# Citrix® administrator guide

For:

Nuance®

**Dragon® Medical Practice Edition**

NUANCE

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# Chapter 1: About this guide

# Guide overview

The Citrix Administrator Guide provides information about the hardware, software, and network requirements for deploying Dragon Medical Practice Edition with XenApp or XenDesktop.

## Audience

This guide is intended for administrators who manage the Citrix server or the Citrix Receiver on client computers.

# Additional resources

The following resources are available in addition to this guide to help you manage your Dragon installation.

## Documentation

| Document | Description | Location |
|---|---|---|
| *Dragon Release Notes* | New Dragon features, system requirements, client upgrade instructions, and known issues. | Dragon client Help. Do the following:<br><br>1. When Dragon is open, click the Help icon (  ) on the DragonBar, and then select **Help Topics**.<br><br>2. Click **Get started**.<br><br>3. Click **Dragon release notes**. |
| *Dragon Client Installation Guide* | Instructions for installing and configuring Dragon clients. | Dragon Support web site |
| Dragon client Help | Commands and instructions for dictating, correcting, and more with the Dragon client. | When Dragon is open, click the Help icon (  ) on the DragonBar, and then select **Help Topics**. |

## Training

Nuance provides several Dragon training offerings, like webinars, demos, and Nuance University online training courses. For more information, see the Dragon Support web site.

## Support

The Dragon Support web site provides many resources to assist you with your Dragon installation, like forums and a searchable knowledgebase. For more information on Support offerings, see the Dragon Support web site at:

https://www.nuance.com/healthcare/physician-and-clinical-speech/dragon-medical-practice-edition.html

# Chapter 2: Introduction

# About dictation with XenDesktop and XenApp

Users initiate the dictation process by launching Dragon remotely from a client computer, then launching a target application in which to dictate. Your Citrix deployment must be configured correctly to allow Dragon to communicate with the target application.

When both applications are running, the user dictates into a microphone connected to the client computer that has been pre-configured to route audio into Dragon on the Citrix server. Dragon receives the audio and transcribes the dictation into text, which it transmits to the destination application.

For more information on configuring audio settings, see "Configure audio settings for Citrix clients" on page 18.

# Chapter 3: Getting started

# Before you begin

Review the following before you install and configure your Citrix server.

## Installation and configuration checklist

| | Task | Reference |
|---|---|---|
| ☐ | Verify that your Citrix server meets the system requirements. | See System requirements section below. |
| ☐ | Select a Citrix deployment option and configure your server. | "Citrix deployment options" on page 11 |
| ☐ | Install Dragon on the Citrix server. | *Dragon client installation guide* |
| ☐ | Publish the Dragon app, or the desktop where you installed Dragon. | "Publishing Dragon from a Citrix server" on page 13 |
| ☐ | Configure your Citrix server as needed to allow Dragon to work with user microphones. | "Configuring your server" on page 16 |
| ☐ | Configure client computers to ensure they can access and use Dragon. | "Configuring clients to use Dragon on the Citrix server" on page 18 |

## System requirements

| | |
|---|---|
| **RAM** | Minimum: 4 GB for all operating systems.<br><br>**Note**: If your computer has less than the recommended amount of RAM, Dragon installs but displays a message recommending that you install additional RAM for optimum performance. |
| **CPU** | Minimum: 2.2 GHz Intel® dual core or equivalent AMD processor. Faster processors yield faster performance.<br><br>**Note**: Streaming SIMD Extensions (SSE) are not supported. |
| **Free hard disk space** | • 4GB for DVD installations |
| **Supported operating systems** | • Windows 7, 8.1, and 10, 32-bit and 64-bit<br><br>• Windows Server 2008 R2<br><br>• Windows Server 2012<br><br>• Windows Server 2016.<br>  **Alert**: Issues using Dragon with server 2016 and Citrix.<br>  **Reason**: Third-party compatibility issues between Microsoft and Citrix. |

| Citrix server requirements | • Citrix XenApp or XenDesktop versions 6.5, 7.6 through 7.15 <br><br> • A single (non-hyper-threaded) core processor for each active speaker <br><br> • Recommended: 2 MB L2 processor cache |
| --- | --- |
| Other | • Internet Explorer 11 or the current version of Chrome or Edge for online Help <br><br> • Microsoft .NET Framework version 4.5.2 or later <br><br> Generally, the .NET Framework is pre-installed on Windows 7, 8.1, and 10 computers. If you do not have it installed, you are prompted to install it during Dragon's installation. <br><br> Nuance does not provide the .NET Framework with your installation; you must download the installation file from microsoft.com. <br><br> • A DVD-ROM drive if installing from disk <br><br> • An audio input device capable of 16-bit recording for dictation <br><br> For a list of recommended devices, see http://support.nuance.com/compatibility/. <br><br> • An internet connection |

## Additional considerations

**Usage**

| Risk | Cause |
| --- | --- |
| Higher loads on your Citrix server | Moving the dictation processing to your server increases CPU usage and processor demand. |
| Higher bandwidth use | Users with analog microphones need to transfer high-resolution audio data to the server. When turned on, each analog microphone uses 1.3 Mbps of network bandwidth. Bandwidth limitations can make Dragon difficult to use. <br><br> Note that USB microphones require less bandwidth than analog microphones. |

**Communication**

To allow users to dictate into a target application, such as Microsoft Word, publish both applications so they run in a single Citrix client session on the same server cluster. Otherwise, Dragon may not work properly with other published applications.

**Load balancing**

If you use the Citrix server's Load Balancing feature, check the configuration of the Load Manager to make sure Dragon runs on the same server as any target applications. To prevent errors, consider

disabling automatic load balancing in a multi-server farm.

**Sessions**

Citrix starts published applications in separate sessions if:

- You publish the applications with different settings

- You publish one application as a Desktop.

- The Citrix client does not start the application in **Seamless** mode.

- A user launches one application, changes **Application Set** settings, and then launches another application.

# Citrix deployment options

You can deploy Dragon with Citrix in one of the following ways.

| Install Dragon… | Users can dictate into… | Users cannot dictate into… |
|---|---|---|
| • As a published application on Citrix XenApp server. | • Applications located on the same XenApp server as Dragon. | • Applications on a published desktop.<br>• Applications installed locally on the client computer. |
| • On a Citrix XenDesktop server. | • Applications installed on the same published desktop as Dragon. | • Applications on a separate published desktop.<br>• Applications published with XenApp.<br>• Applications installed locally on the client computer. |

# Chapter 4: Publishing Dragon

# Publishing Dragon from a Citrix server

You must publish Dragon to allow the Citrix Receiver to see and display Dragon on your client machines.

## Deploying Dragon with XenDesktop

If you are deploying Dragon with XenDesktop, publish the desktop as you normally would. For details on publishing a desktop, see your Citrix documentation.

After you have published a desktop with Dragon installed, you must set up your client machines before running Dragon. For more information, .

## Deploying Dragon with XenApp

**Caution**: You must use identical settings to publish Dragon and any target applications users use for dictation, such as Microsoft Word. Otherwise, Citrix may start the applications in separate sessions, causing errors. For example, if Microsoft Word and Dragon run in different sessions, the microphone hot key does not work when Microsoft Word is the active application, and the Dragon user cannot dictate text into Microsoft Word.

Do the following to publish Dragon as a standalone application on a XenApp server:

1. Note the server location of the Dragon installation directory.

2. Start Citrix Studio.

3. In the left-hand navigation panel, right-click **Machine Catalogs**, and then select **Create Machine Catalog**.

4. Select the server where Dragon is installed.

   The Machine Catalog Setup dialog box appears.

5. Click **Next**.

   The Operating System screen appears.

6. Select **Windows Server OS**, and then click **Next**.

   The Machine Management screen appears.

7. In the **This Machine Catalog will use** section, select **Machines that are power managed**.

8. In the **Deploy machines using** section, select **Citrix Machine Creation Services (MCS)**.

9. Complete the wizard with the settings required for your XenApp deployment.

10. Return to the main Citrix Studio window and click **Delivery Groups** in the left-hand navigation panel.

11. Right-click the **Delivery Group** that contains the machine where Dragon is installed, and then select **Add Applications**.

The Create Application dialog box appears.

12. Click **Next**.

The Applications screen appears.

13. In the Applications list, select your Dragon application, and then click **Next**.

The Summary screen appears.

14. Click **Finish**.

After you have published Dragon from your XenApp server, you must set up your client machines before running Dragon. For more information, "Configuring clients to use Dragon on the Citrix server" on page 18.

# Chapter 5: Post-installation tasks

# Configuring your server

## Install the PowerMic Citrix Server & Virtual Desktop Extension

This section only applies to Citrix XenApp.

To enable the PowerMic, install the PowerMic Citrix Server & Virtual Desktop Extension on the Citrix server.

1. In the Dragoninstallation directory, navigate to **Citrix Extension>Citrix Server & Virtual Desktop Extension**.

2. Double-click to run `PowerMic Citrix Server & Virtual Desktop Extension.exe`.

3. Follow the prompts to install the PowerMic Citrix Server & Virtual Desktop Extension.

> **Note**: You must also install the PowerMic Citrix Client Extension on each client computer where users dictate with a PowerMic. For more information, see "Install the PowerMic Citrix Client Extension on each client computer" on page 19.

## Allow users with analog microphones to launch Dragon

If you have users who dictate with an analog microphone, grant them permission to customize audio quality and set the quality to high.

**To grant users permission to customize audio quality for the web interface:**

1. Open the Citrix Access Management Console.

2. In the left pane, select **Citrix Web Interface>XenApp Web Sites>*Site name***.

3. In the XenApp–Edit Settings window, click **Session Settings**.

4. In the **Remote Connection** section, select **Connection Performance**.

5. Select **Allow users to customize sound**.

6. Click **OK**.

**To set the audio quality to high:**

1. Open the Citrix AppCenter.

2. In the left pane, navigate to **Citrix Resources>XenApp>*Citrix farm*>Policies**.

3. In the lower part of the screen, click the Settings tab.

4. In the **Settings** area, next to **Audio quality**, click **Add**.

   The Add Setting screen appears.

5. From the **Value** drop-down list, select **High – high definition audio**.

6. Under **Group Policy**, select **Administrative Templates>Citrix Components>Citrix XenApp Plugin for Hosted Apps>User Experience>Client audio settings**.

7. Change group policy setting from **Not Configured** to **Enabled**, and then click **Apply**.

8. Select **Enable audio**.

9. In the **Sound quality** drop-down list, select **High**.

10. Click **Apply**.

11. Click **OK**.

12. From a command prompt, run the `gpupdate /force` command to ensure that the policy is correctly applied.

# Configuring clients to use Dragon on the Citrix server

Do the following to prepare your client computers to use Dragon on a Citrix server.

## Install the Citrix Receiver software on all clients

Whether you are deploying Dragon with XenDesktop or XenApp, you must install Citrix Receiver on all clients that need access to the Citrix server.

You can download this software and its documentation from the Citrix web site.

## Configure audio settings for Citrix clients

To allow users to dictate from a client computer, you must configure the audio input by doing one of the following:

- "XenApp deployments: Install Dragon Client Update for Citrix" on page 18
- "XenDesktop deployments: Configure audio devices on the client" on page 18

> **Note**: To enable the PowerMic as a dictation source, you must also install the Citrix Extensions. For more information, see "Install the PowerMic Citrix Server & Virtual Desktop Extension" on page 16.

### XenApp deployments: Install Dragon Client Update for Citrix

Before users can dictate with Dragon on a XenApp server, you must install the **Dragon Client Update for Citrix** utility on each client machine. This utility enables Dragon to receive audio from devices connected to a local client machine.

You need administrator rights to install this utility.

1. If there is an older version of the **Dragon Client Update for Citrix** utility installed on the computer, uninstall it first.

2. In the Dragon installation directory, open the Citrix Extension folder.

3. Launch `vddnspatch2.exe` or `vddnspatch2.msi`.

   The InstallShield Wizard opens.

4. Follow the prompts to install the software for use with the default application set in the XenApp client.

### XenDesktop deployments: Configure audio devices on the client

To allow Dragon to receive audio from devices connected to local client machines, do the following on each client computer:

1. Plug the microphone into the client computer.

2. Right-click the speaker icon in the Notifications area of the computer, and then select **Recording devices**.

   The Sound dialog box appears with the Recording tab open.

3. Verify that the microphone you want to use appears in the list of recording devices and is set as the default recording device.

   To change the default recording device, select a microphone from the list and click the **Set Default** button.

4. Click **OK** to exit the Sound dialog box.

5. Launch an internet browser and log in to the Citrix server.

6. In the Desktops view, select the desktop where Dragon is installed.

   Citrix Receiver opens.

7. If the Citrix Receiver – Security Warning dialog box appears, click **Permit Use**.

8. Click the XenDesktop toolbar at the top of the virtual machine display.

9. Click the **Preferences** icon.

   The Citrix Receiver – Preferences window appears.

10. **PowerMic users only**:

    1. In the Devices tab, find **Nuance PowerMic II-NS** (for PowerMic III) or **Dictaphone Corporation** (for PowerMic II) in the devices list.

    2. In the **Virtual Channel** column, click **Switch to generic**.

11. Click the Connections tab.

12. Under **Session Settings**, select **Connect automatically**.

13. Click **OK** to close the Citrix Receiver – Preferences window.

14. In the XenDesktop toolbar, click the **Devices** icon and verify that your microphone is listed.

**Troubleshooting**

- If the audio quality on the Citrix server where Dragon is installed is set to low but the sound on the client running Dragon is set to high, the client might not receive an audio quality warning. Be sure to set the audio quality on the server to high. For more information, see "Allow users with analog microphones to launch Dragon" on page 16.

- Each client computer must have a sound system. If, for example, USB audio is disabled on the client computer, a user can't create a user profile when using that computer. In this case, you should enable USB audio on the client computer and re-connect to the Citrix server.

## Install the PowerMic Citrix Client Extension on each client computer

This section only applies to Citrix XenApp.

To enable PowerMic with a Citrix deployment of Dragon, you must install the PowerMic Citrix Client Extension on each client computer.

1. In the Dragoninstallation directory, navigate to **Citrix Extension>Citrix Client Extension**.

2. Double click `PowerMic Citrix Client Extension.msi`.

3. Follow the prompts to install the PowerMic Citrix Client Extension.

> **Note**: You must also install the PowerMic Citrix Server & Virtual Desktop Extension on the Citrix server. For more information, see "Install the PowerMic Citrix Client Extension on each client computer" on page 19.

## Managing Citrix logging on the client (optional)

When you start a Citrix session, the software loads the `module.ini` file from the root folder of the client machine, which contains a list of the parameters used to select and configure the communications stack modules, including the Dragon Client Update for Citrix utility.

To avoid running out of space on the Citrix client, you can disable or redirect Citrix logging.

1. Open the `module.ini` file in a text editor. By default, the `module.ini` file is located in the Citrix client directory:

   ```
   C:\Program Files (x86)\Citrix\ICA Client
   ```

2. Find the `[VDDNS]` section and modify the settings:

   - To disable logging: Change the `LogLevel` to `0`.

     Or

   - To redirect logging to another location or device: Change `LogFileName` to a different path.

3. Save and exit the `module.ini` file.