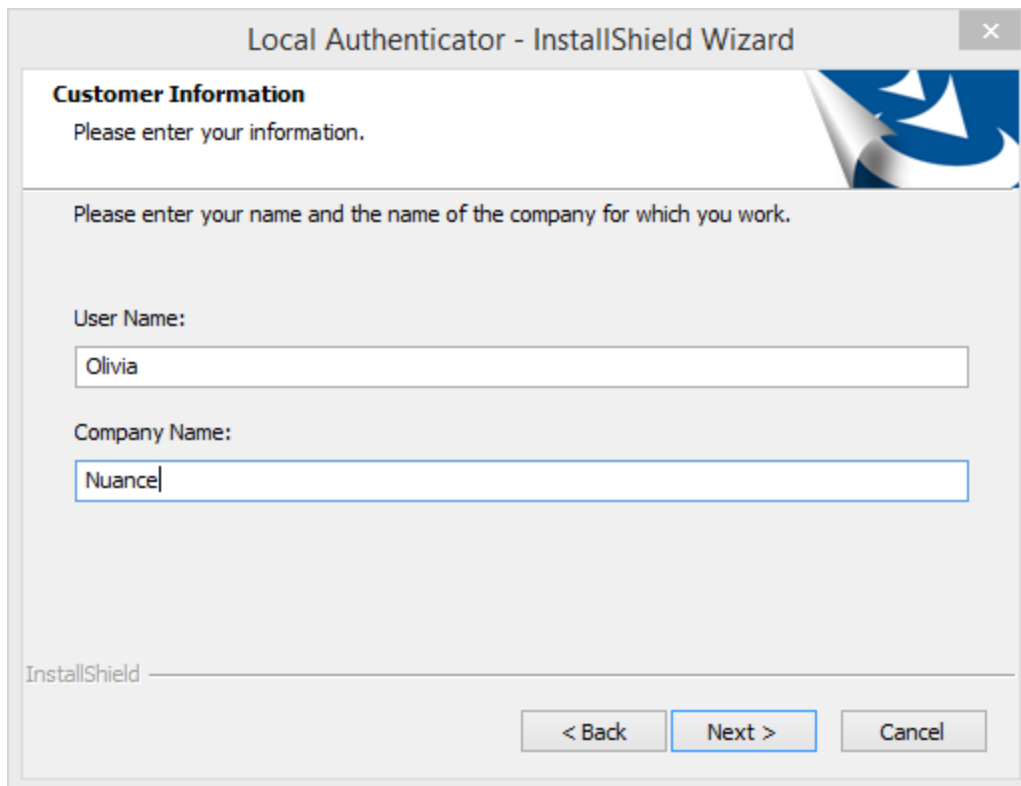
1. Find and run the `.exe` file for the Local Authenticator, which ships with Dragon Group.

2. A dialog will appear asking you to select a language for the installation. Use the dropdown to select the language, then click **OK**.
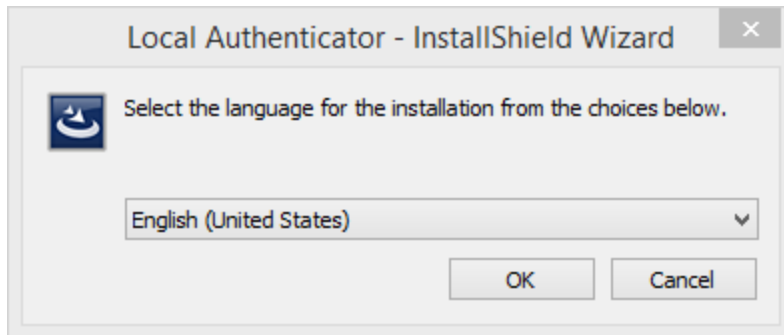
3. The InstallShield Wizard opens. Click **Next** to continue:
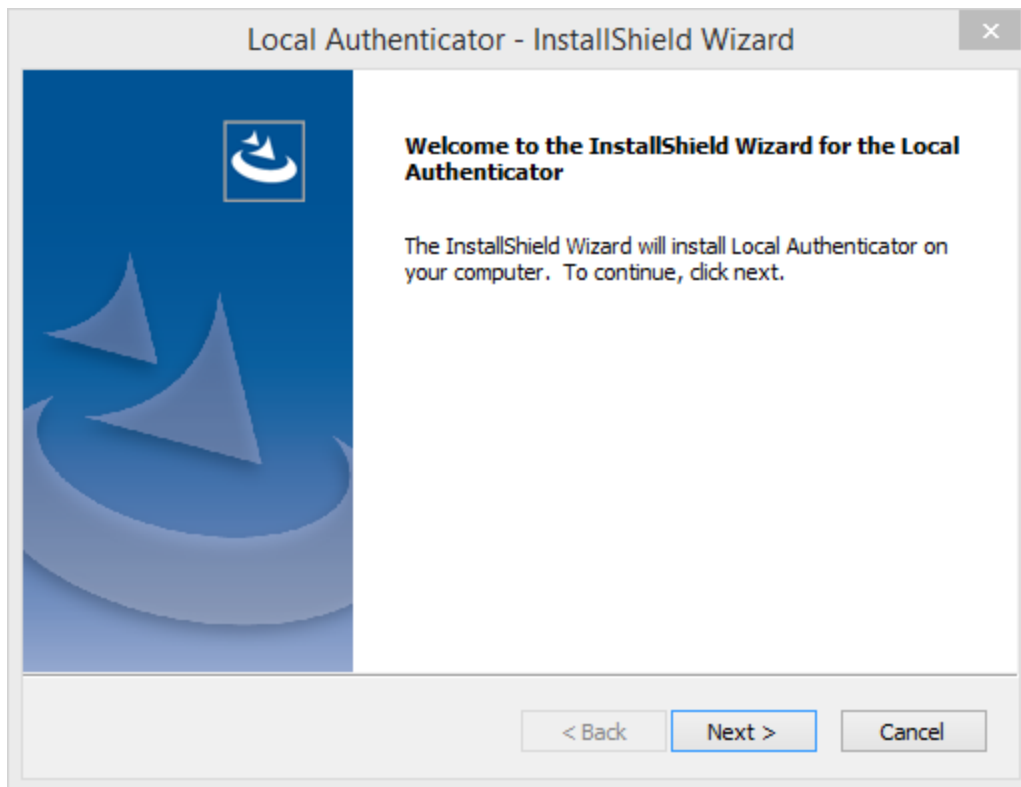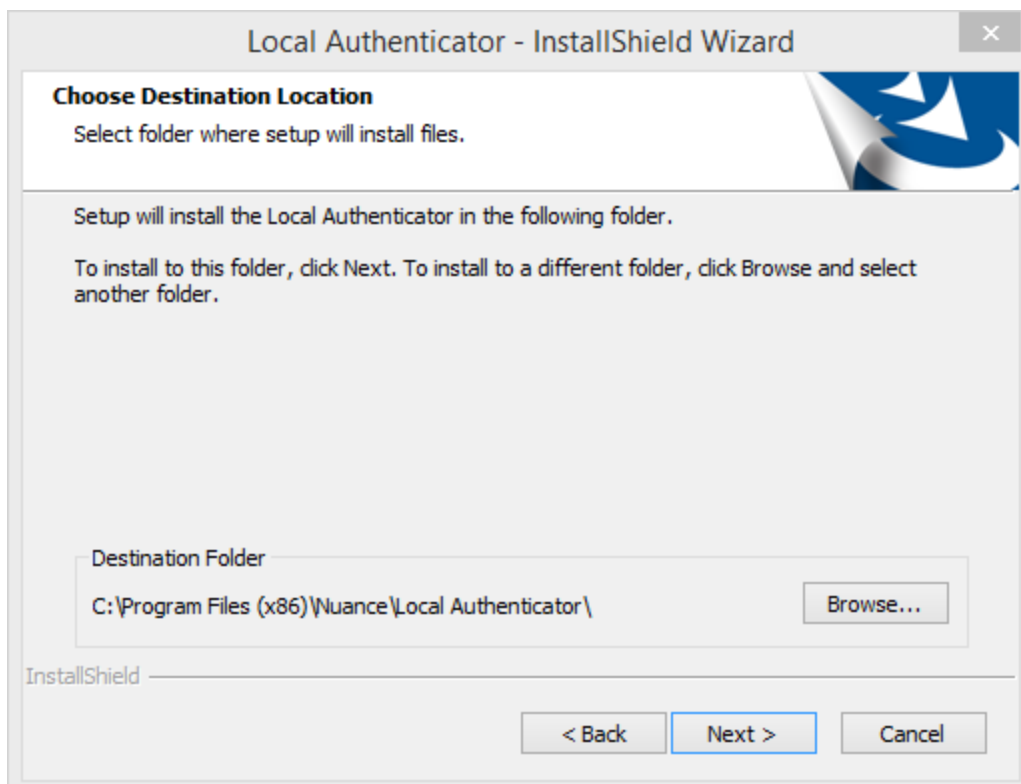
4. In the Customer Information dialog, leave the default value in the **User Name** field and enter your company name in the **Company** field. Click **Next** to continue.
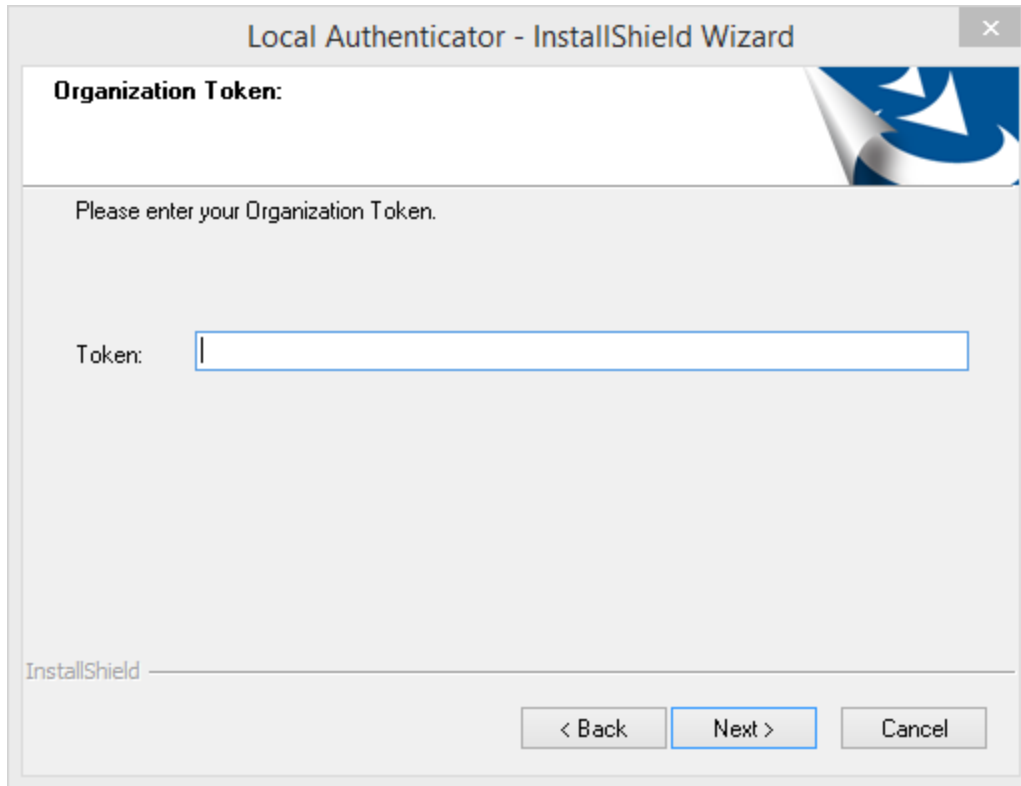
5. Set the location where the Local Authenticator will be installed, then click **Next** to continue.

6. Enter the organization token in the **Token** field and click **Next** to continue.

7. Click **Install** to install the Local Authenticator.

8. A status dialog appears, with a status bar showing you how the installation is progressing. When the installation is complete, the InstallShield Wizard Complete dialog appears. Click **Finish** to exit the installer.
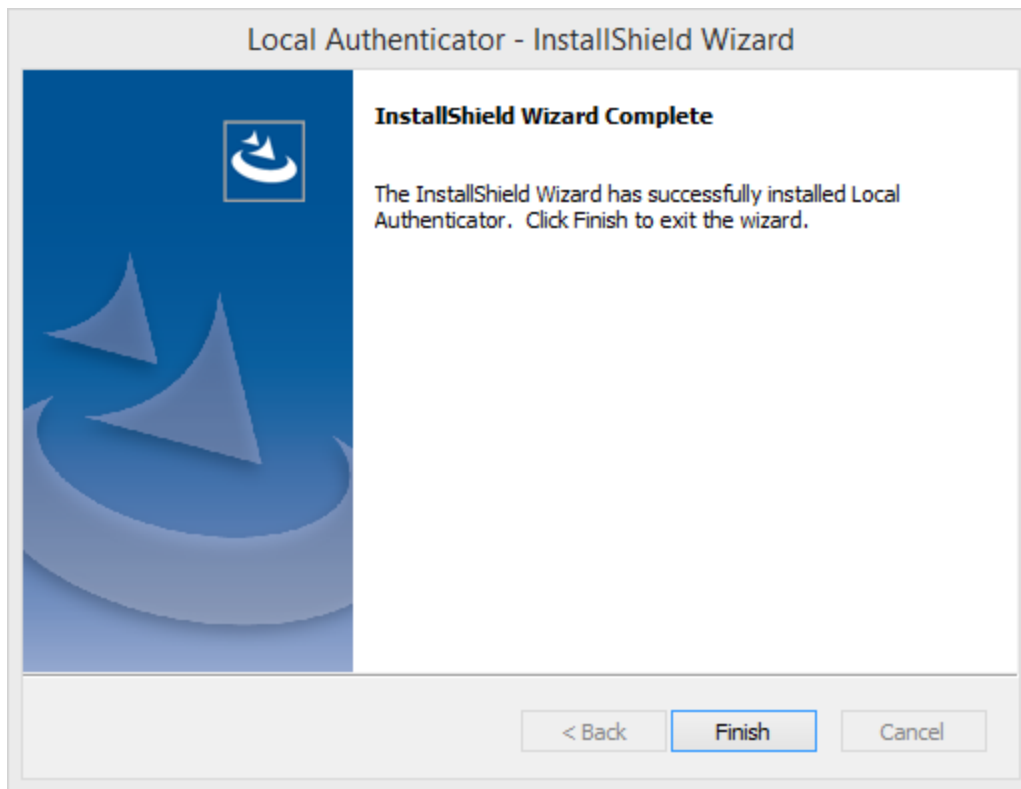
Configuring the Local Authenticator

Complete the following steps to configure the Local Authenticator:

1. Open the folder where the Local Authenticator is installed. By default, the Local Authenticator is installed in:

   `C:\Program Files\Nuance\Local Authenticator`

2. In any text editor, open `NMS.LocalAuthenticator.Service.exe.config`. This is the Local Authenticator configuration file.

3. Find the line "`<add key="NMSServerAddress" value="<NMS in the Cloud>"/>`" and change the value to the address of NMS in the Cloud. You should have received this address in your welcome information.

4. Save your changes to the configuration file.

5. Start the NMS Local Authenticator service.

Local Authenticator logs

The Local Authenticator uses the same service trace logs as NMS in the Cloud. These logs can be found in:

`C:\ProgramData\NMS\Logs`

Chapter 5: Initial Installation of the Dragon Client

Install Dragon on an Initial Computer and Choose the Default Settings

The initial installation is used to set default values for the Administrative, end-user, and Auto-Formatting options. These options can then be used to install on other computers using the same values.

Even if you are installing from a server, you should run through the initial installation below first. For more information on installing from a server, see "Overview of Installing the Dragon Client with Initial Settings" on page 35.

Caution:

To change Administrative Settings, be sure you have Windows administrator privileges. Administrator rights are not required to create a user profile or to use the software after installation.

Before you begin

- Install any pending Windows updates and reboot the computer when you are finished.
- Close all open applications.
- Turn off or disable anti-virus software; the installation process can sometimes trigger a false virus report.

Installation methods

Choose one of the following methods for performing the initial installation:

- "Initial Installation Using the Dragon InstallShield Wizard" on page 28 (Recommended)
- "Installation Using the Dragon Command Line" on page 30

Initial Installation Using the Dragon InstallShield Wizard

The most straight-forward method for performing an initial installation of the Dragon Client is by running the `setup.exe` file on your installation DVD.

Perform the following steps to use the Dragon InstallShield Wizard:

1. Insert the product DVD. If the installation does not start automatically, run `setup.exe` from the DVD.

2. Follow the prompts to move through the installation.

3. When you reach the Region Selection screen, choose the appropriate region(s), then select the **Advanced** checkbox to customize your settings.

4. In the Advanced screen, select the following checkboxes to display additional dialog boxes at the end of the installation. These dialogs allow you to choose settings that apply to all end-users dictating on this computer. You can then copy these settings to other installations (see step 6).

   - **Modify the application's settings for all user profiles**: Displays the Options dialog box at the end of the installation.

   - **Modify the administrative settings**: Displays the Administrative Settings dialog box at the end of the installation.

   - **Auto-Formatting options**: Displays the Auto-Formatting dialog box at the end of the installation.

5. When each of the dialogs you selected appears, select options to apply to all client installations, then click **OK**:

   - **Options**: Select the default options for correction, hot keys, data storage, and other settings.

     Notes:

     - Settings under the **Playback/Text-to-Speech** tab are not saved. To include Text-to-Speech as a feature of your installation, see "Feature Variables to Set Through the ADDLOCAL or ADVERTISE Properties" on page 99.

     - At least one supported third-party indexing/search software should be installed on the system before you install Dragon, or the Enable Desktop Search commands checkbox will not only be unchecked, but will not be available to be checked. Dragon supports Google Desktop and Microsoft Search.

     - **NMS users**: Only options in the Commands tab will be saved to the NMS. All other settings in the Options dialog are saved locally.

   - **Auto-Formatting**: Select Auto-Formatting options to apply to all client installations.

     Note: NMS administrators can also control these settings in the Nuance Management Console.

   - **Advanced**: Select default settings as needed in the following tabs:

     - **NMS Settings**: Check **Enable NMS** and enter the appropriate settings to allow the workstation to communicate with NMS in the Cloud.

       Note: You *cannot* enable NMS on end-users' machines via the Nuance Management Console.

- **Scheduled Tasks**: Enable and schedule Accuracy Tuning and (Stand-Alone mode only) Data Collection tasks.

- **Miscellaneous**: Set other options for the Dragon Client.

> **Note:** Some settings are disabled for NMS users; you can control these settings in the NMC.

- **Roaming (Stand-alone mode only)**: Enable and set up Roaming user profiles. For details, see "Setting Roaming User Profile Options" on page 107.

6. Dragon saves the configuration you created during setup in `nsdefaults.ini`. If you set up your installation for Roaming user profiles, you will also find a file called `roamingdef.ini`. You can find these files under `C:\ProgramData\Nuance\NaturallySpeaking14`.

The `.ini` file(s) contains custom settings that you can apply to each of the Dragon installations you deploy. Retrieve `nsdefaults.ini` (and `roamingdef.ini`, if applicable) and copy to a directory you can access from the other client computers.

> **Note:** If you want to add or change settings in the `.ini` files after you complete your initial installation, see "Natspeak.exe Command Line Options" on page 31. Otherwise, proceed to "Overview of Installing the Dragon Client with Initial Settings" on page 35.

Installation Using the Dragon Command Line

If you prefer, you can perform an initial installation of Dragon through an elevated command prompt in Windows.

Windows elevated command prompts

To open an elevated command prompt, follow the steps below for your operating system:

1. Windows 7: Select **Start** > **All Programs** > **Accessories**.

   Windows 8 or 8.1: From the **Start** screen, select the down arrow to show all apps, then scroll to the right to view the **Windows System** apps.

   Windows 10: Select **Start** > **All apps** > **Windows System**.

2. Right-click **Command Prompt** and select **Run as administrator**.

Command line installation with setup.exe

Perform the following steps to perform an initial installation using the Dragon command line:

1. Open a command prompt window in administrator mode.

2. Insert the installation DVD and search for the directory where `setup.exe` is located. In the command prompt, switch to this path.

3. Enter the following command line to install Dragon on this initial computer:

   ```
   setup.exe /i /v"INSTALLDIR=C:\<full_path>\Nuance\NaturallySpeaking14 /L*v
   C:\Logs\logfile.log /qf"
   ```

   > **Note:** Unless you plan to use the Dragon Client on the machine you used for the initial installation, you do not need to enter a serial number. If you see errors regarding the serial number, you can ignore them.

The `/v` option introduces any series of `msiexec.exe` options you want to pass to the Windows installer. Be sure to enclose all options in quotation marks, directly after the `/v` as shown above. For more information on MSI options, refer to the Microsoft website: http://msdn.microsoft.com/en-us/library/aa367988(v=vs.85).aspx. The command line above sets the following options:

- `INSTALLDIR` — Indicates the full path to the folder where you want Dragon installed.

- `/L*v` — (not case sensitive) Indicates the log file where messages about the installation should be written.

- `/qf` — Shows the full Dragon installation GUI. Recommended for initial installations to help determine any problems with the command line.

For details on `msiexec.exe` installation options, see "MSI Options for Dragon Installations" on page 94.

Running natspeak.exe to set options

When the installation completes, proceed to the next section to set up the configuration for this initial installation. You can apply this configuration to all your installations.

Natspeak.exe Command Line Options

When the installation completes, set up the configuration for this initial installation by following the steps below.

These switches are used in the following syntax:

```
natspeak.exe /<switch>
```

`<switch>` is one or more switches below (each switch is a single word without spaces or hyphens).

To use `natspeak.exe`:

1. On a workstation PC where Dragon is installed, close Dragon if it is running.

2. Open a Command Prompt window:

   - Windows 7: **Start** > **All Programs** > **Accessories** > **Command Prompt**

   - Windows 8.x: From the **Start** screen, click the down arrow to show all apps > scroll to **Windows System** > **Command Prompt**

   - Windows 10: **Start** > **All apps** > **Windows System** > **Command Prompt**

3. Switch to the program directory. The default is:

   ```
   C:\Program Files\Nuance\NaturallySpeaking14\Program
   ```

4. Enter the commands below to change the default configuration. All steps are optional; if you skip a step, your installation will use the default values for the associated options.

   - To open the Options dialog box, enter the command line:

     ```
     natspeak.exe /SetDefaultOptions
     ```

     In the dialog box, select the default options that should apply to all client installations, then click **OK**.

     Notes:

     - Settings under the **Playback/Text-to-Speech** tab are not saved. To include Text-to-Speech as a feature of your installation, see "Feature Variables to Set Through the ADDLOCAL or ADVERTISE Properties" on page 99.

     - At least one supported third-party indexing/search software should be installed on the system before you install Dragon, or the Enable Desktop Search commands checkbox will not only be unchecked, but will not be available to be checked. Dragon supports Google Desktop and Microsoft Search.

     - **NMS users**: Only options in the Commands tab will be saved to the NMS. All other settings in the Options dialog are saved locally.

   - To open the Auto-Formatting dialog box, enter the command line:

     ```
     natspeak.exe /SetDefaultFormattingOptions
     ```

     In the dialog box, select Auto-Formatting options to apply to all client installations and click **OK**.

     Note: NMS administrators can also control these settings in the Nuance Management Console.

   - To open the Administrative Settings dialog box, enter the command line:

     ```
     natspeak.exe /SetDefaultAdministrativeOptions
     ```

In the dialog box, select settings to apply to all installations in the tabs:

- **NMS Settings**: Check **Enable NMS** and enter the appropriate settings to allow the workstation to communicate with NMS in the Cloud.

  > **Note:** You *cannot* enable NMS on end-users' machines via the Nuance Management Console.

- **Scheduled Tasks**: Enable and schedule Accuracy Tuning and (Stand-Alone mode only) Data Collection tasks.

- **Miscellaneous**: Set other options for the Dragon Client.

  > **Note:** Some settings are disabled for NMS users; you can control these settings in the NMC.

- **Roaming (Stand-alone mode only)**: Enable and set up Roaming user profiles. For details, see "Setting Roaming User Profile Options" on page 107.

- Click **OK** when you are finished.

5. The configuration you created running `natspeak.exe` is saved in `nsdefaults.ini` (and, if you configured Roaming users, `roamingdef.ini`). By default, you can find these files here:

   `C:\ProgramData\Nuance\NaturallySpeaking14`

   > **Note:** If you did not run `natspeak.exe` on the command line or specify settings while running the Dragon InstallShield Wizard (see "Initial Installation Using the Dragon InstallShield Wizard" on page 28), you will not find an `nsdefaults.ini` or `roamingdef.ini` file.

6. When you have located the `.ini` files, verify that your option settings have been changed. Double-click the `nsdefaults.ini` file to open it in a text editor. You should see values defined for the options you changed.

7. Include the newly created `nsdefaults.ini` file in your MSI package to distribute the file to all end-user workstations where Dragon is installed.

You are now ready to install the same configuration you just established here onto other computers. For more information on installing from a server, proceed to "Overview of Installing the Dragon Client with Initial Settings" on page 35.

Other natspeak.exe options

Use these options from the command line:

Switch	Function
/About	Shows the About dialog for the Dragon Client
/FindAppData	Opens the AppData directory for the Dragon Client
/FindAppDataAllUsers	Opens the directory where the `.ini` files are stored
/FindCustom	Opens the Data Distribution directory specified in the Miscellaneous tab of the Administrative Settings dialog
/FindDragonLog	Opens the directory that contains `Dragon.log`

Switch	Function
`/FindSetupLog`	Opens the directory that contains the Dragon setup log (`dgnsetup.log`)
`/FindUpgradeLog`	Opens the directory that contains the upgrade log
`/Diagnose`	Runs Dragon in diagnostic mode and exits – information is saved to `Dragon.log`
`/Quick`	Runs Dragon in QuickStart mode, a mode that starts Dragon without loading a user profile or any speech models on startup of your computer
`/Trusted`	Opens the Dragon Client and performs a trusted login with Windows credentials (**NMS only**)
`/User <username> <profile>`	Logs in the user to the Dragon Client (**NMS only**)
`/LogOut`	Logs out user (**NMS only**)
`/SaveandShutDown`	Closes Dragon and saves user profile changes
`/ShutDown`	Close Dragon *without* saving user profile changes
`/Deactivate`	Deactivates the license for the current Dragon Client

Chapter 6: Installing the Dragon Client with Settings

Overview of Installing the Dragon Client with Initial Settings

You can use command line installations to copy your initial Dragon settings to all your Dragon Client installations.

Before you install

Before installing the Dragon Client on end-users' machines, be sure you have done the following:

- Be sure you have the Dragon serial number (or the group serial number, if you are installing or upgrading Dragon on multiple networked computers).

- Be sure all mapped drives you plan to use are mapped on each client computer where you are distributing the installation or upgrade.

- Install any pending Windows updates on clients and reboot as needed before continuing.

- Copy any `.ini` files you want apply to your installation to a central location so you can access them later.

Notes:

- If you chose **Enable Desktop Search Commands** on the Commands tab during the initial installation, you must install Google Desktop or Microsoft Search before installing Dragon; otherwise, Desktop Search Commands will not be enabled.

- Enclose long path names containing spaces in quotation marks (be sure to escape the each quotation mark with a backslash: `\"`).

- You can use the `/qn` option to install the product in Quiet mode, where no GUI or other messages appear. To use the `/qn` option, add it to the end of the command line. Another option, the `/passive` mode, runs the entire installation unattended, but displays a progress bar.

- The first time you run any installation command line, you should use the `/qf` option rather than `/qn`. This allows you to see GUI prompts that help you determine any problems with the command line.

- To ensure that you receive messages about any errors that occur during the installation, pass `/L` and one or more sub-options, followed by a log file name. The installer will create a file containing any installation log errors and other messages related to the process. You can send the log file to technical support should any issues arise.

- For more information on MSI options, refer to the Microsoft website: http://msdn.microsoft.com/en-us/library/aa367988(v=vs.85).aspx.

Pushing client installation from a server

Dragon includes a native Windows Installer (MSI) that lets you install across a network to multiple client computers and customize your installations. You can use the included `Dragon 14.msi` (see) or `admininstall.bat` file (see).

Several servers support this type of network installation:

- Windows Server 2008 R2 and 2012 x64

- System Management Server (SMS)

- Active Directory Services

For an administrative installation, the administrator creates an image of the installation program on the server and then configures the server to automatically push the application onto the client systems. You can also configure network installations to modify, repair, or remove an existing installation.

Support for SMS and Windows Server with Active Directory

Systems Management Server (SMS) provides a mechanism for pushing application installations out from the server to client systems. SMS supports using the Windows Installer (MSI) to push installations on clients using Windows 7, 8 or 10. SMS requires that a client application be installed on all client computers.

Active Directory Services is a feature of Windows Server 2008 and 2012. The Group Policy component of Active Directory Services includes a Software Installation snap-in that lets an administrator create a network installation. Administrators can use this feature to install software onto Windows 7, 8 and 10 clients.

Dragon supports the Active Directory Services Assign to Computers installation option. This option successfully installs the software when the computer is rebooted. Administrators can delay installation on Windows clients by enabling logon optimization for group policy; for this type of installation, an entry for the installation can be viewed in the event log after the first reboot. The installation is then performed on the second reboot. The installation takes place silently, and the software is installed for all end-users on the computer. When you perform a silent installation of Dragon, the installation process does not display any messages. To view installation messages, administrators should view the setup log.

Install the Same Dragon Configuration on Multiple Computers

Follow the steps below to install with `setup.exe` in the command line of a single client machine. If you would like to use `Dragon 14.msi` instead, see "Command Line Installation with msiexec.exe" on page 39.

1. Open a Command Prompt:

   - Windows 7: **Start** > **All Programs** > **Accessories** > **Command Prompt**

   - Windows 8.x: From the **Start** screen, click the down arrow to show all apps > scroll to **Windows System** > **Command Prompt**

   - Windows 10: **Start** > **All apps** > **Windows System** > **Command Prompt**

2. Insert the installation DVD and search for the directory where `setup.exe` is located.

3. In the Command Prompt window, switch to the `setup.exe` directory.

4. To install the configuration you created during the initial installation, enter a command line using the format shown below. Pass your Dragon serial number for the `SERIALNUMBER` option and the full path to your customized `nsdefaults.ini` file to the `DEFAULTSINI` option:

   ```
   setup.exe /s /v"SERIALNUMBER=#####-###-####-####-##
   INSTALLDIR=\"C:\Program Files\Nuance\NaturallySpeaking14\"
   DEFAULTSINI=\"C:\<full_path>\nsdefaults.ini\"
   /L*v C:\Logs\logfile.log"
   ```

   Stand-Alone mode: If you would like to include Roaming user profile settings in your installation, see "Installing a Roaming User Profile Configuration on Additional Computer(s)" on page 114.

Notes:

- When you are using the `setup.exe` method, you must ensure that all flags/properties (`SERIALNUMBER`, `DEFAULTSINI`, `/qn`, etc.) are all with in the same quotes, directly after `/v`, without a space.

- Enclose long path names containing spaces in quotation marks (be sure to escape the each quotation mark with a backslash: `\"`).

- See "MSI Options for Dragon Installations" on page 94 for details on the MSI options available for Dragon installations.

Carrying Out an Administrative Installation with a .bat File

A straightforward way to install Dragon from the command line to a server is to carry out an administrative installation using a `.bat` file. A script for carrying out a full administrative installation is provided in the `admininstall.bat` file at the top of the directory structure on the DVD.

Caution:

Only advanced administrators should attempt any type of administrative installation.

To run the batch file, open a Command Prompt and enter `admininstall.bat` and follow it with the location of `Dragon 14.msi`.

Understanding the script in admininstall.bat

Below are some of the lines from the script in the `admininstall.bat` file, a batch file that decompresses setup files into a network location for installation using SMS or another service.

Near the top of the batch file, you will see the lines that check the parameters entered and, if the parameter passed is not acceptable, execute a routine that handles that situation:

```
:rem //Check and analyze input parameters
if .%1.==.. goto bad_args
```

If the arguments you pass when you enter the command are acceptable, the batch file sets the `NETWORK_DNS_DIR` to the location of `Dragon 14.msi`:

```
set NETWORK_DNS_DIR=%1%
```

When you run the `admininstall.bat` file, the file installs Dragon using a single line of code:

```
echo Installing Dragon...
setup.exe /a /s /v"/qb TARGETDIR=%NETWORK_DNS_DIR% /Liwmo!e+ %TEMP%\admin-
install.log"
```

The above code calls the `setup.exe` command and passes it:

- `/a` – Indicates an administrative installation.

- `/s` – Indicates a silent installation.

- `/v` – Indicates `msiexec` options to follow, enclosed in quotation marks. The included options are:

  - `/qb` – Indicates a basic GUI display during the installation process.

  - `TARGETDIR` – Indicates the target directory for an administrative installation.

  - `/L` – Indicates what type of data should be included in the log and where the log will be saved. Since a silent installation of Dragon will not display any messages, check the setup log for any installation messages or errors.

When the installation of Dragon succeeds or fails, the batch file displays an appropriate message. The remainder of the file handles errors and cases where bad arguments are passed on the command line.

Modifying admininstall.bat

The `admininstall.bat` script includes a bare minimum of the options available. You can modify the file by adding to and changing the options you pass for installing Dragon. See for details on the MSI options available for Dragon installations.

Command Line Installation with msiexec.exe

Another way to install Dragon from the command line on several client computers is to use the `msiexec.exe` program from Microsoft. You are required to use `msiexec.exe` instead of `setup.exe` if you are installing Dragon from a server across a network.

Finding the MSI Installer on the Dragon DVD

The compiled MSI file, `Dragon 14.msi`, is located on your installation DVD.

You can double-click on the `.msi` file to start the InstallShield Wizard. However, to take advantage of available command line options, you can pass the file name to the `msiexec.exe` command as the application to install by using the `/i` option:

```
msiexec.exe /i "Dragon 14.msi"
```

Install same configuration on additional computer(s)

1. Open a Command Prompt:

   - Windows 7: **Start** > **All Programs** > **Accessories** > **Command Prompt**

   - Windows 8.x: From the **Start** screen, click the down arrow to show all apps > scroll to **Windows System** > **Command Prompt**

   - Windows 10: **Start** > **All apps** > **Windows System** > **Command Prompt**

2. On your installation DVD, locate `Dragon 14.msi` and switch to that directory.

3. Retrieve the customized `nsdefaults.ini` file from the computer where you carried out the initial installation.

4. To install Dragon, enter a command line using the format below:

```
msiexec /i "Dragon 14.msi"
SERIALNUMBER=#####-###-####-####-##
DEFAULTSINI="<full_path>\nsdefaults.ini"
/L*v "C:\Logs\logfile.log" /qn
```

Notes:

- For an administrative installation, pass the `/a` option to `msiexec` rather than the `/i` option. You also need to pass the `TARGETDIR` option instead of the `INSTALLDIR` option.

- Dragon setup is designed so that `msiexec.exe` can be run from an elevated command prompt in Windows. See "Windows elevated command prompts" on page 30 for instructions on opening an elevated command prompt in Windows 7, Windows 8 and Windows 10.

- See "MSI Options for Dragon Installations" on page 94 for details on the MSI options available for Dragon installations.

Chapter 7: Configuring the Dragon Client for NMS

Associating Dragon with the Nuance Management Server or Local Authenticator

You can configure User, Group, Site and Organization settings in the Nuance Management Console (see the *Nuance Management Server Administrator Guide* for details). Then associate Dragon Clients with NMS in the Cloud to allow users to log in and access the settings you configured in the NMC.

To set up the Dragon Client to work with NMS in the Cloud:

1. On the DragonBar, click **Tools** > **Administrative Settings**.

   > **Note:** You can also access the Administrative Settings dialog via the natspeak.exe command line options (see "Natspeak.exe Command Line Options" on page 31).

2. If you see a warning dialog, click **Proceed** to close all user profiles and open the Administrative Settings dialog.

3. Click the **NMS Settings** tab:
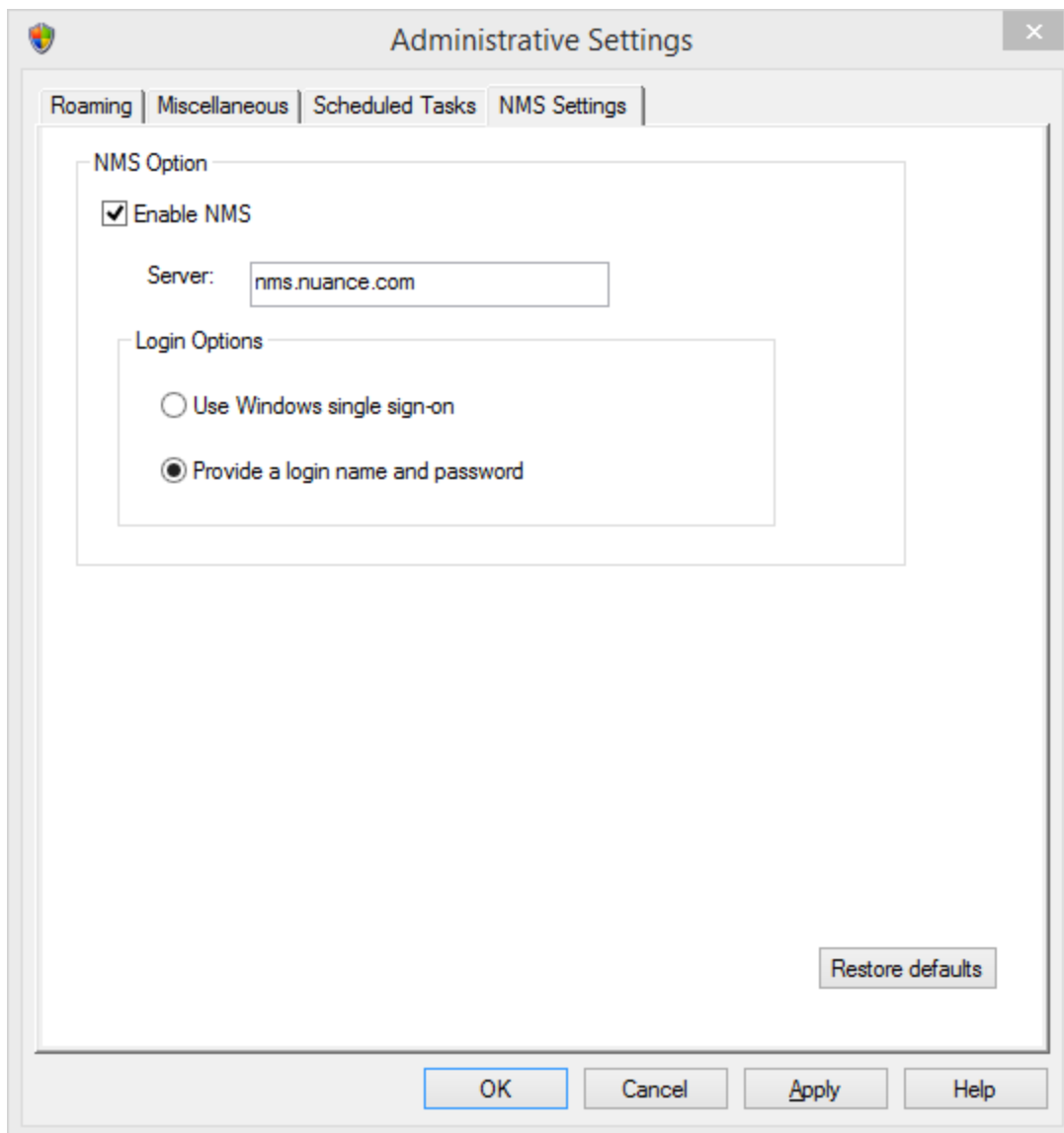
4. Select the **Enable NMS** checkbox.

5. If you are running NMS in the Cloud with Active Directory for authentication, enter the address of the Local Authenticator in the **Server** field.

   If you are using Dragon's native authentication, enter the address of the NMC in the **Server** field.

6. Click the appropriate radio button in the **Login Options** field.

   - Choose **Provide a login name and password** if you are using Dragon native authentication.

   - Choose **Use Windows single sign-on** if you configured your users for Active Directory single sign-on authentication.

7. Click **Apply**, then click **OK** to exit the Administrative Settings dialog.

Once the Dragon Client is connected to NMS in the Cloud, end-users can log in to the user account that an NMS administrator has created in the Nuance Management Console.

If the user has no existing profile, the **New User Wizard** will appear after sign-in. For details on setting up a new user profile, see "Working with user profiles" on the Dragon Help site.

Chapter 8: Scheduling Optimization Tasks

Using Acoustic and Language Model Optimizer and Scheduler Tools

Run the Acoustic and Language Model Optimizer Scheduler to:

- Optimize the acoustic files for a user profile

- Optimize the language model for a user profile

- Schedule one or both types of optimization to occur on a particular day or time at particular intervals

- Enable or disable the scheduled optimizations

Checking the optimization status of a user profile

Dragon Group checks the optimization status of a user profile when it is loaded if:

- The profile has never been loaded before

- The "Learn from specific documents" and "Learn from sent e-mails" wizards have not run within one week of the profile's creation

- The "Learn from..." wizards have not run for six months

- The Language Model Optimizer has not run in over two months

- The Acoustic Optimizer has never run and at least one hour of recorded dictation is available

Keeping custom words up-to-date

Using Dragon's support for custom words, especially contact names, can make dictating with Dragon faster and more precise.

> **Note:** Stand-Alone administrators can automatically distribute custom words, Vocabularies and commands to your end-users using the `nsadmin.exe` tool. For details, see the nsadmin Help file available in the Help folder of your installation directory (by default, `C:\Program Files\Nuance\NaturallySpeaking14\Help`).

When Dragon loads a user profile, Dragon examines how long it has been since the last time custom words were updated. Dragon will display the Personalize Your Vocabulary dialog box when:

- The "Learn from..." wizards have not run within two days of creating a new profile

- The "Learn from..." wizards have not run for one month or more (If the end-user dismisses the Personalize Your Vocabulary dialog, Dragon will display the dialog once a week until the wizards are run.)

The Personalize Your Vocabulary dialog box contains information about the last time the "Learn from specific documents" and "Learn from sent e-mails" wizards ran for the profile. Users can run these wizards from the dialog. The dialog also displays the total time required to run the wizards.

Checking for user profile maintenance when saving a user profile

When an end-user saves a user profile or closes Dragon, Dragon checks to make sure that scheduled user profile maintenance has been performed recently. If not, an additional checkbox will appear on the **Save** dialog. The maintenance should only take an extra minute or two to complete and is always beneficial – especially when new custom words have been added.

Running the Acoustic and Language Model Optimizers from the DragonBar

If a user profile is open in the Dragon Client, you can run the Acoustic and Language Model Optimizer from the DragonBar (Non-Roaming profiles only):

1. Select **Audio** > **Launch Accuracy Tuning**.

2. If the end-user has not dictated and corrected recognized text since the last time the optimizer was run, you will receive a message that the Acoustic Optimizer does not need to be run. Click **OK**. The **Acoustic and Language Model Optimizer** will open with the **Perform Acoustic Optimization** option grayed out.

3. Check the types of optimization you want to perform: **Perform Acoustic Optimization** (to optimize the acoustic files of the user profile), **Perform Language Model Optimization** (to optimize the language model of the user profile), or both.

4. Click **Go** to start. The process may take some time to complete.

5. You will receive a message notifying you when the process has completed. Click **Done**.

Running the Acoustic and Language Model Optimizer from the Start menu

You can also the Acoustic and Language Model Optimizer from the Windows Start menu without opening a user profile:

- Windows 7: Select **Start** > **All Programs** > **Dragon** > **Dragon Tools** > **Acoustic and Language Model Optimizer Scheduler**.

- Windows 8.x: From the **Start** screen click the down arrow to show all applications. Scroll to find **Dragon**, then find **Acoustic and Language Model Optimizer Scheduler**.

- Windows 10: Select **Start** > **All apps** > **Dragon** > **Acoustic and Language Model Optimizer Scheduler**.

Notes:

- Only an administrator can run the Acoustic and Language Model Optimizer from the **Start** menu.

- For Roaming user profiles, the system administrator is responsible for running the Acoustic and Language Model Optimizer on the network location of the Master Roaming user profiles. You can install Dragon on the computer where the Master Roaming user profiles are located or on any computer that has network access to the Master Roaming user profiles, then run the Scheduler. Later, any optimizations that result from running these tools are copied to the Local Roaming user profile when Dragon synchronizes it with the Master Roaming user profile.

- If you want to optimize a Roaming user profile locally, disable Roaming and browse to the Master Roaming user profile location. You can now run the Acoustic and Language Model Optimizer as you would for a non-Roaming user profile.

1. The Acoustic and Language Model Optimizer will open, displaying a list of the user profiles stored in the default directory. To access a different directory, select **File** > **Set User Directory**. The **Set a Directory Containing User Files** dialog box opens:
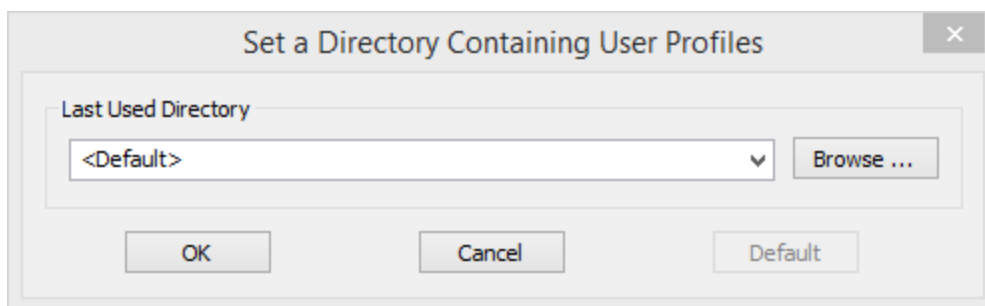
2. Enter the path to the directory, or click the **Browse** button and browse to the location of the user profiles or (for Roaming users only) **Master Roaming user profiles**, then click **OK**. If the user profiles you want to optimize

are located in multiple directories, you can later repeat the steps outlined here and change this directory to locate the additional user profiles.

3. Select **File** > **New Task**.

4. The Windows user name and password dialog box opens. Enter your Windows user name and password, then click **OK**.

> **Note:** If you are logged in to a domain, you must insert the domain name in front of your user name.

5. The Select Frequency dialog box opens. Under **Optimization**, select **Perform Acoustic Optimization**, **Perform Language Model Optimization**, or both:

6. Under **User Profile Information**, select a user profile from the **User Name** dropdown list or, to select multiple user profiles, click the **Multiple Users** button to open the **Select user profiles** dialog box:
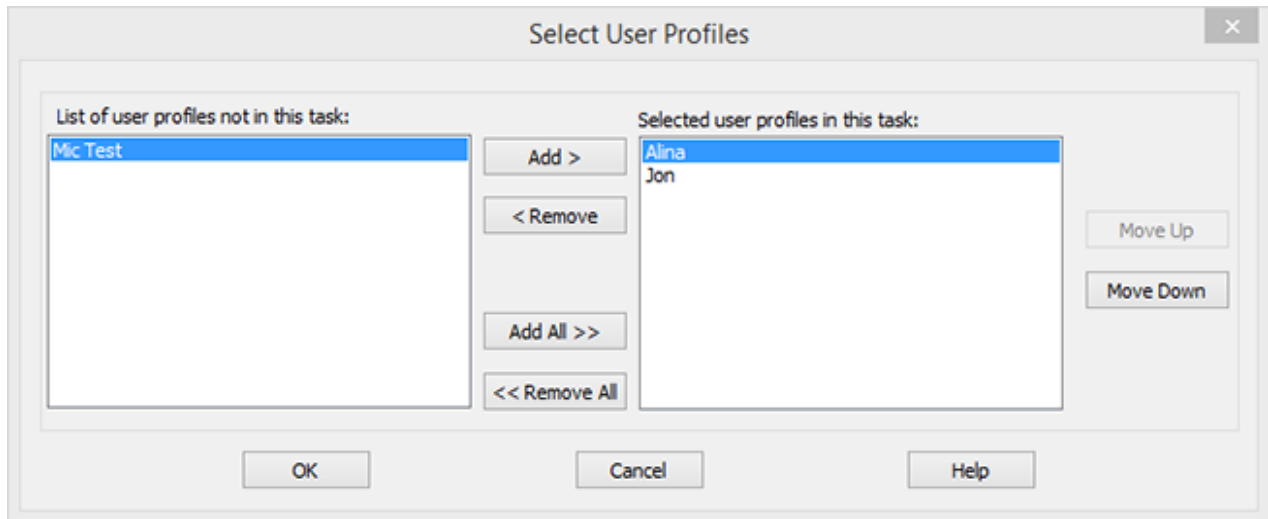
- Use the **Add** and **Remove** buttons to move selected user profiles to the **Selected end-users in this task** list on the right. You can also click **Add All** to add all profiles in the selected directory, or **Remove All** to remove all user profiles from the list.

- You change the order of the list by selecting a name and clicking the **Move Up** or **Move Down** button. When you are satisfied with the list, click **OK** to proceed.

7. If you are running the Optimizer tasks for a single user:

- In the **Dictation Source** text box, select an audio input device from the dropdown list.

- In the **Vocabulary** text box, select a vocabulary from the dropdown list.

8. Under **Select Frequency and Start Date & Time**, select how often and at what time you want the optimization to run, as well as the first date it should run.

9. At the bottom of the dialog, click the **Enabled (schedule task runs at specified time)** checkbox to enable the optimization.

10. Click **Apply** to apply the changes.

11. Click **OK** to close the **Select Frequency** dialog box. The **Acoustic and Language Model Optimizer Scheduler** dialog box displays a list of the events scheduled in the right pane of its dialog box. You can create more than one optimization schedule for a single user profile. When you do, both optimization events appear in the schedule list.

12. Click **File** > **Exit** to close the Acoustic and Language Model Optimizer Scheduler.

Chapter 9: Working with Custom Commands

Using the Convert XML to DAT Tool

You can use a text editor to edit custom commands in XML format. To restrict access to only Dragon end-users, you can convert your commands from XML format to DAT format. Dragon uses `.dat` files to store commands.

> **Note:** For more on creating custom commands, see "Creating and editing custom commands" on the Dragon Help site. For help with Structured Commands, see the Advanced Scripting Reference.

You can use the XML to DAT tool (`mycmdsxml2dat.exe`) to extract end-user-defined Dragon commands from an XML file. The tool writes the commands to a `.dat` file.

Starting the Convert XML to DAT tool

- Windows 7: Click **Start** > **All Programs** > **Dragon** > **Dragon Tools** > **Convert XML to DAT**.

- Windows 8.x: From the **Start** screen, click the down arrow to show all applications. Scroll to find **Dragon**, then find **Convert XML to DAT**.

- Windows 10: Click **Start** > **All apps**. Scroll to find **Dragon**, then find **Convert XML to DAT**.

The Convert XML to DAT tool starts in an MS-DOS window, listing the tool's syntax.

Convert XML to DAT syntax

The convert XML to DAT tool (`mycmdsxml2dat.exe`) uses the following syntax:

```
mycmdsxml2dat.exe <dat-file-path> <xml-file-path> [options]
```

Parameters	Type	Description
`<dat-file-path>`	Required	The full path to the local copy of the current end-user's `.DAT` file (by default, `C:\ProgramData\Nuance\NaturallySpeaking14\Data\enx\dat`)
`<xml-file-path>`	Required	The full path to the `.XML` file to be converted
`-v`	Optional	Validates the specified `.xml` file over the Internet with a Nuance DTD (Document Type Definition) file. Disabled by default.

Use the XML to DAT tool to convert data in an XML file

1. Create an XML file that contains the commands to use with Dragon.

2. On a command line, use `mycmdsXML2DAT.exe` with the syntax shown above to convert the XML file to DAT format.

3. Use the `nsadmin` utility to copy the `.dat` file to the Data Distribution directory. For details, see the nsadmin Help file available in the Help folder of your installation directory (by default, `C:\Program Files\Nuance\NaturallySpeaking14\Help`).

The next time an end-user opens a user profile, Dragon incorporates the new commands from the `.dat` file into the user profile.

To distribute commands in the NMC, see "Working with Command Sets" in the *Nuance Management Server Administrator Guide*.

Using the MyCommands Protection Utility

In Dragon Group, you can protect custom Text-and-Graphics, Step-by-Step, Macro Recorder, and/or Advanced Scripting commands by exporting them into a `.dat` file, then running the MyCommands Protection Utility included in your Dragon installation. After they are imported to the Dragon Client, end-users can use the commands, but cannot view or edit their source code or re-export the commands. As a result, the integrity of the commands remains intact.

To protect the commands in a `.dat` file:

1. Make a backup copy of the unprotected `.dat` file and store it in a secure location. Once you protect the `.dat` file that you are distributing, you cannot make the file available for editing again.

2. Open a command prompt.

3. Change directories to the Program folder inside your installation directory. By default:

   ```
   C:\Program Files\Nuance\NaturallySpeaking14\Program
   ```

4. Enter the following on the command line:

   ```
   protectcmds.exe <dat-file-path> <vendor-name> [<vendor-contact-info>]
   ```

If an end-user attempts to view, copy, or edit commands from a protected file, the following message appears:

The command was protected by <vendor-name>.
Please contact <vendor-contact-info> for more information.

In the Command Browser, the same message appears as the **Preview Content** in **Script** mode.

Once you have protected the file, you can put it into the Data Distribution directory for distribution to multiple user profiles, then use the `nsadmin` command line tool. For details, see the nsadmin Help file available in the Help folder of your installation directory (by default, `C:\Program Files\Nuance\NaturallySpeaking14\Help`).

To distribute commands in the NMC, see "Working with Command Sets" in the *Nuance Management Server Administrator Guide*.

Chapter 10: Upgrading the Dragon Client

Preparing to Upgrade Dragon

Export user profiles

Before you upgrade, consider exporting user profile(s) for safe-keeping in case you need to re-install the previous version of Dragon.

1. On the DragonBar, select **Profile** > **Manage User Profiles**. The Manage User Profiles dialog opens:
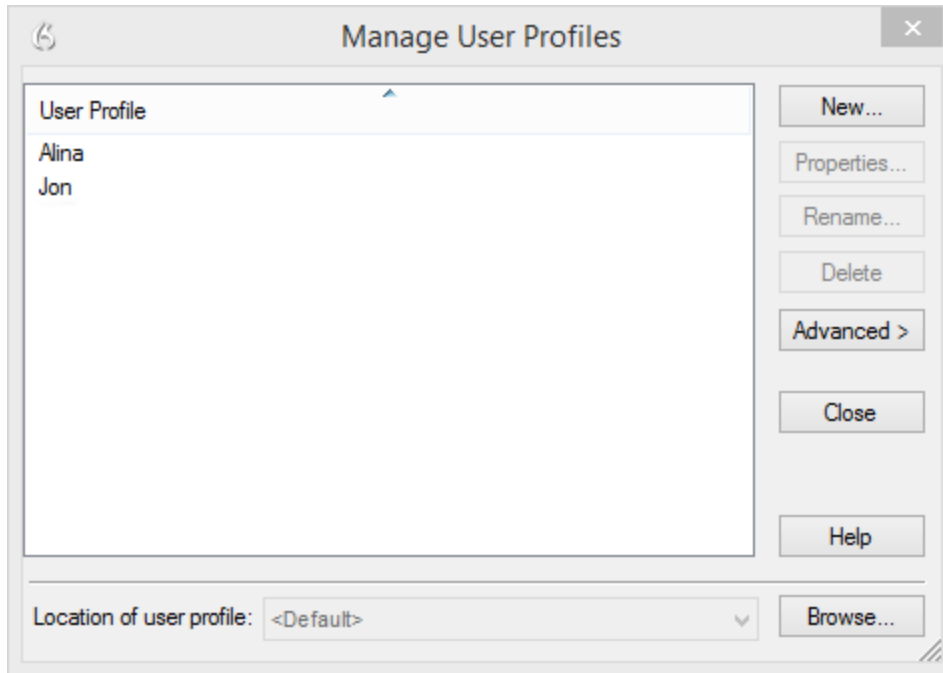
2. Select the user profile that you want to export.

3. Click the **Advanced** button and select **Export** from the menu that appears:
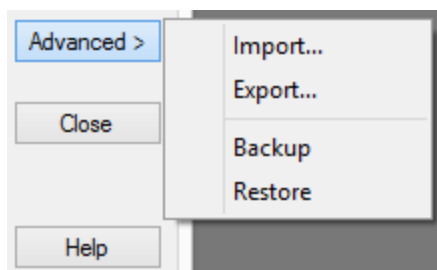
4. When the Browse For Folder dialog box opens, navigate to the folder where you want to store the exported user profile (or create a new folder by clicking the **Make New Folder** button) and click **OK**.

5. When a dialog box opens displaying a message indicating the export was successful, click **OK**.

6. Repeat steps 2 through 5 for each set of user profiles you want to export.

7. Click **Close** to exit the Manage User Profiles dialog box.

8. In the operating system, navigate to the directory where you exported the user profiles. In that directory you will find a separate folder for each exported user profile, labeled with the user name.

For more information on exporting profiles, see "Working with user profiles" in the Dragon Help site.

> **Note:** Do not export profiles to a folder in the Dragon directory. These directories may be deleted if Dragon is uninstalled.

Optional: Export custom words

Your user profiles' vocabulary may be enhanced by custom words or phrases the user added manually (through the Vocabulary Editor or the email and document analysis feature) and words Dragon learned during the process of correcting misrecognitions.

Consider exporting any custom words to create a backup copy in case you need to re-install the previous version.

To check for custom entries in your vocabulary:

1. From the DragonBar, select **Vocabulary** > **Open Vocabulary Editor**.

2. Select **Custom words only** from the **Display** dropdown list:
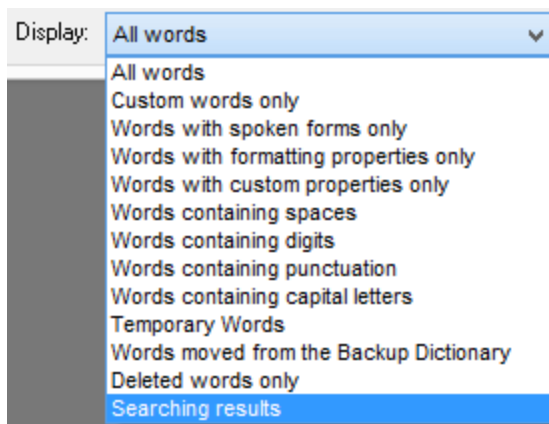
If the user profile includes custom words, follow these steps to export them into a file:

1. From the DragonBar, select **Vocabulary** > **Export custom word and phrase list**.

2. In the Save window, specify a name for the list, then choose a format, `.xml` or `.txt`, in the **Save As Type** dropdown. By default, the custom words will be saved as a `.txt` file.

3. Choose a Windows folder where you will store the file.

4. Click **Save**.

Optional: Export custom commands

If your user profiles contain custom commands (imported or created in Dragon), consider exporting them so that you have a backup of them in case you need to re-install the previous version.

To export custom commands into a file:

1. From the DragonBar, select **Tools** > **Command Browser**.

2. In the Command Browser window, click the **Mode** menu, then select **Manage**.
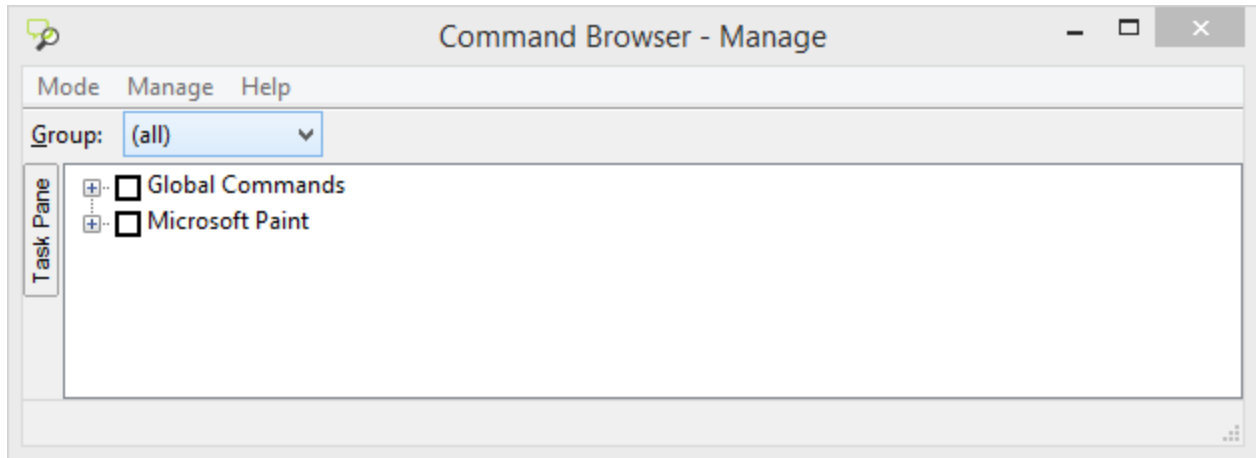
3. To export only custom commands, choose **User-Defined** in the **Group** dropdown menu:
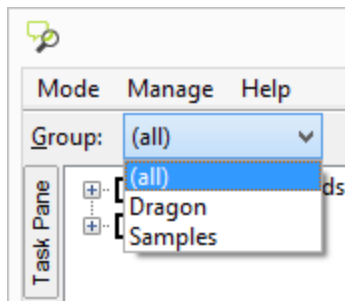
4. Click the plus sign (+) to expand the list of commands.

5. Select the checkbox next to the commands you wish to export.

6. Click the **Manage** menu, then select **Export**.

7. In the Save window, specify a name for the file, then choose a Windows folder where you will store it.

8. Click **Save**.

Upgrading Roaming User Profiles

If you are upgrading from Dragon Professional version 12 or 12.5, you will need to upgrade your user profiles before using them. For Roaming user profiles, an administrator should upgrade the Master Roaming user profiles *before* upgrading the Dragon Clients. Version 13 or 13.5 profiles can be used without upgrading.

Before upgrading Roaming user profiles, recall some basics about how the Roaming feature works: Each Dragon end-user has a Master Roaming user profile, which is stored on a network location that can be opened from any networked computer where Dragon is installed. When a Roaming user profile is opened, Dragon transfers a copy of the Master Roaming user profile to the end-user's device.

Since the Local Roaming user profile is a copy of the Master Roaming user profile, it does not make sense to upgrade the Local Roaming user profile when upgrading the local Dragon installation.

Instead, install Dragon Group on the network computer where the current Master Roaming user profiles are located and upgrade the Master Roaming user profiles directly. After upgrading the Master Roaming user profiles, administrators can then proceed to upgrade end-user systems that deploy the Roaming feature.

Notes:

- Although the User Profile Upgrade Wizard supports both mapped drives and UNC paths, Nuance strongly recommends upgrading the Master Roaming user profiles on a computer where Dragon Group is locally installed. Upgrading over a network will take an undetermined length of time. In addition, the User Profile Upgrade Wizard does not support upgrading user profiles over an HTTP connection.

- Plan to upgrade the Master Roaming user profiles at a time when they are not being opened by end-users – for example, during the night or on a weekend. If there is not a time when none of the Roaming user profiles are in use, you can upgrade different groups of Roaming user profiles at different times.

- Nuance recommends backing up user profiles before upgrading them. Back up the Master Roaming user profiles to a separate location using any system backup utility that is implemented at your facility.

Before you upgrade

1. Install or upgrade Dragon Group on the computer where the current Master Roaming user profiles are located.

   Note: If you cannot install Dragon where the current Master Roaming user profiles are located, Nuance recommends that you copy the current Master Roaming user profiles to a separate computer, install the upgraded version of Dragon Group on that machine, then continue the Master Roaming user profile upgrade. When the upgrade is complete, copy the Master Roaming user profiles back to the network-accessible directory.

   Note: If the upgrade installation displays an option to upgrade existing user profiles to work with this installation in Dragon Professional 13.5 or earlier, ignore the option, as it does not affect Roaming user profiles. You will manually run the **User Profile Upgrade Wizard** later.

2. **NMS users**: To upgrade Roaming user profiles, you must make sure that NMS is **disabled** for this installation of the Dragon Client.

   a. On the administrator system where you will upgrade the Master Roaming profiles, start Dragon.

   b. On the DragonBar, click **Tools** > **Administrative Settings**.

c. In the NMS Settings tab, make sure **Enable NMS** is **unchecked**. You can re-enable NMS after you have upgraded your Master Roaming user profiles.
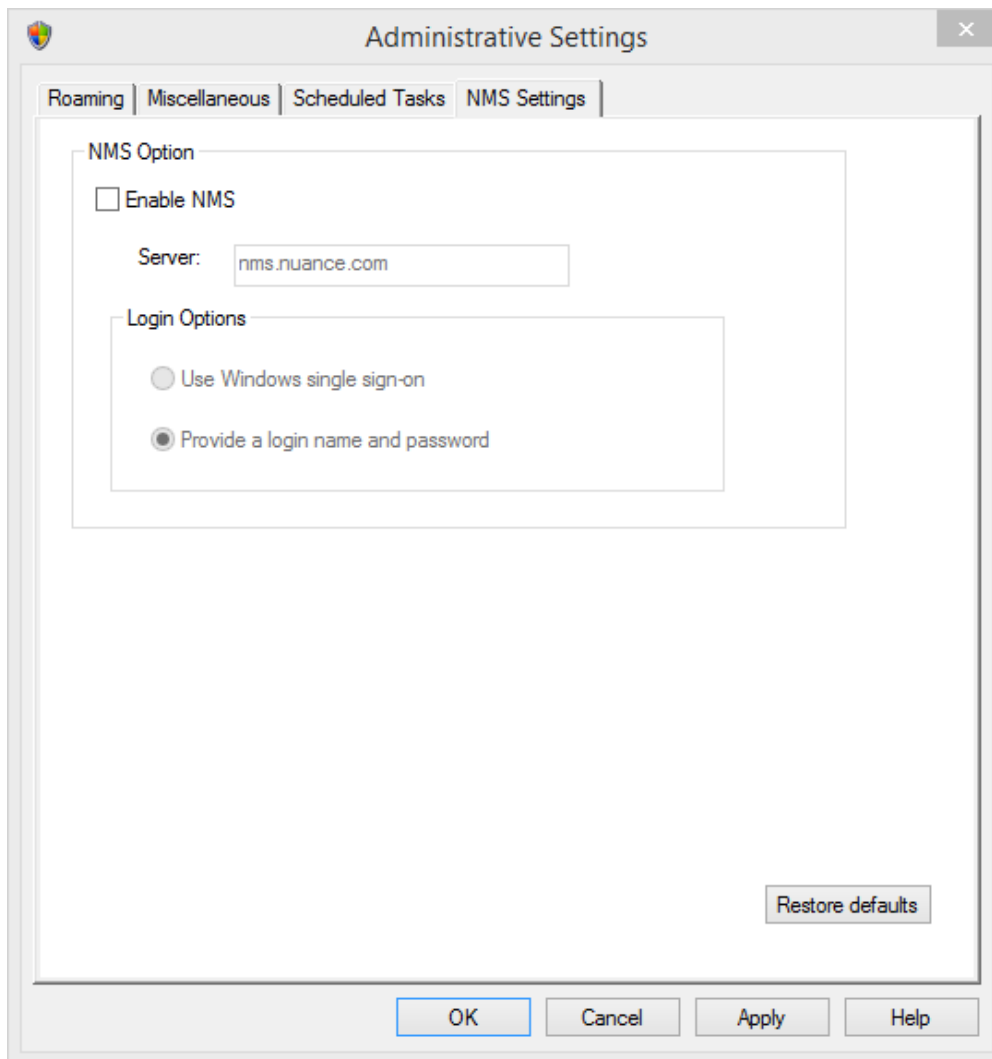
If you skip this step, you will need to go to the NMC and disable Roaming for the entire Site (see "Configuring the location of Roaming user profiles" in the *Nuance Management Server Administrator Guide*).

3. On the central network location that stores the current Master Roaming user profiles, create a new directory to store the upgraded Master Roaming user profiles. Always be sure the upgraded user profiles are in a different location from the current user profiles. If end-users see two versions of each user profile, they may become confused when they try to open a user profile.

4. Disable the Roaming feature. If you skip this step, the Upgrade User Profiles Wizard will display an error message stating that you cannot upgrade a Roaming user profile.

    a. On the administrator system where you will upgrade the Master Roaming profiles, start Dragon.

    b. On the DragonBar, click **Tools** > **Administrative Settings**.

     c. When the Administrative Settings dialog opens, click the Roaming tab and make sure **Enable** is not checked.
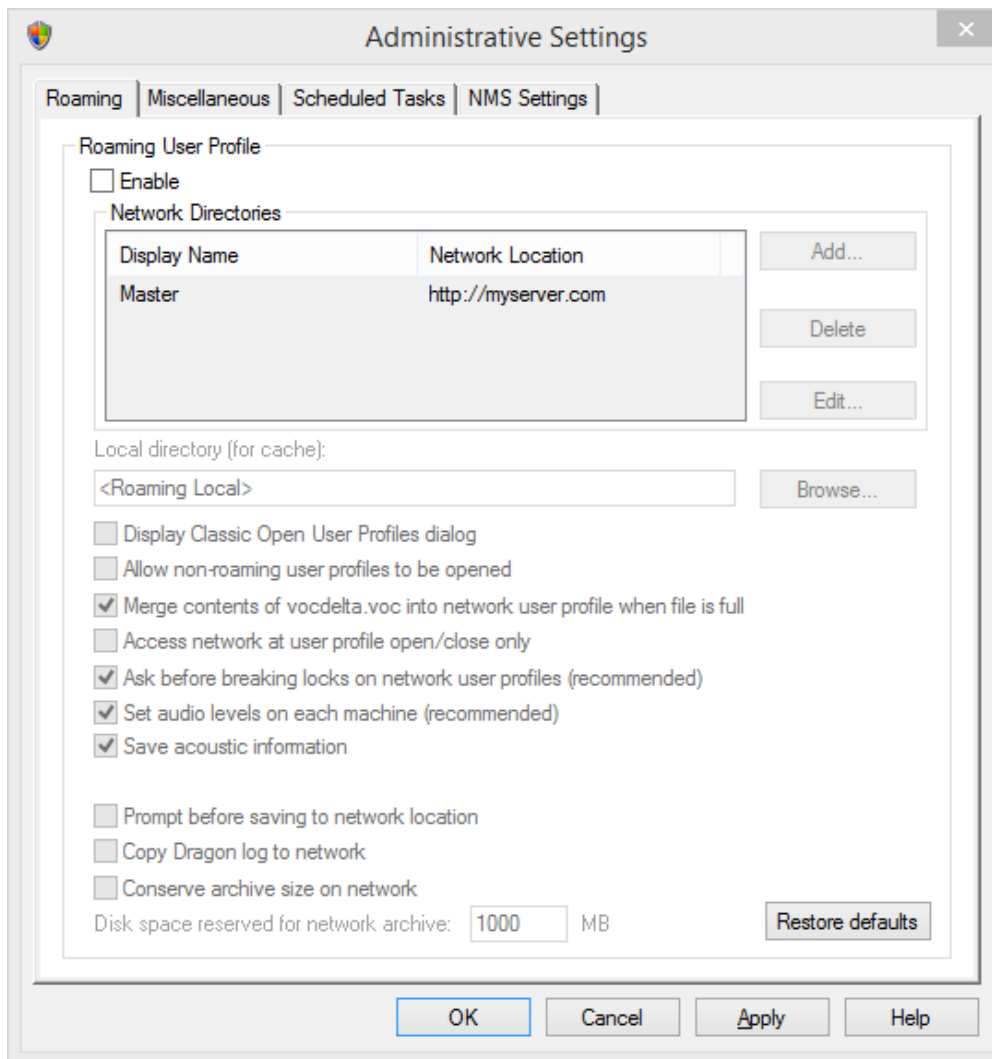
     d. Click **OK**, then close Dragon.

5. Upgrade the Master Roaming user profiles using the Upgrade User Profiles Wizard (see "Upgrading User Profiles" on page 63).

Since the User Profile Upgrade Wizard leaves the original Master Roaming user profiles unchanged and in their original network location, the Dragon Clients can continue to use the Roaming feature until you upgrade the systems. Follow the steps in "Upgrading with msiexec.exe" on page 61.

After upgrading Roaming user profiles

If you copied the Master Roaming user profiles to a separate computer for upgrading, make sure you copy the upgraded profiles back to the new network-accessible directory that you created to store them (see step 3).

After upgrading the Dragon Clients, remember to update the Roaming User Network Directories to point to new, upgraded the Roaming user profiles. For instructions, see "Setting the location of Master Roaming user profiles" in the Dragon Help site (for Stand-Alone users) or "Configuring the location of Roaming user profiles" in the *Nuance Management Server Administrator Guide* (for NMS users).

Stand-Alone users: Be sure to enable the Roaming feature when you upgrade the Dragon Clients. See "Installing a Roaming User Profile Configuration on Additional Computer(s)" on page 114 for details on configuring Roaming user profiles during installation.

Upgrading Your Dragon Installation from the Command Line

There are two command line upgrade scenarios:

- Major Upgrade—Upgrading to a new edition or version of Dragon Group.

- Minor Upgrade—Upgrading to a higher point release within the same edition and version of Dragon.

Minor upgrades do not support the silent (no GUI) upgrade option. When you run `setup.exe` with a GUI to install a minor upgrade, `setup.exe` can detect when a previous version of Dragon exists on a target computer. Once it detects a previous version, `setup.exe` runs the rest of your installation in minor upgrade mode, automatically overwriting older files with newer files and adding any missing files.

> **Note:** Since a silent installation of Dragon will not display any messages, check the setup log for any installation messages or errors.

Upgrading with settings

Although the upgrade does not migrate forward the configuration or Roaming user profile settings from the earlier version, you can install with your previous settings using one of the following methods:

- Reuse the `nsdefaults.ini` and (Stand-Alone users only) `roamingdef.ini` files you used when you first installed Dragon Group.

- Perform an initial installation of the new version of Dragon on a single computer (see "Installation Using the Dragon Command Line" on page 30) and establish the configuration you want to use by calling `natspeak.exe` on the command line (see "Natspeak.exe Command Line Options" on page 31).

Administrators cannot upgrade user profiles during the command line installation.

For Roaming user profiles, upgrade the profiles in the Master Roaming user profile directory before you upgrade the Dragon Clients (see "Upgrading Roaming User Profiles" on page 55). Upgraded Roaming user profiles will become available as soon as Dragon is updated on the client computers.

For non-Roaming user profiles, run the User Profile Upgrade Wizard after installation completes. See "Upgrading User Profiles" on page 63 for details on the User Profile Upgrade Wizard.

Upgrading from the command line

Before you begin your upgrade:

- Be sure you have the Dragon serial number (or the group serial number, if you are installing or upgrading Dragon on multiple networked computers).

- Be sure all mapped drives you plan to use are mapped on each client computer where you are distributing the installation or upgrade.

- Install any pending Windows updates on clients and reboot as needed before continuing.

- Copy any `.ini` files you want apply to your installation to a central location so you can access them later.

Using setup.exe for silent upgrades

When you use the command line, you must use the `REINSTALL=ALL` option and set `REINSTALLMODE` to the sub-options you want to reinstall, generally `REINSTALLMODE=vamus`. If you did not originally install in the default location, make sure you use the `INSTALLDIR` option to point to your installation directory. Here is an example command line using `setup.exe`:

```
setup.exe /s /v"/i "Dragon 14.msi"
SERIALNUMBER=#####-###-####-####-##
REBOOT=ReallySuppress
```

```
INSTALLDIR=\"C:\Program Files\Nuance\NaturallySpeaking14\"
DEFAULTSINI=\"C:\<full_path>\nsdefaults.ini\"
REINSTALL=ALL REINSTALLMODE=vamus
/L*v C:\logfile.log /qn"
```

Note: When you are using the `setup.exe` method, you must ensure that all flags/properties (`SERIALNUMBER`, `DEFAULTSINI`, `/qn`, etc.) are all with in the same quotes, directly after `/v`, without a space. See "MSI Options for Dragon Installations" on page 94 for details on the MSI options available for Dragon installations.

Upgrading with msiexec.exe

> **Note:** When you use the `msiexec.exe` installer to uninstall Dragon from a command prompt, the installer automatically retains user profiles from the previous version of Dragon. After upgrading, end-users can upgrade their local (non-Roaming) user profiles when they start Dragon. To upgrade Roaming user profiles, see "Upgrading Roaming Users" on page 55.

The table below lists `GUID`s that you pass to the `/x` option of `msiexec` for each version of Dragon and Visual C++ Runtime for Dragon. Make sure to use the `/x` option with the `GUID`.

Products and versions	GUID
Dragon Group	{FEAB6184-0560-4EBF-A26BC3F2B11FE9E1}
DNS V13	{33EA20FB-5389-4938-BA59-2BCD9BB68F41}
DNS V12	{D5D422B9-6976-4E98-8DDF-9632CB515D7E}
VC-Runtime 32-bit	{4A5A427F-BA39-4BF0-9A47-9999FBE60C9F}
VC-Runtime 64-bit	{4A5A427F-BA39-4BF0-9A47-7777FBE60C9F}

Step-by-Step Upgrade Process

> **Note:** See "MSI Options for Dragon Installations" on page 94 for details on the MSI options available for Dragon installations. For more information on MSI options, refer to the Microsoft website: http://msdn.-microsoft.com/en-us/library/aa367988(v=vs.85).aspx.

You must follow these steps to set options for your end-users:

1. Open a command line window as an administrator (see "Windows elevated command prompts" on page 30).

2. To uninstall the current version of Dragon with `msiexec.exe`, pass the installer the `/x` option followed by the old version's `GUID` (shown in the table above) and the `/qn` option to turn off any GUI.

   For example:

   ```
   msiexec /x {33EA20FB-5389-4938-BA59-2BCD9BB68F41} /L*v "C:\updatelog.log"
   /qn
   ```

   Include `/L*v "C:\updatelog.log"` if you want to create a log of the uninstall and/or update process. You can change `"C:\updatelog.log"` to a different location or file name.

   Caution:

   The first time you run any installation command line, you should use the `/qf` option rather than `/qn`. This allows you to see GUI prompts that help you determine any problems with the command line.

3. Install the new version of Dragon with `msiexec.exe` by passing the installer the `/i` option followed by the name of the Dragon `.msi` file and installation options you want to include.

   - For a *major* upgrade, pass `REMOVEOLDPROD=1`. This tells the installer to look for previous versions of Dragon and uninstall them. If no previous version of Dragon is found, the installation will continue. In addition, pass `DEFAULTSINI` and set it to the full path to your modified `nsdefaults.ini` file. For example:

   ```
   msiexec /i "Dragon 14.msi"
   SERIALNUMBER=#####-###-####-####-##
   ```

```
REBOOT=ReallySuppress
INSTALLDIR="C:\Program Files\Nuance\NaturallySpeaking14"
DEFAULTSINI="C:\<full_path>\nsdefaults.ini"
REMOVEOLDPROD=1 /L*v "C:\logfile.log" /qn
```

- For a *minor* upgrade, install the new version of Dragon with `msiexec.exe` as you would the major upgrade, but pass `REINSTALL` and `REINSTALLMODE` options, as shown in the sample below:

```
msiexec /i "Dragon 14.msi"
SERIALNUMBER=#####-###-####-####-##
REBOOT=ReallySuppress
INSTALLDIR="C:\Program Files\Nuance\NaturallySpeaking14"
DEFAULTSINI="C:\<full_path>\nsdefaults.ini"
REINSTALL=ALL REINSTALLMODE=vamus
/L*v "C:\logfile.log" /qn
```

Here, `REINSTALL` is set to `ALL` and `REINSTALLMODE` is set to `vamus`.

For more information on the `REINSTALL` and `REINSTALLMODE` settings, refer to "MSI Options for Dragon Installations" on page 94.

Caution:

If you do not pass the `REINSTALL` and `REINSTALLMODE` options, the minor upgrade will fail.

If you are using Roaming user profiles in Stand-Alone mode, be sure to include your `roamingdef.ini` file (see "Installing a Roaming User Profile Configuration on Additional Computer(s)" on page 114).

4. After the installation of Dragon is complete, perform the steps below.

Edit the NSSYSTEM.INI file

After you install Dragon using a script, you must edit the `nssystem.ini` file so that Dragon can find existing profiles from the previous version and launch the Upgrade User Profile Wizard when the end-user opens Dragon.

Edit the `nssystem.ini` *from the machine where you performed the installation*. Do not copy the `nssystem.ini` file from a different computer where you installed Dragon.

1. Navigate to `C:\ProgramData\Nuance\NaturallySpeaking14`.

2. Use a text editor like Notepad to open the `nssystem.ini` file.

3. In the `nssystem.ini` file, in the `[Settings]` section, add the following line:

```
Old Users Directory=<path to previous Dragon version profiles>
```

4. Save the `nssystem.ini` file.

Upgrading User Profiles

If your organization used Dragon Professional version 12 or 12.5, you will need to upgrade your user profiles before using them. Version 13 or 13.5 profiles can be used without upgrading.

When you upgrade the Dragon Client, the Upgrade User Profiles Wizard will launch when the end-user first attempts to open a version 12 or 12.5 user profile. The Upgrade User Profiles Wizard walks users through the process of upgrading profiles stored on the local machine. For Roaming user profiles, an administrator should upgrade the Master Roaming user profiles *before* upgrading the Dragon Clients (see).

You can also run the Upgrade User Profiles wizard from the **Start** menu:

- Windows 7: Click **Start** > **All Programs** > **Dragon** > **Dragon Tools** > **Upgrade User Profiles**

- Windows 8.x: From the **Start** screen, click the down arrow to show all apps. Scroll to **Dragon**, then find **Upgrade User Profiles**

- Windows 10: Click **Start** > **All apps** > **Dragon** > **Upgrade User Profiles**

> **Note:** Although the User Profile Upgrade Wizard supports both mapped drives and UNC paths, Nuance strongly recommends upgrading the Master Roaming user profiles on a computer where Dragon Group is locally installed. Upgrading over a network will take an undetermined length of time.

Running the Upgrade User Profiles Wizard

1. On the **Select the profile(s) to upgrade** page, you will see a list of any user profiles stored in the default directory. To upgrade other profiles, click **Browse to add a profile** and select the location of the user profiles to be upgraded. The **Select the profile(s) to upgrade** page now displays all user profiles in the selected directory or directories:
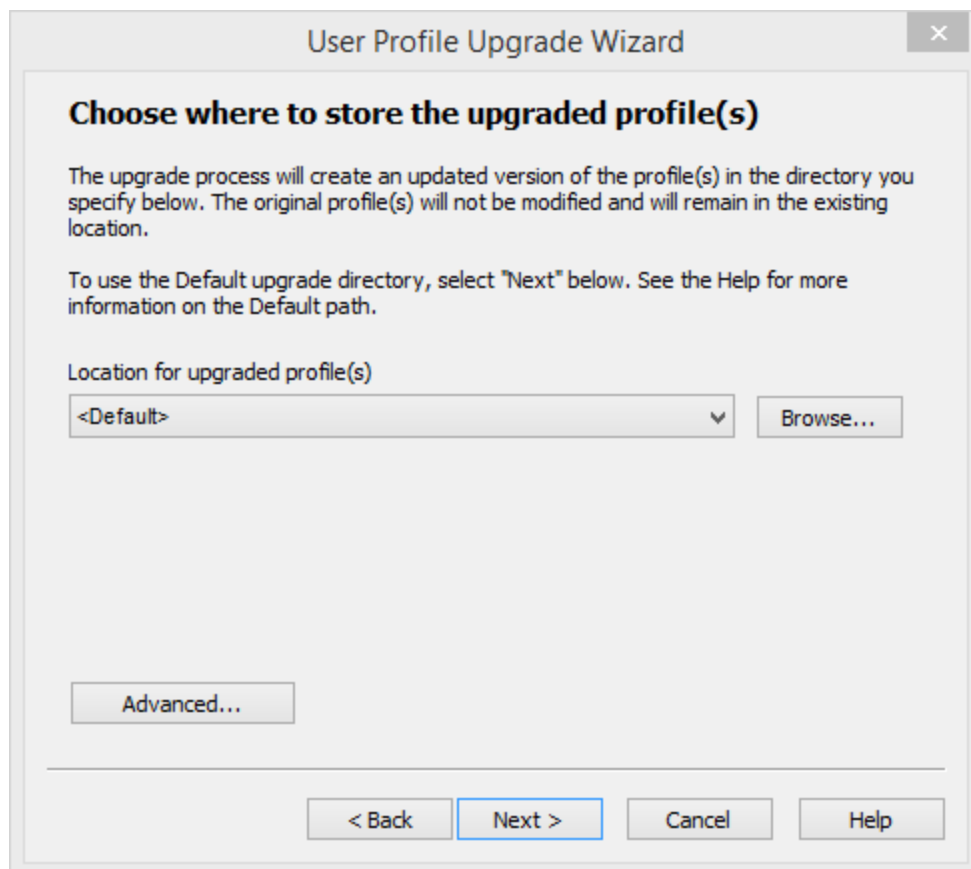
Click **Browse to add a profile** to add user profiles from other local folders or **Remove from list** to remove specific user profiles. Click **Next** to continue.

2. If you choose to upgrade only one user profile, the wizard will confirm the user to be upgraded and the estimated time required.

3. (Optional for non-Roaming users) On the **Choose where to store the upgraded profile(s)** page, under **Location for upgraded profile(s)**, choose the directory where you want to store upgraded user profiles. If no location is visible, click the **Browse** button and find the correct location.
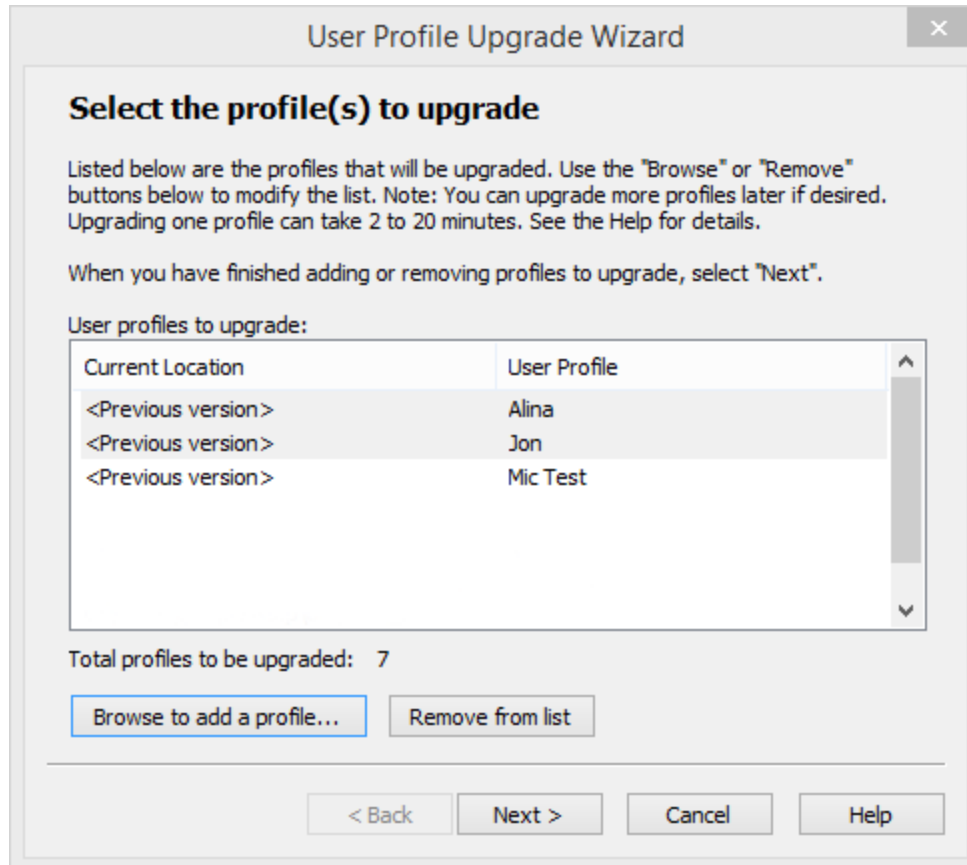
4. (Optional) Click **Advanced** if you would like to select a new Base Vocabulary or Acoustic Model for one or more of your upgraded user profiles.
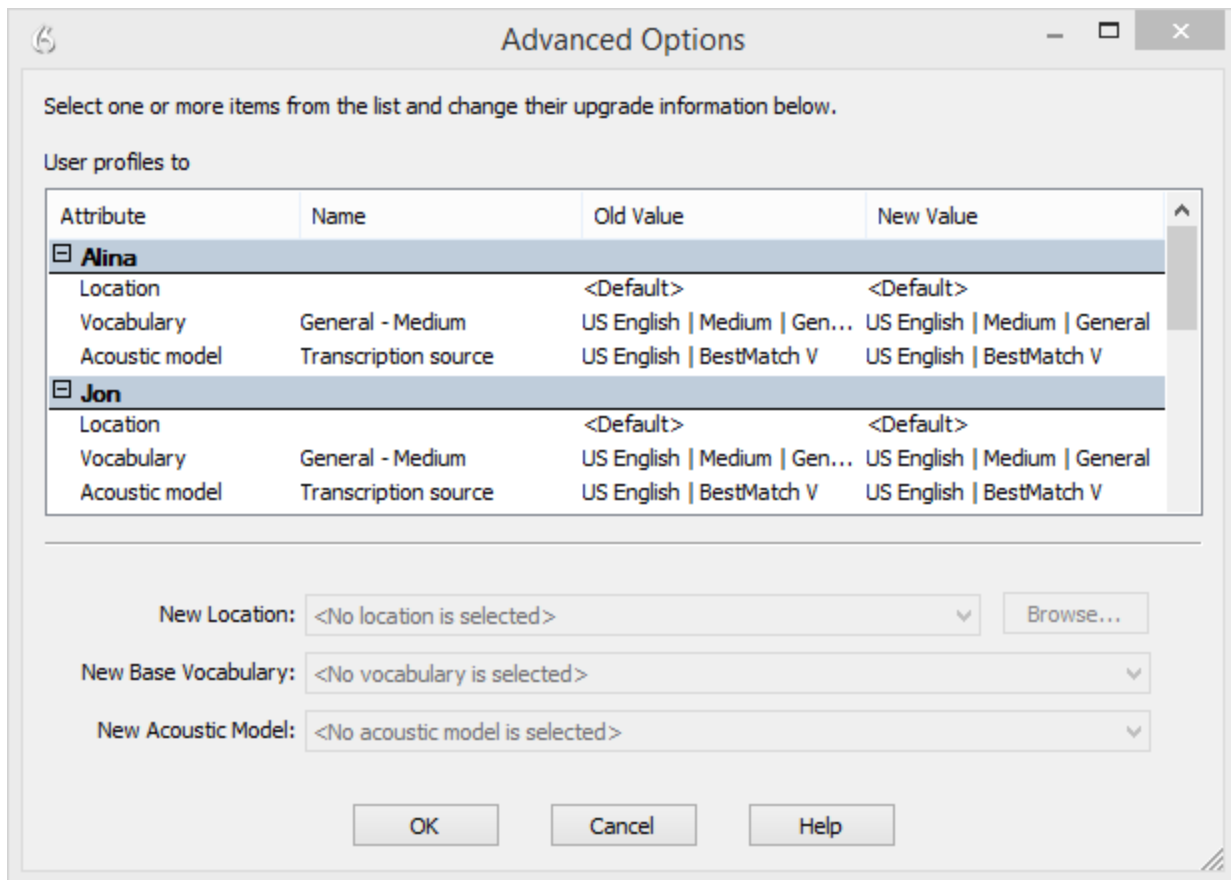
Click **OK** when you are done to return to the **Choose where to store upgraded profile(s)** page.

5. Click **Next** to proceed.

6. The **Begin profile upgrading** page displays the number of user profiles that the wizard is prepared to upgrade.

   Click **Begin upgrading** to start the upgrade process. The upgrade process can take 12-24 minutes or more per user profile, depending on the speed of the computer system. Click **Stop** at any time to interrupt this process.

7. Click **Finish** to complete the upgrading process and exit the **User Profile Upgrade Wizard**.

   The upgrade process creates new user profiles in the destination you selected.

Importing custom words and commands

If you are using Stand-Alone mode, you will need to import any custom words and commands your user profiles included. These are not automatically included in the user profile upgrade.

- To distribute words and commands to all users, you can use the `nsadmin.exe` tool. For details, see the nsadmin Help file available in the Help folder of your installation directory (by default, `C:\Program Files\Nuance\Nat-urallySpeaking14\Help`).

- To manually import words and commands to individual Dragon Clients, see "Exporting and importing a list of custom words and phrases" and "Exporting and importing commands" in the Dragon Help site.

Chapter 11: Managing Logs and Errors

Dragon Logs

Dragon Group generates logs that can help troubleshoot your system. 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.

NMS in the Cloud users can view additional logs in the Nuance Management Console (see the "View log files for a variety of products and product components" section in the *Nuance Management Server Administrator Guide*).

> **Note:** Dragon regularly purges all logs and does not automatically back them up. If you want to save your logs for longer periods, back them up to another location.

Dragon Client logs

The Dragon Client creates log files, `dragon.log` and `dgnsetup.log`, which you can view on the end-user's machine:

```
C:\ProgramData\Nuance\NaturallySpeaking14\logs\<WindowsUser>
```

You can also access this directory through a shortcut in the Start menu:

- Windows 7: Click **Start** > **All Programs** > **Dragon** > **Show Setup Log** or **Show Dragon Log**

- Windows 8.x: From the **Start** screen, click the down arrow to show all applications. Scroll to find **Dragon**, then find **Show Setup Log** or **Show Dragon Log**.

- Windows 10: Click **Start** > **All apps** > **Dragon**> **Show Setup Log** or **Show Dragon Log**

> **Note:** If you do not see the **Show Dragon Log** or **Show Setup Log** shortcuts in the **Start** menu, try logging out, then logging back in again.

The current Dragon log filename is `Dragon.log`. When this file exceeds 10 MB, it is appended with the date and time in the format `Dragon_YYYYMMDD_HHMMSS.log` and a new log file is created.

The hour is shown in 24-hour format. For example, `Dragon_20150820_155023.log` is the name of a log created on August 20, 2015 at 15:50:23 (or 3:50:23 PM).

Dragon stores the last 10 log files.

Manually creating a new Dragon log file

An administrator can start a new Dragon log file when Dragon starts.

1. Open text editing software such as Notepad. On Windows 7, Windows 8.x, and Windows 10, make sure you have administrator rights when you open the text editor (use the "Run as administrator" option to open the text editor).

2. In the text editor, navigate to the folder that contains the `nssystem.ini` file. The default location of the `nssystem.ini` file is:

   ```
   C:\ProgramData\Nuance\NaturallySpeaking14
   ```

3. In the text editor, open the `nssystem.ini` file.

4. In the `[Settings]` section, add the following line of text: `New Log On Startup=1`.

5. Save and close the `nssystem.ini` file.

6. To activate the setting, re-open the user profile.

Usability logs (Stand-Alone mode only)

You can set up Dragon to create a usability log that logs all menu commands, toolbar buttons, and voice commands that you use during a dictation session.

To set up a usability log:

1. With a user profile open, on the DragonBar, select **Tools** > **Options**.

2. Click the **Data** tab.

3. Click the **Advanced** button.

4. When the **Advanced** dialog box opens, check the **Create usability log** checkbox and click **OK** to return to the Data tab.

5. Click **Apply**, then click **OK** to close the Options dialog box.

By default, the log is located here:

```
C:\Users\<Windows_user>\AppData\Roaming\Nuance\NaturallySpeaking14
```

Handling Dragon Error Messages

When Dragon displays an error message:

1. Read the message carefully. It may give you enough information to determine what to do.

2. If you dictated text into your document, click **Close** to close the error message box and then save your document.

3. Do not save your user profile.

4. Copy the error message log file (`Dragon.log`) to a safe place. Technical Support may ask you to send this file for further study. In Dragon Group, the `Dragon.log` file is located in the following directory:

   `C:\ProgramData\Nuance\NaturallySpeaking14\logs\<WindowsUser>`

5. Exit Dragon and start it again. In some cases it may be necessary to restart your computer.

6. Insert your Dragon DVD into your DVD reader, run the installation program again, and choose the **Repair** option on the first screen of the Dragon setup program. After setup finishes, reinstall any Dragon patches that were previously installed.

7. If the error message does not provide enough information to determine what to do, search our website for information on the error message. You may find a solution that can save you time and trouble:

   http://www.nuance.com/product-support/default.asp?lang=us&prod=dn

Accessing the Dragon Knowledge Database

Solutions to known problems with Dragon are provided at the Nuance Knowledge Base, located at http://nuance.-custhelp.com/.

1. In the search field, type keywords related to your problem,

2. Click the magnifying glass to start the search.

For an Advanced Search, click **Advanced Search**, then fill in some or all of the following fields in the popup window that appears:

1. Select your product in the dropdown list in the **Limit by product** field.

2. Refine your product by version number and edition as needed (for example, **Dragon NaturallySpeaking** > **14** > **Dragon Professional**).

3. In the **Limit by Category** dropdown list, select a category to further refine the search criteria.

4. In the **Sort by direction** field, choose whether results should be sorted in ascending or descending order.

5. Click **Search**.

Chapter 11: Using Dragon over a remote desktop connection

This chapter contains information on setting up and using the Dragon client through a remote desktop connection.

Use Dragon through a remote desktop connection

Tasks to perform	Topic associated with the task
Overview of how client users can remotely connect to Dragon through a remote desktop connection.	Remote desktop connection support
Install Dragon on the server and install Dragon Client For Remote Desktop	Installing Dragon software on the server and the client
Set up the Windows server options	Configuring the Windows server
Set up client computers by setting audio policies and the Remote Desktop Connection 7.	Configuring the Dragon clients

Remote desktop connection support

You can use Dragon through a remote desktop connection with the following operating systems:

Server Operating Systems	Description	Client Operating systems
Windows Server 2008 R2 and Windows Server 2012 R2	Supports multiple client connections at the same time.	▪ Windows 10, (32-bit and 64-bit) ▪ Windows 8, (32-bit and 64-bit) ▪ Windows 7, (32-bit and 64-bit)
Windows 7 Ultimate and Enterprise Server	Supports only a single client connections at one time.	
Windows 10 Professional, Enterprise and Education	Supports multiple client connections at the same time.	
Windows 8 Professional and Enterprise	Supports multiple client connections at the same time.	
Windows Server 2012R2 and 2008	Supports multiple client connections at the same time.	

In order to transmit audio from the client computer to Windows Server 2008 R2, Windows Server 2012 R2, or Windows 7 Ultimate Server running Dragon Group, 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 Group on the server.

Support for dictation sources over a remote desktop connection

In Dragon Group, you can use the following dictation sources over a remote desktop connection:

▪ **USB microphones**

▪ **Other microphones**: Microphone plugged into Mic-In jack

▪ **Headset**: Andrea NC-181

▪ **Bluetooth**: Plantronics Calisto Bluetooth Headset

Using Dragon Group on Windows Server 2008 R2, Windows Server 2012 R2, or Windows 7 Ultimate Server:

- The Remote Audio suggested for the user profile will be the default microphone on your client computer.

- If you are using the Remote Application web interface - When you launch Dragon Group 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.

System Requirements for using Dragon through a remote desktop connection

▪ **Server Operating System**: Windows Server 2008 R2, Windows Server 2012 R2, or Windows 7 Ultimate Server Window Server 2008 R2 and Windows Server 2012 R2 support 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 10, 32-bit and 64-bit

  ▪ Windows 8.x, 32-bit and 64-bit

- Windows 7, 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 Group 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 the PoweMic

  - **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: http://support.microsoft.com/kb/969084

- **Network**:

  - 100 Mbps connection speed

  - Network bandwidth required per active user is 1.3 Mbps

Installing Dragon on the server and the client

To enable audio redirection through a remote desktop connection, and allow users to connect and use Dragon Group on Windows Server 2008 R2, Windows Server 2012 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:

1. Install Dragon on Windows Server 2008 R2, Windows Server 2012 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 and Windows Server 2012 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 Group with a remote desktop connection.*

3. Proceed to Configuring the Windows server.

Configuring the Windows server

1. Ensure the server computer meets the system requirements. See System Requirements for more information.

2. On Windows Server 2008 R2, Windows Server 2012 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 Configuring Remote Desktop Connection for Windows Server 2008 R2.

4. If you are using Windows Server 2012 R2, perform the steps in Configuring Remote Desktop Connection for Windows Server 2012 R2.

5. If you are using Windows 7 Ultimate Server, perform the steps in Configuring Remote Desktop Connection for Windows 7 Ultimate Server.

6. Optionally, you can publish all applications and EMRs on Windows Server 2008 R2, Windows Server 2012 R2, or Windows 7 Ultimate Server using Remote Application Manager. This provides full support for dictation and playback

7. If you are using Windows 10, see How to use Remote Desktop on the Microsoft site (http://windows.microsoft.com/en-us/windows-10/how-to-use-remote-desktop)

8. Proceed to Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring Windows Server 2008 R2

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**.

5. On the **Before You Begin** screen, click **Next**.

6. On the **Select Server Roles** screen, select **Remote Desktop Services**, click **Next**.

7. On the **Remote Desktop Services** screen, click **Next**.

8. On the **Select Role Services** screen, select **Remote Desktop Session Host**, click **Next**.
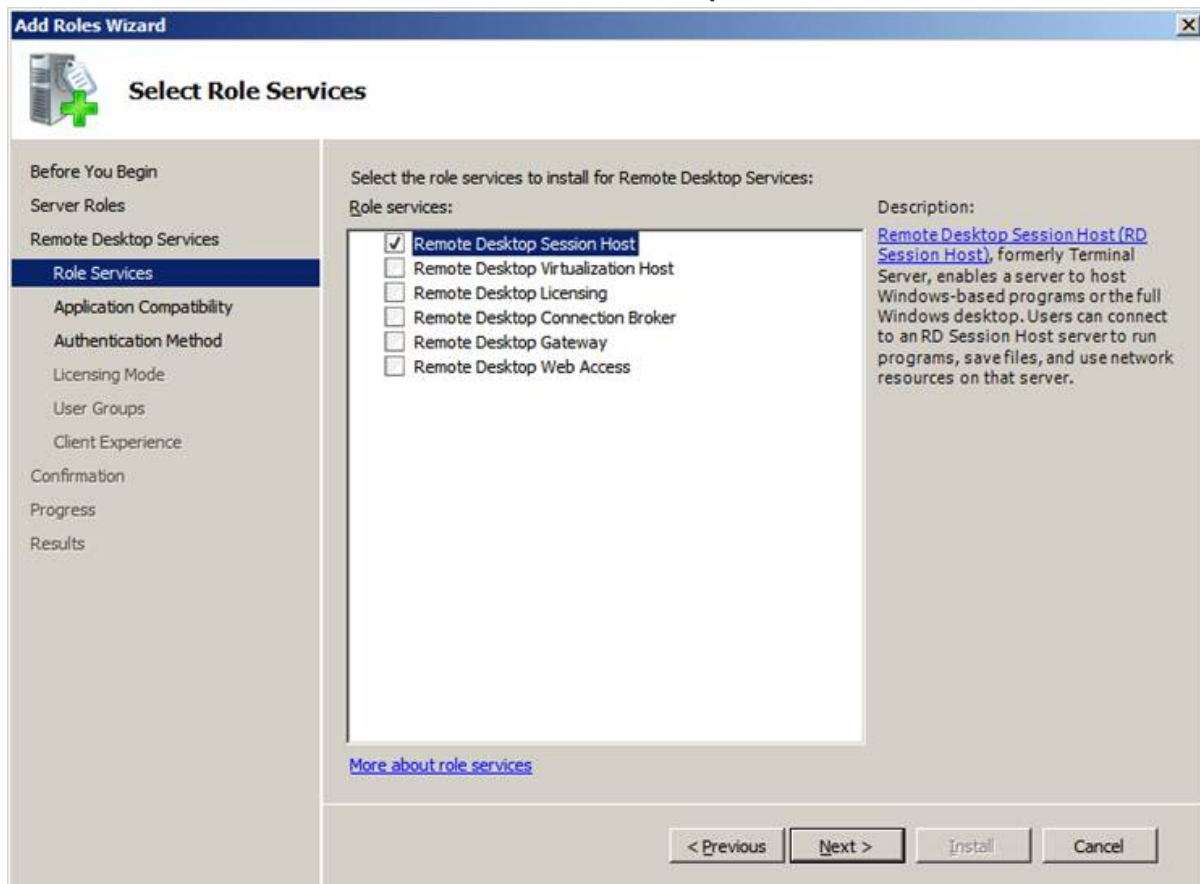
9. On the **Uninstall and Reinstall Applications for Compatibility** screen, click **Next**.

10. Select **Do not require Network Level Authentication** , click **Next**.
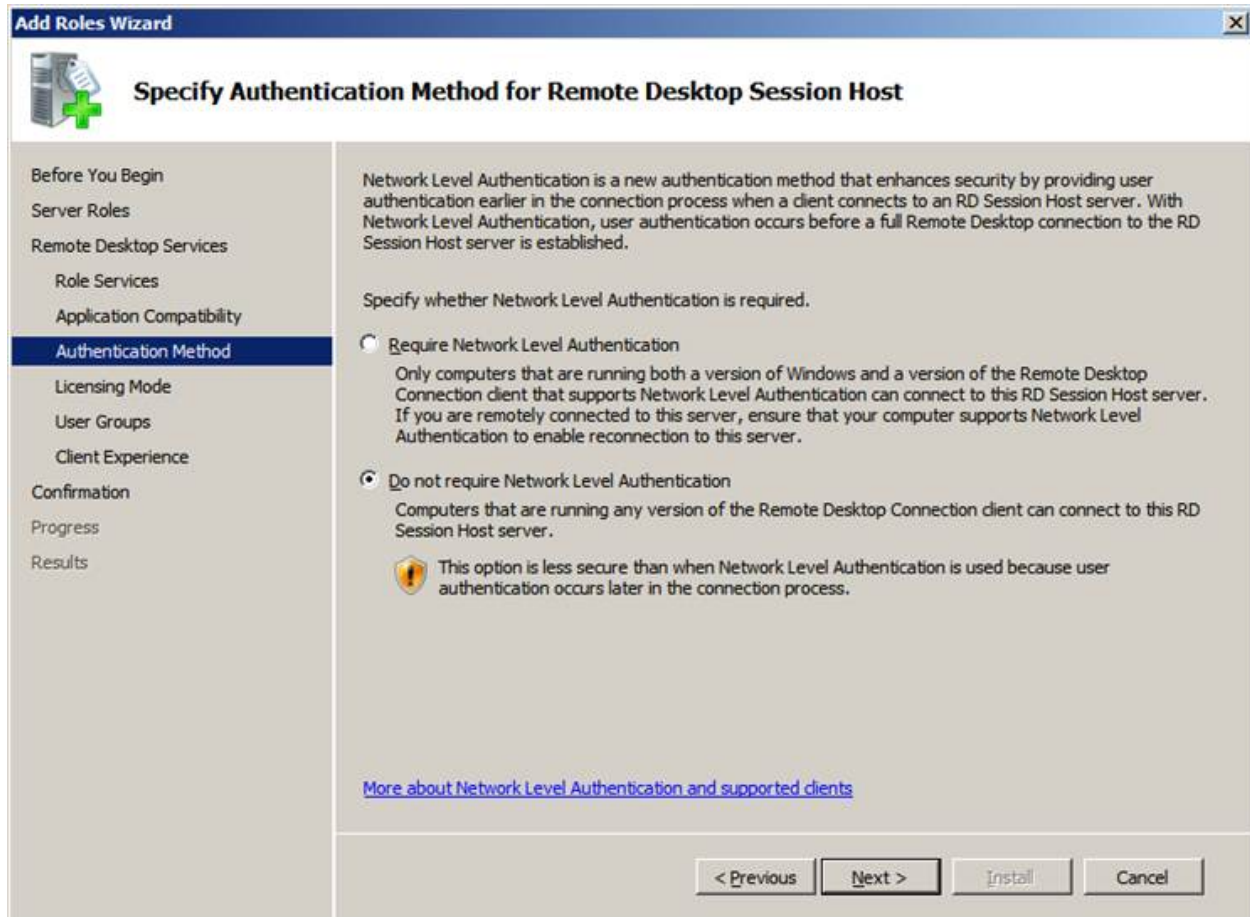
11. On the Specify Licensing Mode screen, click **Next**.

12. Click **Next**.

13. Select the **Audio and video playback** option and the **Audio recording redirection** option and click **Next**.
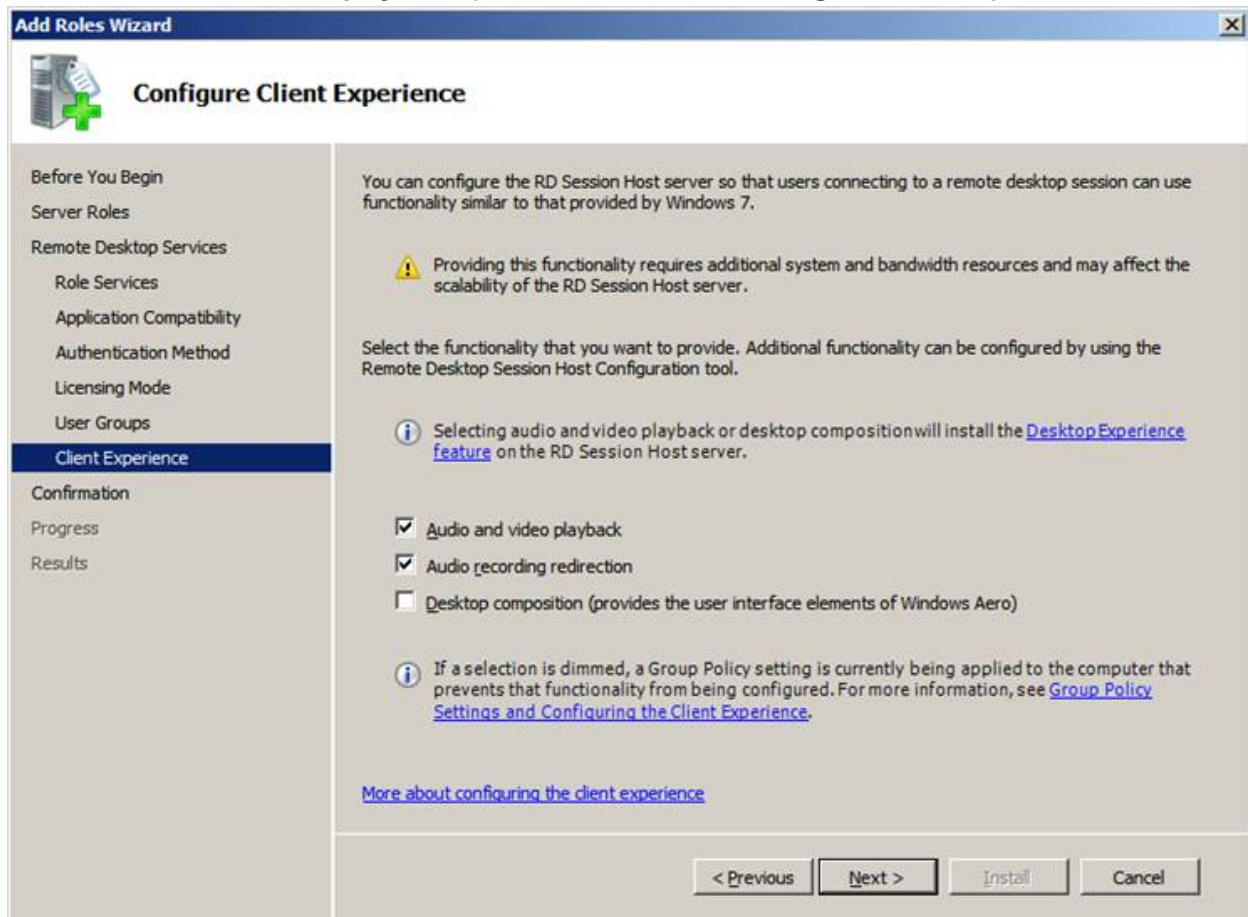
14. Confirm your selections, and click **Install**.
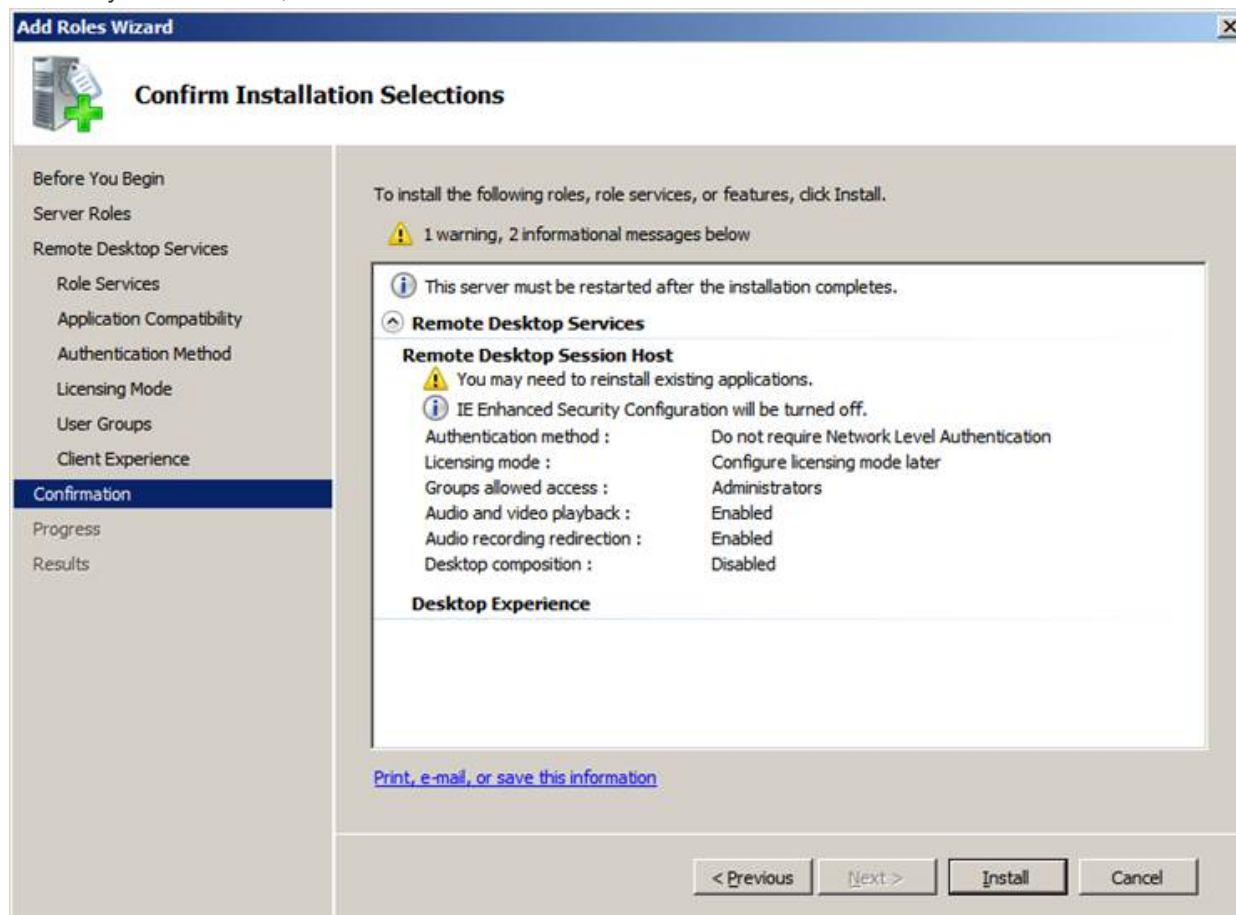
The **Installation Progress** screen display the status of the installation.

15. On the **Installation Results** screen, verify that the installation was successful. Click **Close**.

16. Restart the computer.

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 0x00000000
   ```

6. On the server, open the Control Panel.

7. Navigate to **System and Security** > **System**.

8. Select **Remote**.

80

9. Allow remote connections by choosing your preferred configuration.

10. Click **OK**.

11. Continue at step 5 in Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring Windows Server 2012 R2 Part 1

1. Open Remote Desktop Connection to the server or go directly to the server console.

2. Open the server, open the **Server Manager**.

3. On the Dashboard, select **Add roles and features** to open the **Add Roles and Features** wizard.

4. Click **Before You Begin** and click **Next**.

5. Select **Role-based or feature-based installation** and click **Next**
.
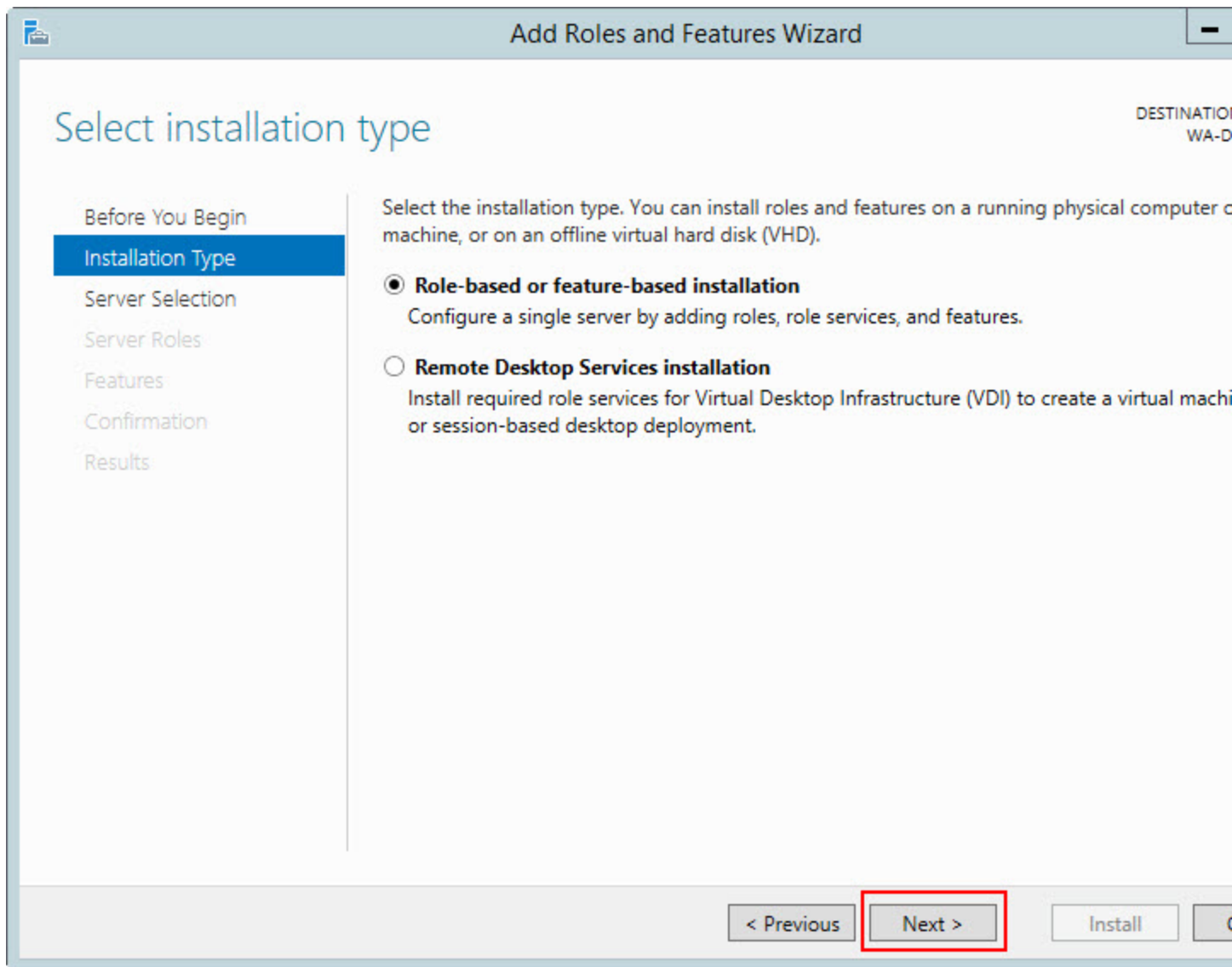
6. On the **Select destination server** screen, select **Select a server from the server pool**.Select the server and click **Next**
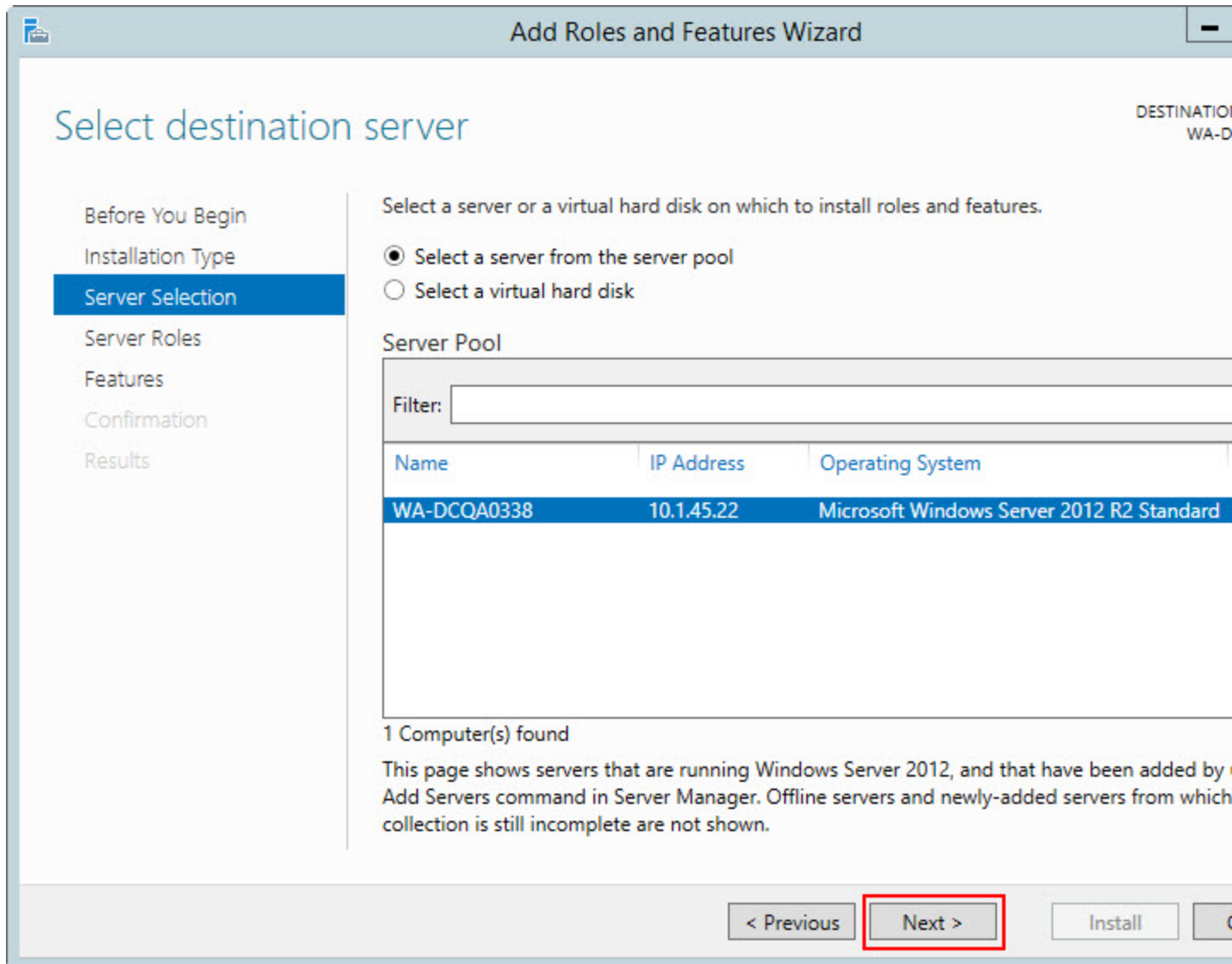
7. On the **Select Server Roles** screen, select **Remote Desktop Services**, click **Next**.
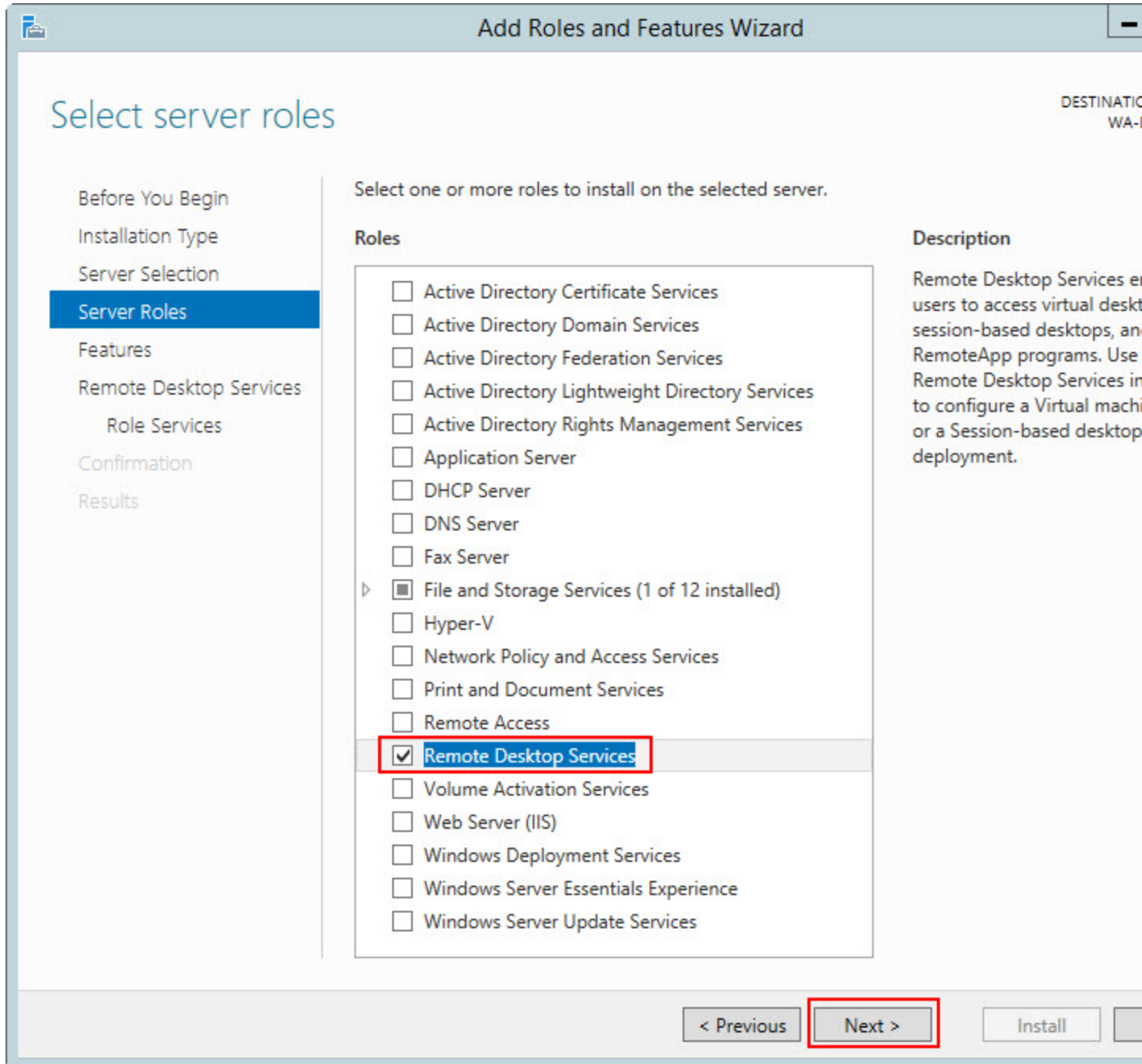
8. On the **Select features** screen, open the **Remote Server Administration Tools** submenu.

9. Open the **Role Administration Tools** submenu.

10. Open the **Remote Desktop Services Tools** submenu.

11. Select **Remote Desktop Licensing Tools** and click **Next**.

12. On the **Remote Desktop Services** screen, click **Next**.

13. On the **Select role services** screen, select **Remote Desktop Session Host**.

14. On the next screen, click **Add Features** and then click **Next**.
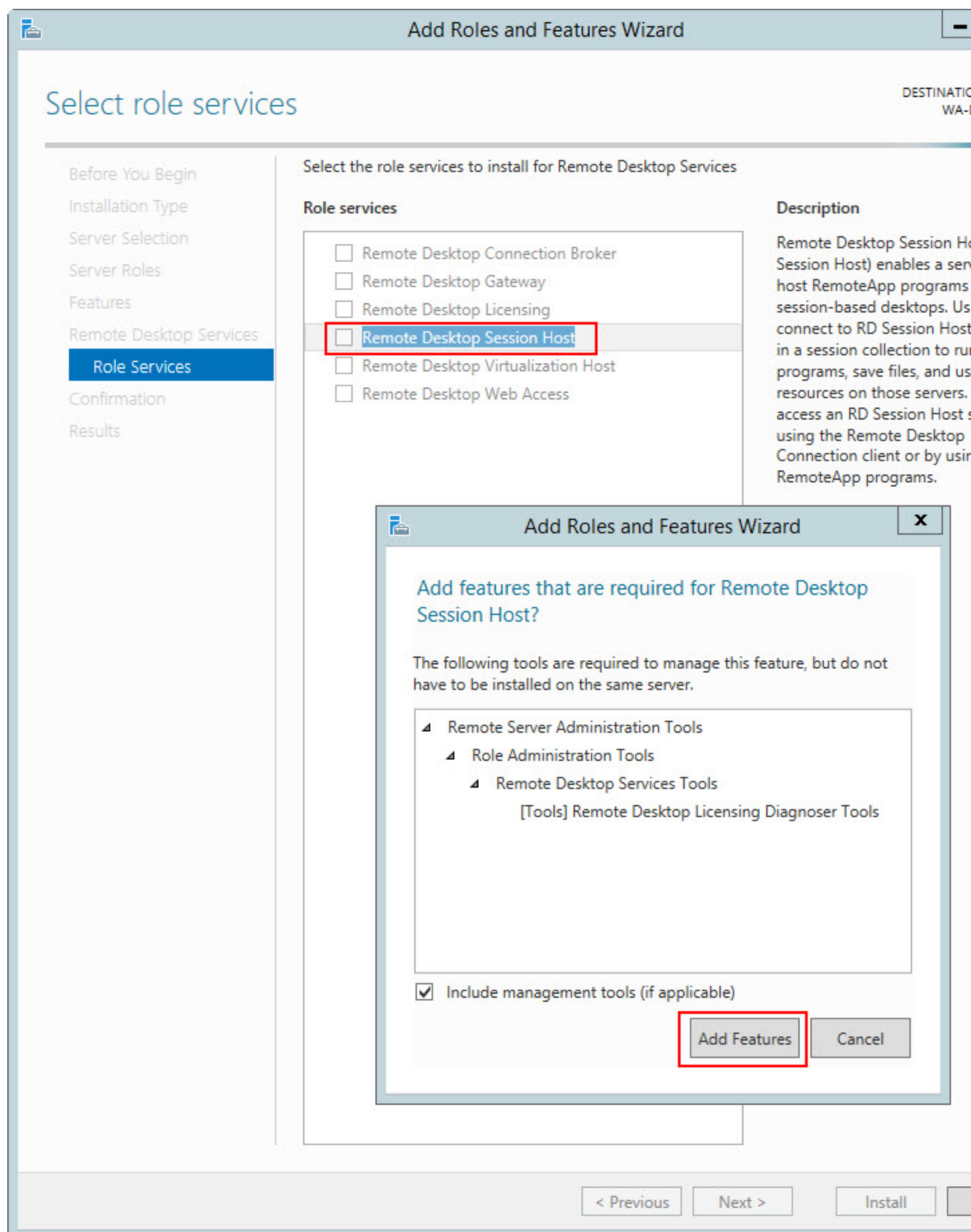
15. On the **Confirm installation selections** screen, check the **Restart the destination server automatically if required** option.

16. In the **Add Roles and Features** wizard, click **Yes**.

17. Confirm your selections, and click **Install**.

18. The **Installation Progress** screen displays that status of the installation.

19. On the **Installation progress** screen, verify that the installation was successful.

20. Click **Close**.
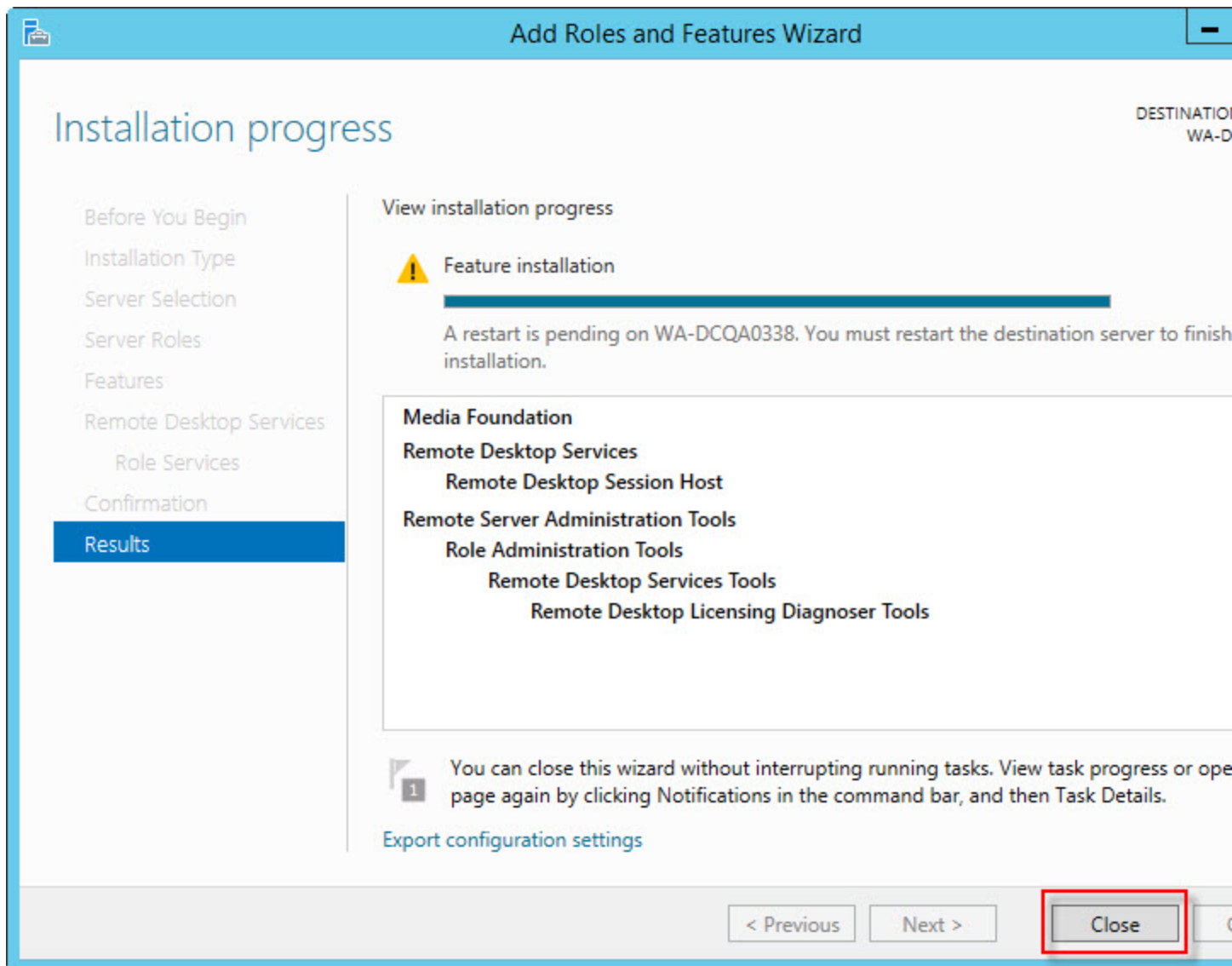
21. Restart the computer (even if the server was not restarted automatically).

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: right-click on the **Allow audio and video playback redirection** screen and choose **Edit**.

4. Select **Enabled** and click **OK**.

5. Launch regedit on the client PC and set the following registry setting to **0**:
    ```
    HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Terminal
    Server\WinStations\RDP-Tcp
    fDisableAudioCapture REG_DWORD 0x00000000
    ```

6. On the server, open the **Control Panel**.

7. Navigate to **System and Security** > **System**.

8. Select the **Remote settings** > **Remote** tab.

9. Allow remote connections by choosing your preferred configuration.

10. Click **OK**.

11. Continue at step 5 in Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring 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 Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring the Dragon clients

After you install Dragon Group 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 Group on the server.

1. Ensure the client computer meets the system requirements. See System Requirements for more information

2. On the client, plug in the microphone that you will use to dictate with Dragon Group. 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 http://sup-port.microsoft.com/kb/969084.

4. When you start Remote Desktop Connection 7, in the Remote Desktop Connection dialog box, click **Options**.
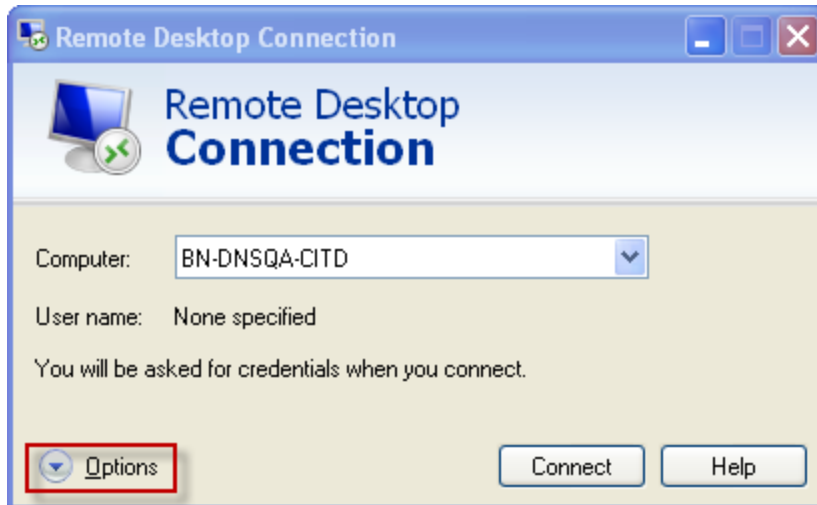
5. Select the **Local Resources** tab, click **Settings**.
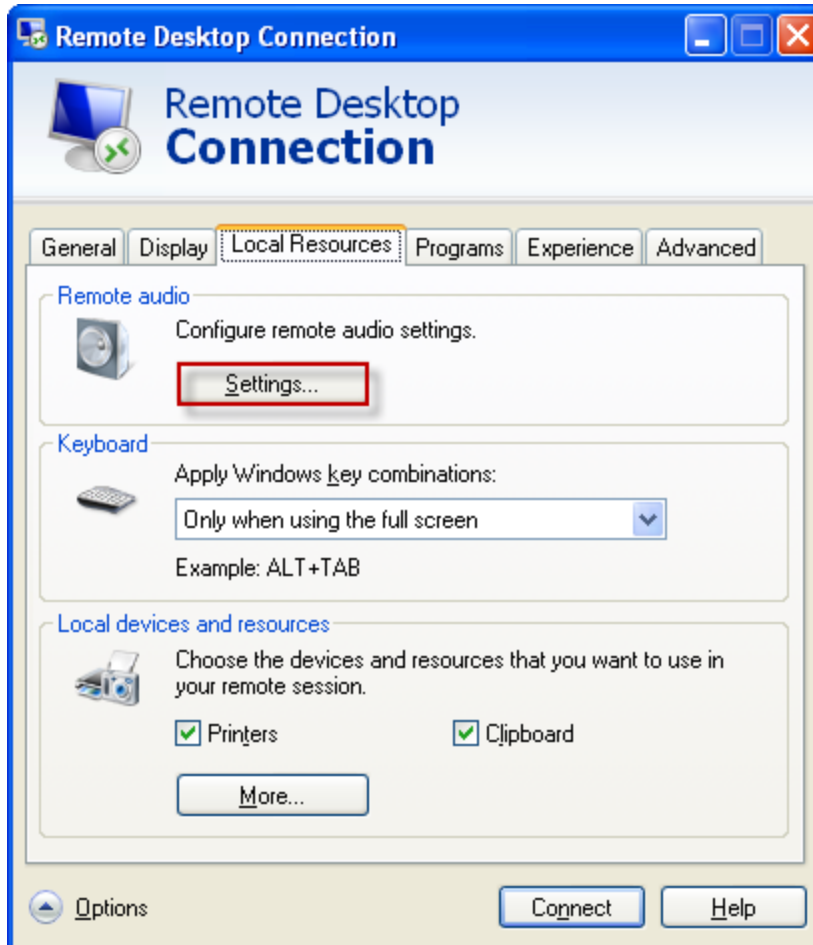
6. Select **Play on this computer** and **Record from this computer**, and click **OK**. Selecting these options enables audio support each time the user opens the remote connection to use Dragon Group on Windows Server 2008 R2 or Windows Server 2012 R2.
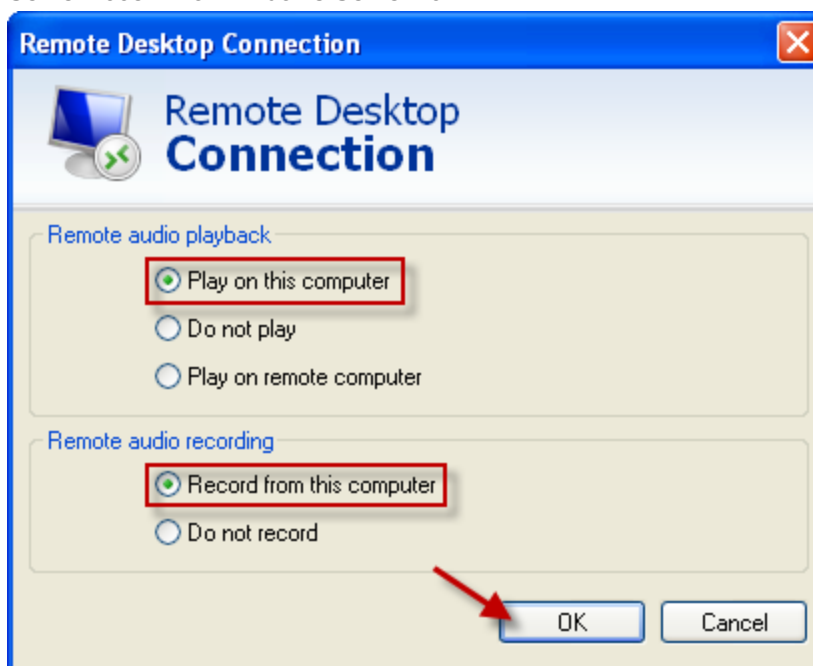
7. In the Windows sound settings, verify that Remote Audio device appears.
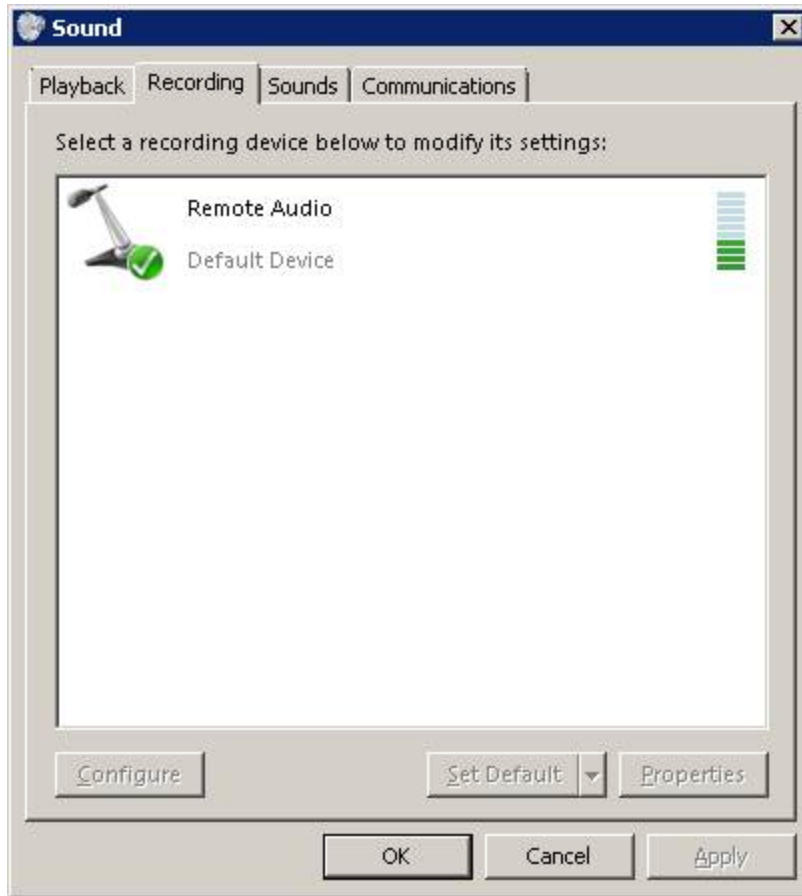
User Profiles and using Dragon through a Remote Desktop session

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 Group is installed on Windows Server 2008 R2, Windows Server 2012 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, Windows Server 2012 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 end-user's workstation, poor accuracy may result.

Appendix A: Options for MSI Installations

MSI Options for Dragon Installations

This section describes the `msiexec.exe` options that apply to Dragon Group. For more information on MSI options, refer to the Microsoft website: http://msdn.microsoft.com/en-us/library/aa367988(v=vs.85).aspx.

Notes:

- Launching `msiexec.exe /i "Dragon 14.msi" <PROPERTY>=<VALUE>` automatically sets the specified `<PROPERTY>` to `<VALUE>` and continues the installation. However, if you use `setup.exe` to install, you must put all `msiexec.exe` options in quotation marks after the /v option:

      setup.exe /v"<PROPERTY>=<VALUE>"

- Be sure that the values that you pass to the MSI are valid. Entering an invalid value can cause the installer to crash.

- Dragon command line options do not need to be prefaced by hyphens or slashes.

- In Dragon Group, the installation process does not present the QuickStart option. If you wish to enable this option, you can do so after Dragon is installed.

- Unless noted otherwise, all property values are in UPPERCASE.

Options	Description
`DEFAULTSINI="c:<path>\` `nsdefaults.ini"`	Indicates a default settings file (`nsdefaults.ini`) that the installer uses to change the product settings for all end-users at installation time. This file must be in an `.ini` file format; any settings you want to include must have a section name encased in square brackets as well as the value and data. If the section name is missing, the settings are not propagated on client computers. Generally, you should not edit the `nsdefaults.ini` file directly; instead, set defaults in Dragon's **Options** and **Administrative Settings** dialog boxes during your initial installation, then use the `nsdefaults.ini` from that installation. For details, see "Install Dragon on an Initial Computer and Choose the Default Settings" on page 27.
`ROAMINGUSERINI="c:<path>\` `roamingdef.ini"`	Indicates a default settings file (`roamingdef.ini`) used to configure Roaming network settings. For more information about Roaming user settings, see "Setting Roaming User Profile Options" on page 107.
`SERIALNUMBER=abcde-fgh-ijkl-` `mnop-qr`	A serial number is required for all installations. You must specify a valid serial number on the command line. **Note:** Specifying a serial number on the command line does not bypass the serial number checking during Setup.
`INSTALLDIR="<path to install>"`	Sets the installation directory to the specified location. **Note:** For an administrative installation, pass the `TARGETDIR` option instead of the `INSTALLDIR` option.

Options	Description
`REBOOT=ReallySuppress`	Prevents the computer where you are installing Dragon from rebooting automatically after the installation ends.
`SETDEFAULTS=0/1`	Sets the default state of the **Modify the application's settings for all users** checkbox in the Advanced dialog of the Installer (see page 28 for details). `0`: Checkbox is not selected; the installer will not display the Options dialog unless the user checks the box. `1`: (Default) Checkbox is selected; the installer will display the Options dialog when the installation process completes unless the user unchecks the box. **Note:** If you use the `/qn` switch, no dialogs will display during installation, even if you set them to display in the command line.
`SETADMINS=0/1`	Sets the default state of the **Modify the administrative settings** checkbox in the Advanced dialog of the Installer (see page 28 for details). `0`: Checkbox is not selected; the installer will not display the Administrative Settings dialog unless the user checks the box. `1`: (Default) Checkbox is selected; the installer will display the Administrative Settings dialog when the installation process completes unless the user unchecks the box. **Note:** If you use the `/qn` switch, no dialogs will display during installation, even if you set them to display in the command line.
`SETFORMATTINGS=0/1`	Sets the default state of the **Modify the formatting options for all users** checkbox in the Advanced dialog of the Installer (see page 28 for details). `0`: Checkbox is not selected; the installer will not display the Auto-Formatting dialog unless the user checks the box. `1`: (Default) Checkbox is selected; the installer will display the Auto-Formatting dialog when the installation process completes unless the user unchecks the box. **Note:** If you use the `/qn` switch, no dialogs will display during installation, even if you set them to display in the command line.
`PERIODIC_TASK=<tasks>;<admin>;` `<password>;<Day>, <hh:mm>`	Configures the Acoustic Model Optimizer, Language Model Optimizer and (**Stand-Alone only**) Data Collection tasks in the Scheduled Tasks tab of the Administrative Settings dialog.

Options	Description
	See "MSI Options for Scheduled Tasks" on page 102 for details.
REGION=<region>	Set the REGION to include with your installation. For English-language installations, available regions are: • United States (UnitedStates or US) • Canada (Canada) • United Kingdom (UnitedKingdom or UK) • Australia/New Zealand (Australia or NewZealand) • Indian subcontinent (IndianSubcontinent or Indian) • Southeast Asia (SoutheastAsia or Asia) To install all English-language regions, set REGION=All. Set REGION=NoEnglish or REGION=None if you do not wish to install any English-language regions.
ADDLOCAL=Feature1,Feature2,... or ADDLOCAL=ALL	Set the ADDLOCAL property to a comma-delimited list of features to be installed locally. See "Feature Variables to Set Through the ADDLOCAL or ADVERTISE Properties" on page 99 for a list of available features. To install all features locally (including user profiles), use ADDLOCAL=ALL.
ADVERTISE=Feature1,Feature2,...	Set the ADVERTISE property to a comma-delimited list of features to be available but not locally installed. The ADVERTISE option overrides the ADDLOCAL option. The best method for installing a particular set of features is to set the ADDLOCAL property to ALL and then set the ADVERTISE property to those features you do *not* want installed locally.
REINSTALL=Feature1,Feature2,... or REINSTALL=ALL	Set the REINSTALL property to a comma-delimited list of features to be reinstalled. To reinstall all features, use REINSTALL=ALL. If you set the REINSTALL property, you should also set the REINSTALLMODE property to indicate the type of reinstall to be performed. Note that even if REINSTALL is set to ALL, only those features that were already installed previously are reinstalled.
REINSTALLMODE={type of reinstallation to perform}	Set the REINSTALLMODE property to a string indicating the type of reinstall to perform. Options are case-insensitive and order-independent. For a list of available modes, see https://msdn.microsoft.com/en-us/library/windows/desktop/aa371182. The default is REINSTALLMODE=omus. The installer will overwrite files if they are missing or an older version, rewrite required registry

Options	Description
	entries, and reinstall all shortcuts and icons.
`REMOVEOLDPROD=1`	Set `REMOVEOLDPROD` to `1` to remove the old version of the product before installing the new version. You should on only use this option for major upgrades.
`/x<Product.msi|ProductCode>`	Uninstalls the currently installed version of Dragon. You are required to take this action during upgrading; however, you should be familiar with the entire upgrade procedure before proceeding with this option. See "Upgrading with msiexec.exe" on page 61 for applicable product codes.
`/L<parameter> "<full path>\logfile.log"`	Creates an installation log in the specified location. To log all information, including verbose output, enter `/L*v`. You can send this log to technical support should any issues arise. For available parameters, see https://technet.microsoft.com/en-us/library/cc759262(v=ws.10).aspx#BKMK_SetLogging
`/q<parameter>`	Sets the user interface level for the installation. For an initial installation, pass the `/qf` option to ensure that you see GUI prompts that will help you diagnose any issues that arise. Use `/qn` for a silent installation. For available parameters, see https://technet.microsoft.com/en-us/library/cc759262(v=ws.10).aspx#BKMK_SetUI
`NAS_ADDRESS="<Production server URL>"` (NMS Installations only)	Indicates the NMS address that the Dragon Client connects to when the user logs on. You should have received this address in your welcome email.
`NAS_WINDOWS_LOGIN=0/1` (NMS Installations only)	Sets the Login Options radio button state in the NMS tab of the Administrative Settings dialog. **Note:** Before you enable Active Directory single sign on, you must make additional configuration changes in order for the feature to work. See "Setting up the Nuance Management Server to Run Active Directory Services" on page 14 for more information. `0`: (default) Disables Active Directory single sign-on; sets radio button to **Provide a login name and password**. `1`: Enables Active Directory single sign-on; sets radio button to **Use Windows single sign-on**.

Sample command lines

msiexec.exe command line

```
msiexec.exe /i "Dragon 14.msi"
SERIALNUMBER=#####-###-####-####-##
DEFAULTSINI="C:\<full_path>\nsdefaults.ini"
INSTALLDIR="C:\Program Files\Nuance\NaturallySpeaking14"
PRODUCTUPDATEFLAG=1 REBOOT=ReallySuppress
PERIODIC_TASK="aco|lmo;admin;pswd;Mon, 01:00|Mon, 06:00"
ADDLOCAL=TTSENX,NatSpeak,ENUGeneral
/L*v "C:\Logs\logfile.log" /qn
```

setup.exe command line

```
setup.exe /s /v"SERIALNUMBER=#####-###-####-####-##
DEFAULTSINI=\"C:\<full_path>\nsdefaults.ini\"
INSTALLDIR=\"C:\Program Files\Nuance\NaturallySpeaking14\"
PRODUCTUPDATEFLAG=-1 REBOOT=ReallySuppress
PERIODIC_TASK="aco|lmo;admin;pswd;Mon, 01:00|Mon, 06:00"
ADDLOCAL=TTSENX,NatSpeak,ENUGeneral
/L*v C:\Logs\logfile.log /qn"
```

Feature Variables to Set Through the ADDLOCAL or ADVERTISE Properties

When specifying features on the command line:

- If a feature does not exist in a particular edition or language, overriding its default property has no effect.
- Some features (such as Text-to-Speech) have sub-features. Setting these features on the command line automatically turns on the properties of all sub-features, unless you specify an additional override for those sub-features.

You can specify any of the features in the table below using `ADDLOCAL` and `ADVERTISE` properties on the command line. For example:

```
ADDLOCAL=TTSENU,NatSpeak,ENUGeneral
```

Feature	Sub-features
NatSpeak **Note:** Required in `ADDLOCAL`; if not included, the installation will fail.	None
Samples (Sample Commands file)	None
TTS (Text-to-Speech)	- `TTSENU` (US English Text-to-Speech) - `TTSENG` (British English Text-to-Speech) - `TTSDEU` (German Text-to-Speech) - `TTSESP` (Spanish Text-to-Speech) - `TTSFRA` (French Text-to-Speech) - `TTSITA` (Italian Text-to-Speech) - `TTSNLD` (Dutch Text-to-Speech)
Tutorial	- `TutENX` (English Tutorial) - `TutDEU` (German Tutorial) - `TutESP` (Spanish Tutorial) - `TutFRA` (French Tutorial) - `TutITA` (Italian Tutorial) - `TutNLD` (Dutch Tutorial)

Speech options

Feature	Sub-features: Vocabularies	Supported accents
ENU (US English)	• `ENUGeneral` (US English General Medium, US English Empty Dictation, US English Commands Only) • `ENULegal` (US English Legal Large) • `ENUGenSvc` (US English Large General)	• Standard • Australian accented English • British accented English • Indian accented English • Pakistani accented English • Southeast Asian accented English • Southern US • Spanish accented English • Teens • Accent not otherwise specified
Canada (Canadian English)	• `CanadaGeneral` (Canadian English General Large)	• Standard • Australian accented English • British accented English • Indian accented English • Pakistani accented English • Southeast Asian accented English • Southern US • Spanish accented English • Teens • Accent not otherwise specified
ENG (UK English)	• `ENGGeneral` (UK English General Large, Empty Dictation General, Commands Only)	• Standard • Australian accented English • Indian accented English • Southeast Asian accented English • Accent not otherwise specified
DEU (German)	• `DEUGeneral`(German General Large, Swiss German General, Empty Dictation General) • `DEULegal` (German Legal)	N/A
ITA (Italian)	• `ITA` (Italian General Large and Italian Empty Dictation General Large)	N/A
NLD	• `NLDGeneral` (Dutch General Large and Dutch Empty Dictation	N/A

Feature	Sub-features: Vocabularies	Supported accents
(Dutch)	General Large)	
FRA (French)	• `FRAGeneral` (French General Large, French Empty Dictation General Large)	N/A
ESP (Spanish)	• `ESP` (Latin American Spanish General Large, Latin American Spanish Empty Dictation General Large, Castilian Spanish General Large)	N/A

MSI Options for Scheduled Tasks

> **Note:** Take the following actions on the client computer, not on the computer where you performed the initial installation and configured default option settings for end-users.

You can include an additional option on the command line to run one or more of the following tasks on a particular schedule:

- **Acoustic model optimization (ACO)** — This task optimizes the acoustic models used to interpret the end-user's speech. You can set a particular date and time for this optimization to occur. When a speaker is new to Dragon, you might want to run the optimization more often.

- **Language model optimization (LMO)** — This task optimizes the language model (vocabulary files) used to help recognize words that the end-user speaks. The model incorporates data from the end-user's speech into the language model he or she is using, customizing the model for that user profile.

- **Data collection (DC)** — This task automatically collects data that helps improve Dragon's ability to recognize speech. You can choose to allow this data to be sent back to Nuance over the Internet on a particular schedule or choose not to send the data. This process does not collect your personal information. Data collection is available in non-US English versions of Dragon Group.

> **Note:** When NMS is enabled, you cannot schedule Data Collection tasks on the Dragon Client machines. NMS administrators can schedule Data Collection in the NMC. See "Turning on data collection for your site" in the *Nuance Management Server Administrator Guide* for details.

You can schedule the above tasks and turn them on or off by passing an option called `PERIODIC_TASK` to the MSI installer.

First, set `PERIODIC_TASK` to a string containing short acronyms for the types of tasks, separated by vertical bars:
`aco | lmo | dc`

If you do not pass the acronym for a feature, that feature is set to its default.

Next, the string for `PERIODIC_TASK` should include the administrator login and password, followed by the schedule for each task, in the order that they occur in the string, separated by vertical bars.

- Enter the day(s) of the week for each task using three-letter abbreviations (`Mon`, `Tue`, etc.).

- Enter the hour using a 24-hour clock in the format `hh:mm` (`05:00`, `18:30`, etc.).

For example, the string below sets the schedule for Acoustic Model Optimization to Mondays at 1 AM and the Language Model Optimization to Mondays at 6 AM:

```
PERIODIC_TASK="aco|lmo;admin;pswd;Mon, 01:00|Mon, 06:00"
```

The task runs once a week on the day and time indicated. If you omit the `Day`, the task runs every day at the time given. Because no schedule is specified for Data Collection, the default schedule will be used (Stand-Alone only).

Default Schedules

- Acoustic model optimization (`ACO`) — Every day, 3 AM

- Language model optimization (`LMO`) — Every day, 2 AM

Editing Miscellaneous and Scheduled Task Settings in nsdefaults.ini

Several settings from the Miscellaneous and Scheduled Tasks tabs of the Administrative Settings dialog box can be modified in the `nsdefaults.ini` file you created in "Initial Installation of the Dragon Client" on page 26. You can then pass the revised file to the `DEFAULTSINI` option (see "Install the Same Dragon Configuration on Multiple Computers" on page 37).

> **Note:** Many of the settings below are not available when NMS is enabled in the Dragon Client. NMS administrators can control these settings in the NMC.

Options	Description	UI
`AO Archive Time Limit` (**Stand-Alone only**)	Maximum audio archive size in minutes. The same option in the `options.ini` file for a particular end-user contains the size of the current audio archive for that end-user. Default max. is 3600000 minutes.	Archive Size dialog box, displaying the range of audio archive sizes
`Disable command changes for restricted users=0/1`	Turns on or off the option that lets non-administrative end-users add or modify commands.	**Miscellaneous** tab: **Do not allow restricted users to add or modify commands** checkbox
`Disable vocabulary changes for restricted users=0/1` (**Stand-Alone only**)	Turns on or off the option that lets non-administrative end-users modify vocabularies.	**Miscellaneous** tab: **Do not allow restricted users to modify vocabularies** checkbox
`Global Enable Pause Results=0/1` (**Stand-Alone only**)	Turns on or off recognition when the speaker pauses.	**Miscellaneous** tab: **Record wave data between utterances** checkbox
`Custom Directory=<full path>` (**Stand-Alone only**)	Sets the location of the Data Distribution directory used by the Data Distribution Tool or the `nsadmin` command.	**Miscellaneous** tab: **Data Distribution location** field
`No Dictation=0/1`	When No Dictation is on (set to `1`) the end-user cannot dictate, but can correct dictation; used to designate an end-user as a transcriptionist.	**Miscellaneous** tab: **Correction Only Mode** checkbox
`Global MyCommands MacroRecorder=0/1` (**Stand-Alone only**)	Allows or does not allow the end-user to modify Macro Recorder commands. The end-user can use Macro commands, even when not allowed to modify them.	**Miscellaneous** tab: **Disable use of Macro Recorder commands** checkbox
`Global MyCommands StepByStep Scripting=0/1`	Allows or does not allow the end-user to modify Step-by-Step commands. The end-user can use Step-by-Step	**Miscellaneous** tab: **Disable use of Step-by-Step commands** checkbox

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Options	Description	UI
(**Stand-Alone only**)	commands, even when not allowed to modify them.	
`Global MyCommands VBA Scripting=0/1` (**Stand-Alone only**)	Allows or does not allow the end-user to modify Advanced Scripting commands. The end-user can still use Advanced Scripting commands, even when not allowed to modify them.	**Miscellaneous** tab: **Disable use of Advanced Scripting commands** checkbox
`enx ACO uses Auto Accent AM selection=0/1` (**Stand-Alone only**)	When set to `1`, the Acoustic Optimizer engine can automatically select an acoustic model that it believes is more suited to your speech. To avoid having this switch occur, set the option to `0`.	**Miscellaneous** tab: **Disable automatic acoustic model selection in Acoustic Optimizer** checkbox
`Data Collector Batch Mode=0/1` (**Stand-Alone only**)	When set to `1`, turns on a process that automatically collects data to help improve speech recognition in the future. The process sends recorded dictation and the corresponding text to Nuance over the Internet, but does not send any personal information. Collecting data for Nuance is optional.	**Scheduled Tasks** tab: **Enable scheduled Data Collection** checkbox
`Allow Users to Optimize=0/1`	When set to `1`, automatically runs an optimization process on speech recognition for the currently open user profile.	**Scheduled Tasks** tab: **Enable scheduled Accuracy Tuning** checkbox
`Allow Users to Configure Tasks=0/1`	When set to `1`, allows end-users to set the schedule for accuracy tuning and (for Stand-Alone users) data collection tasks. Otherwise, these tasks take place on a default schedule.	Let the user choose when to run Accuracy Tuning and Data Collection

Extracting MSI/MST Files from the Dragon setup.exe

Some minor releases of Dragon do not include an MSI file. Instead, the file is part of the `setup.exe` file. You can run silent installations from the command line with `msiexec.exe` or `setup.exe` – you don't need to extract the `.msi` and `.mst` files. Use the following information if you are comfortable using `.msi` installers.

> **Note:**
> When you are using the `setup.exe` method, you must ensure that all flags/properties (`SERIALNUMBER`, `DEFAULTSINI`, `/qn`, etc.) are all with in the same quotes, directly after `/v`, without a space.

Using `.MST` files, you can tailor the MSI installation without changing the `setup.exe` file that Nuance provides.

The following sample command line extracts the `Dragon 14.msi` file and the `.mst` files used for installing Dragon:

```
setup.exe /a /s /v"EXTRACTFILES=c:\temp\MSIfiles /qn"
```

Use the options below to extract `.msi`/`.mst` files from `setup.exe`. These options do not install any files, but rather extract an installable set of files into the server directory you specify. You can then use the extracted `.MSI` and `.MST` files in a command line to install Dragon.

| Option	Description
`/a`	An administrative installation installs a source image of the application onto the network. For details, see https://msdn.-microsoft.com/en-us/library/aa367541(v=vs.85).aspx.
`/v"<msiexec options>"`	Passes `msiexec` options to Windows Installer. See "MSI Options for Dragon Installations" on page 94 for details. This option is required when extracting the `.msi` files.
`EXTRACTFILES=C:\<fullpath>\`	Indicates the directory where the extracted `.msi`/`.mst` files are to be written. Enclose long path names containing spaces in quotation marks (be sure to escape the each quotation mark with a backslash: `\"`). This property is required to extract the `.msi` files. If the directory you specify does not exist, the installer creates it. Here is a sample command line to extract `.msi` files from a single executable: ```setup.exe /a /s /v"EXTRACTFILES-S=c:\temp\msifiles"```
`/l<Windows Language Code>`	Creates an MST file for the language specified (for example, `1031.mst`). The language codes supported for installing Dragon are: 1031=German 1033=English 1034=Spanish 1036=French 1040=Italian 1043=Dutch

Appendix B: Stand-Alone Mode Installation Options

Setting Roaming User Profile Options

Use the following steps to create a `roamingdef.ini` file to be used for an MSI installation where the Roaming feature is enabled:

1. Install Dragon on a computer with Windows administrator privileges (see "Initial Installation of the Dragon Client" on page 26).

2. In the Administrative Settings dialog box, accessed during installation or via the `natspeak.exe` commands ("Natspeak.exe Command Line Options" on page 31), click on the Roaming tab.
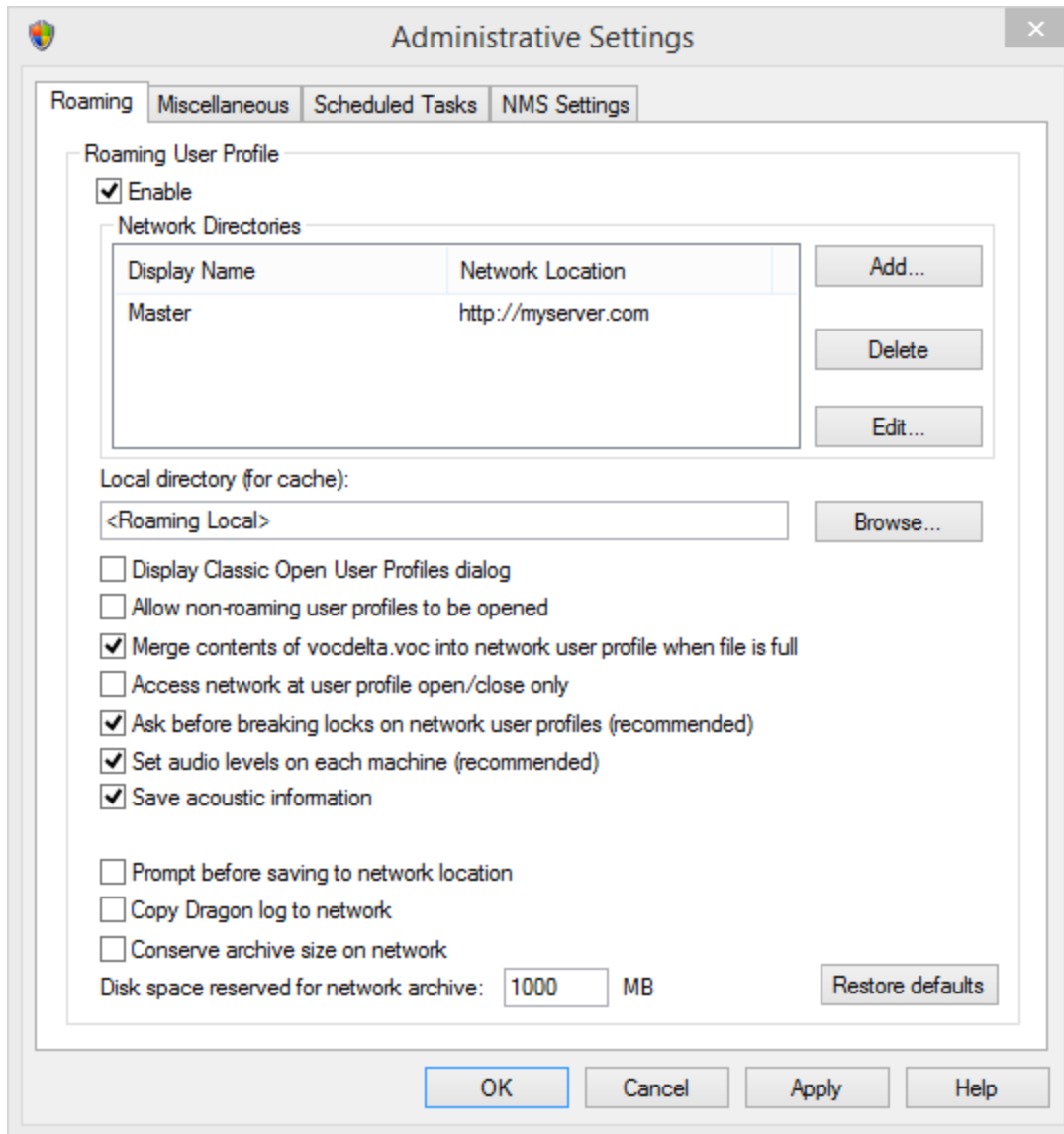
3. Enable the Roaming feature options required in your environment. You must include the Master Roaming user profile location, set in the **Network Directories** field, and any necessary HTTP or HTTPS settings. For details on configuring the Roaming feature, see "Administrative Settings dialog box – Roaming tab" in the Dragon Help site.

4. Test these settings to make sure the Roaming user profile connection works.

5. Configure settings in additional tabs as needed.

6. Save your settings by closing Dragon.

7. Copy the encrypted `roamingdef.ini` or `roaming.ini` file (use whichever file is newer) and the `nsdefaults.ini` file created by this installation of Dragon to a separate location. By default, the `.ini` files are located in:

       C:\ProgramData\Nuance\NaturallySpeaking14

Understanding Roaming User Settings in nsdefaults.ini and roamingdef.ini

The settings below were created when you configured Roaming in the previous topic.

Roaming options set in nsdefaults.ini

You can edit these settings directly in the `nsdefaults.ini` file.

Option	Description and UI equivalent
`Roaming User On=0/1`	**Enable** checkbox: Turns the Roaming feature on or off. Default `0` (unchecked) = Off
`Roaming User Local Cache Directory="<existing directory>"`	**Local directory (for cache)** field: Sets the location of the local copy of the Roaming user profile. The default location is: `C:\ProgramData\Nuance\Nat-urallySpeaking14\RoamingUsers\`
`Open User Large Collection=0/1`	**Display Classic Open User Profiles dialog** checkbox Default `1` (unchecked) = Off
`Roaming User Restrict Local User Access=1/0`	**Allow non-Roaming user profiles to be opened** checkbox: Permits non-Roaming user profiles to be opened when the Roaming feature is active. Default `1` (unchecked) = Access restricted to Roaming user profiles only. This setting can prevent end-users from accidentally selecting a non-roaming (local) user profile.
`Roaming User Incorporate Voc Delta=0/1`	**Merge contents of vocdelta.voc into network user profile when file is full** checkbox: When the `vocdelta.voc` file reaches 90% of its maximum size (1 GB), incorporates the contents of the local `vocdelta.voc` file into the Master Roaming user profiles (acoustic model for the user profile), without running the Acoustic and Language Model Optimizer. After it incorporates the contents of the file into the Master Roaming user profile, it clears that data from the local user profile, where new data is pulled from subsequent dictation. If the data is being incorporated when you open a Roaming user profile, the process can be time consuming. Default `1` (checked) = On **Note:** Dragon does not display a message when the `vocdelta.voc` file reaches 90% of its maximum size.
`Roaming User Limited Network Traffic=0/1`	**Access network at user profile open/close only** checkbox: Synchronizes the Master and local Roaming user profiles *only* when an end-user opens or closes the profile. This includes the changes an end-user makes locally from the Options dialog box. Default `0` (unchecked)= Off Excessive network slowdowns can be alleviated by checking this option because it limits multiple interim synchronizations of Local and Master Roaming user profiles.

Option	Description and UI equivalent
`Roaming User Always Break Lock=0/1`	**Ask before breaking locks on network user profiles (recommended)** checkbox: Produces a prompt that states the user profile is locked and asks you to override the lock preventing users from opening a Roaming user profile that is already in use. Network problems can cause a lock to become "stuck" and not release. Default `0` (checked) produces a prompt. A setting of `1` breaks the lock automatically without producing a prompt.
`ASW Override=0/1` (ASW is short for Audio Setup Wizard)	**Set audio levels on each machine** checkbox: Runs a Volume and Quality Check on the microphone each time you open a Roaming user profile. This setting affects all end-users. Turn this option on if your end-users experience reduced accuracy because of differences in the microphone, sound card, and ambient sound levels at different locations. Default `0` (checked) = On
`Roaming ASW Override=0/1`	**Set audio levels on each machine** checkbox: Runs a Volume and Quality Check on the microphone each time you open a Roaming user profile. Set to `1` if the Roaming feature is enabled and **ASW Override** is `1`. **ASW Override** and **Roaming ASW Override** should always have the same setting.
`Roaming User Save Acoustics =0/1`	**Save acoustic information** checkbox: Sets whether acoustic adaptations made during a dictation session are saved. Default `1` (checked) = On: Master user profile acoustic optimization applies the acoustic adaptation data from dictation sessions to the acoustic model for the profile. When set to `0`, the `.usr` and `.sig` files created during dictation are not saved. Master user profile acoustic optimization does not apply the acoustic adaptation data from dictation sessions to the acoustic model for the profile.

Option	Description and UI equivalent
`Roaming User Copy Dragon Log=0/1`	**Copy Dragon log to network** checkbox: Copies the `dragon.log` file from the Local Roaming user profile location to the Master Roaming user profile location at the same time that the program synchronizes the local and the Master Roaming user profiles. Default `0` = Off
`Roaming User Do Not Copy Dra Files=0/1`	**Conserve archive size on network** checkbox: Controls files available to the Acoustic Optimizer during synchronization. Default `0` (unchecked) = Off; Acoustic data files from the latest dictation session are available to the Acoustic Optimizer when the program synchronizes the local and Master Roaming user profiles. Turn this option on to prevent the transfer of acoustic optimization data to Local user profiles.
`Roaming User Max Container Size=1000 MB`	**Disk space reserved for network archive** field: Controls the maximum size for each container directory in the Master Roaming user profile directory. Default = 1000 MB

Roaming user options set in roamingdef.ini

The options below are saved in the encrypted `roamingdef.ini` file and should not be edited directly. You can control these settings in the **Roaming User Network Location** dialog, accessed by clicking the **Add** or **Edit** buttons in the Network Directories section of the Roaming tab.

Options	Description and UI
`[<Network Settings>]`	**Display Name** text field: name assigned to the network directory where Roaming user profiles are stored
`location`	**Address** text field: Path to a network directory, web server, or secure web server where Roaming user profiles are stored
HTTP Settings	
`type`	**Authentication Type** radio buttons: **Basic** or **Digest**
`authscheme=1`	Indicates authentication is required
`queryforuserpassword`	**Prompt for User and Password** checkbox
`authuser`	**User** text field: <domain>\<username> required to log in
`authpassword`	**Password** text field: Actual password required to log in
`followredirects`	**Follow Redirects** radio button: **Never**, **Always**, or **Same Scheme Only**
`keepalive`	**Keep Connection Alive** checkbox
`locktimeout`	**Lock** field in the **Timeouts** area: Number of seconds after timeout expires to lock the connection
`connectiontimeout`	**Connection** field in the **Timeouts** area: Number of seconds after timeout

Options	Description and UI
	expires to close the connection
`connectiontimeoutinactivity`	**Type** radio buttons in he **Timeouts** area: Set if you selected the **Inactivity** option.
`connectiontimeoutabsolute`	**Type** radio buttons in the **Timeouts** area: Set if you selected the **Absolute** option
`firewall`	**Firewall and Proxy Servers**: Set if a firewall is configured
`proxy`	**Use Proxy Server** checkbox: Set if checked
`proxyserver`	**Network Location**: URL to the web server
`firewalltype`	**Type** dropdown: Type of firewall, represented by a number (enabled if **Use Proxy Server** is checked)
`firewallhost`	**Server** text field: Name of server for the firewall (enabled if **Use Proxy Server** is checked)
`firewallport=1080`	**Port**: Port used by the proxy server or firewall – **1080** is the default (enabled if **Use Proxy Server** is checked)
`firewalluser`	**User** text field: Login name of the administrator that can access the firewall (enabled if **Use Proxy Server** is checked)
`firewallpassword`	**Password** text field: Password to log in to the firewall (enabled if **Use Proxy Server** is checked)
`firewalldata`	**Firewall Data or Proxy Authorization** text field: Special authentication string for firewall or proxy server, if applicable (enabled if **Use Proxy Server** is checked)
SSL Settings	
`sslcertstore`	**Certificate Store** radio buttons
`sslcertstorepassword`	**Certificate Store Password** text field
`sslcertstoretype`	**Certificate Store Type** radio buttons (represented by a number)
`useopenssl`	**Using OpenSSL** checkbox
`opensslcipherlist`	**Cipher List** text field (enabled if **Using OpenSSL** is checked)
`opensslcafile`	**Certificate Authority File** path (enabled if **Using OpenSSL** is checked)
`opensslcadir`	**CA Directory** path (enabled if **Using OpenSSL** is checked)
`tls1`	**SSL Enabled Protocols** checkbox: Version 1 of the Transport Layer Security (TLS) protocol

Options	Description and UI
ssl3	**SSL Enabled Protocols** checkbox: Version 3 of the Secure Sockets Layer (SSL) protocol
ssl2	**SSL Enabled Protocols** checkbox: Version 2 of the Secure Sockets Layer (SSL) protocol
pct1	**SSL Enabled Protocols** checkbox: Version 1 of the Private Communications Transport (PCT) protocol

Installing a Roaming User Profile Configuration on Additional Computer(s)

The default Roaming user settings you created in "Setting Roaming User Profile Options" on page 107 will be transferred to your client computers only if you include the ROAMINGUSERINI option, set to roamingdef.ini. Use the full path to the file:

```
ROAMINGUSERINI=\"C:\<full_path>\roamingdef.ini\"
```

If you do not pass the ROAMINGUSERINI option, default settings are used. You must also include the DEFAULTSINI option, set to nsdefaults.ini, as shown below.

For installations using setup.exe, your command line may look like this:

```
setup.exe /s /v"SERIALNUMBER=#####-###-####-####-##
DEFAULTSINI=\"C:\<full_path>\nsdefaults.ini\"
INSTALLDIR=\"C:\Program Files\Nuance\NaturallySpeaking14\"
ROAMINGUSERINI=\"C:\<full_path>\roamingdef.ini\"
/L*v C:\Logs\logfile.log /qn"
```

> **Note:** Enclose long path names containing spaces in quotation marks (be sure to escape the each quotation mark with a backslash: \").

If you are using msiexec.exe to install, your command line might look like this:

```
msiexec.exe /i "Dragon 14.msi"
SERIALNUMBER=#####-###-####-####-##
DEFAULTSINI="C:\<full_path>\nsdefaults.ini"
INSTALLDIR="C:\Program Files\Nuance\NaturallySpeaking14"
ROAMINGUSERINI="C:\<full_path>\roamingdef.ini"
/L*v "C:\nuanceLogs\logfile.log" /qn
```

After you have completed the installation, verify that all options are correctly set on the client computer.

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