Dragon Law Enforcement Citrix support

The award-winning Dragon® Law Enforcement speech recognition software from Nuance can now be used in Citrix environments.

As the number of deployed enterprise applications increases, organizations are seeking solutions that simplify application delivery without sacrificing performance, security, or cost. Citrix® Systems has been providing innovative software solutions that enable the best delivery methods for all applications. The Citrix XenApp™ and XenDesktop™ architectures provide centralized, scalable, and secure application virtualization platforms.

Citrix provides a server-based centralized architecture to deliver applications to end users. In Citrix, all application processing and logic occur on the server; the client PCs only display data and allow the user to interact with the graphical user interface of the program.

This approach is ideal for highly distributed environments where the administrative costs of maintaining a consistent PC desktop image on diverse workstations are substantial or in scenarios where network bandwidth and/or client workstation processing power is limited. Citrix also eliminates the need for software updates to be installed on client workstations.

Running Dragon Law Enforcement on a Citrix server
Dragon Law Enforcement supports installation on Citrix XenApp or Citrix XenDesktop servers, enabling users to dictate from workstations that do not have Dragon installed. In this configuration, the Dragon application is only installed on the same Citrix server as the target application that will be used for dictation, such as Microsoft Word or a records management system.

By installing Dragon on a Citrix server computer, you can have Dragon rely on the Citrix server for all processing activities. Furthermore, deploying Dragon on a Citrix XenApp or Citrix XenDesktop server provides Dragon users with Full Text Control, for supported applications running on that same Citrix server.

– With XenApp, a user can run one or more applications on the server. The user sees the applications running on their local desktop alongside their local applications. In this case, the published Dragon application has direct control of other published applications.

– With XenDesktop, the user sees an entire desktop session that has been published by the Citrix XenDesktop server. If the user is running on thin

Supported configurations

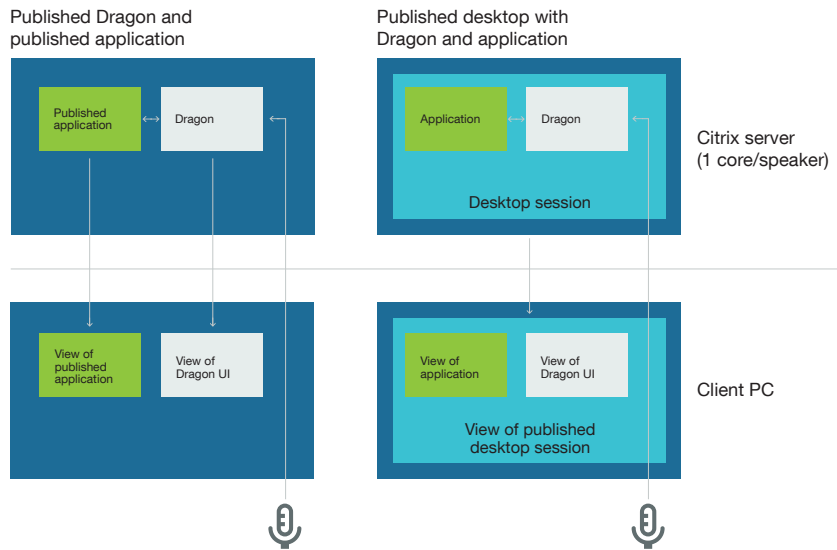Nuance supports the following configurations in which Dragon Law Enforcement is installed on a Citrix server.

Citrix Receiver 4.2 on:
– Microsoft Windows 8, and 8.1 (Standard and Metro), 32- and 64-bit
– Microsoft Windows 7, SP1 or higher, 32- and 64-bit

Citrix XenApp or Citrix XenDesktop server 7.6 on:
– Microsoft Windows Server 2008 R2, 32 and 64-bit
– Microsoft Windows Server 2012 R2, 32 and 64-bit

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client, the published desktop would fill the screen and present a very similar experience to having all of the applications running on a local PC. In this case Dragon can interact with, and control any application running on the published desktop.

Published Dragon and
published application

Published application	↔	Dragon

Published desktop with
Dragon and application

Application	→	Dragon

Desktop session

Citrix server
(1 core/speaker)

| View of published application | | View of Dragon UI |

| View of application | | View of Dragon UI |

View of published
desktop session

Client PC

Benefits of this deployment solution
– Dragon users can dictate from client computers that do not have Dragon installed.

– Administrators can use the Citrix management console to control which Dragon users have access to Dragon.

– The amount of time and effort required to install Dragon on each client computer can be greatly reduced or even eliminated.

– Administrators only need to install a .dll file, the Dragon update for Citrix, and the Citrix client extension, onto each client computer.

Drawbacks of this deployment solution
– Increased CPU usage and processing requirements on the Citrix XenApp server.

– Each Dragon user requires about 1 Mbps of network bandwidth whenever the microphone is turned on. Users may not be able to use Dragon from a remote workstation that has a slow Internet connection or on a network with many Dragon users performing dictation simultaneously.

– Users cannot use published Dragon to dictate directly into an application that runs on the local computer. As a workaround, users can dictate into a

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published application and use the clipboard to copy and paste the text to the local application.

Key issues to consider, for sizing and configuration
Organizations considering deployments of Dragon on a Citrix server need to take into account several items for configuring the Citrix environment and scaling client usage. This section provides some basic guidelines on how to address these issues to ensure maximum performance. Please note that these are guidelines only and not definitive specifications—actual performance will vary from customer to customer.

Organizations deploying Dragon Law Enforcement in a Citrix environment must consider the following three items:

1. Projected user base and usage metrics

2. Server-side hardware

3. Network bandwidth

1. Projected user base and user metrics
Before considering any deployment of Dragon with Citrix, organizations need to answer key questions about the user base and potential growth. These metrics are essential since they are needed to size the appropriate network and hardware requirements.

– How many users do you plan to enable access to Dragon through a Citrix environment in the first 6 months? 12 months?

– What is the projected distribution of simultaneous user access to Dragon in a Citrix environment?

– Where will these users be physically distributed? On the same corporate LAN, WAN, remote access, or a combination?

2. Server-side hardware
Dragon Law Enforcement has been tested to run in a Citrix enterprise environment configured with Citrix XenApp 7.6 or Citrix XenDesktop 7.6, and clients running Citrix Reciever 4.2. Based on answers to the questions above, your organization will need to scale and deploy an appropriate number of Windows servers to run Citrix XenApp or Citrix XenDesktop to support all your Dragon users.

Dragon users should have profiles created with Best Match 4 to provide the optimum balance between CPU load and recognition performance. This requires one CPU core for each user who is actively speaking and about 1.1GB of RAM for each active session.

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3. Network bandwidth
The request for network bandwidth when running Dragon derives primarily from the virtual audio channel. Nuance recommends and checks for high-quality sound on Citrix to ensure the highest quality of accuracy for speech recognition. Each audio channel requires about 1Mbps of network bandwidth.

Based on the user population you intend to serve, you must account for and allocate the appropriate amount of network bandwidth for users to be able to utilize Dragon from a Citrix client.

For more information, refer to the "Citrix administrator guide" or contact your Nuance representative.

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