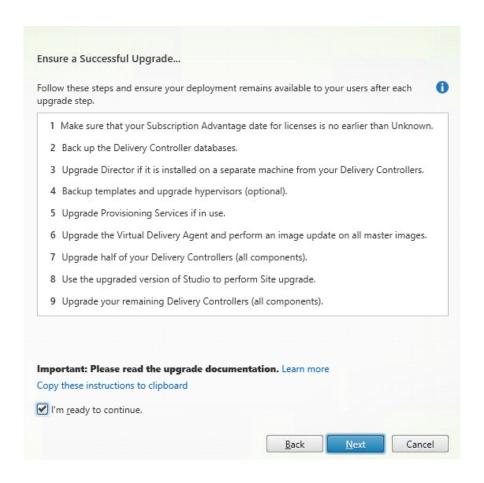
Chapter 1: XenDesktop 7.6 – Upgrading, Installation, and Configuration

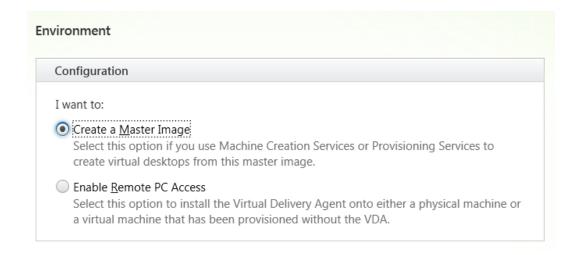
Upgrading from XenDesktop 5.6/7.x to XenDesktop 7.6

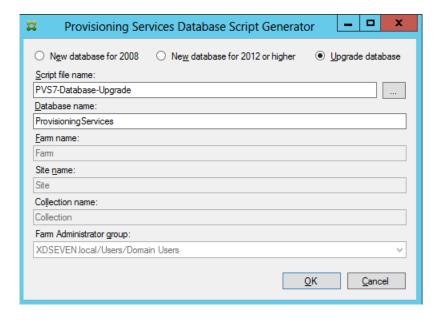




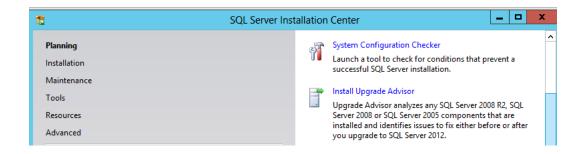








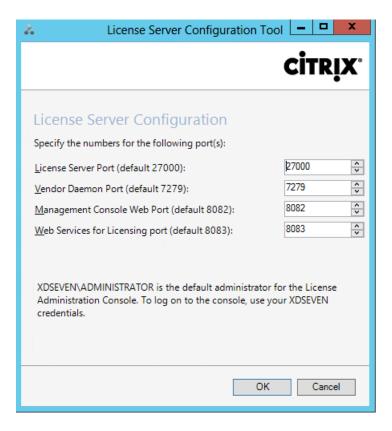
Preparing the SQL Server 2012 Database

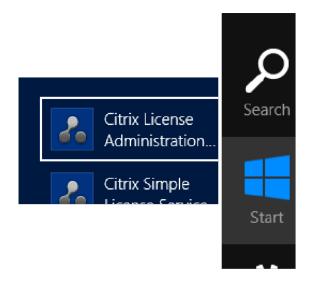




Installing and configuring the Citrix Licensing Services (11.12.1)

:





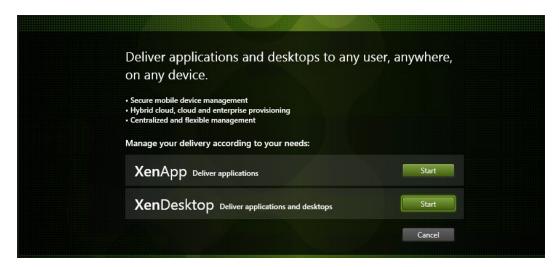


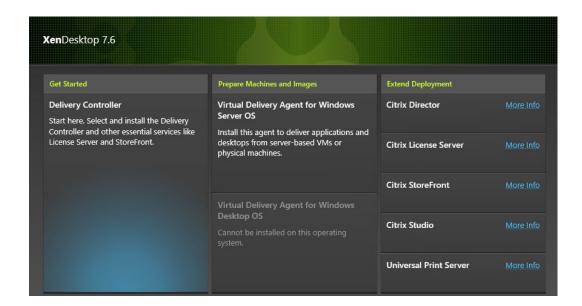


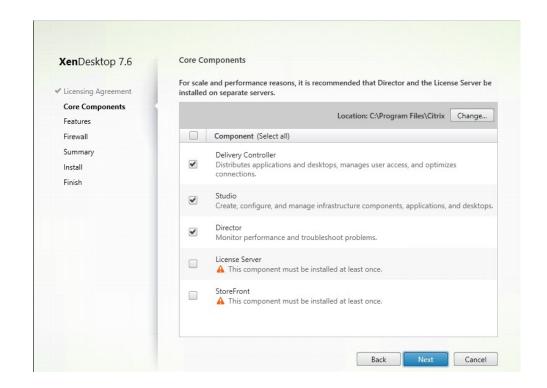
Server Configuration

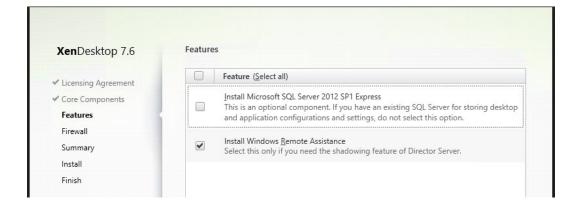


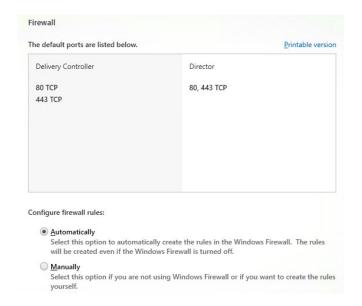
Installing XenDesktop 7.6 components

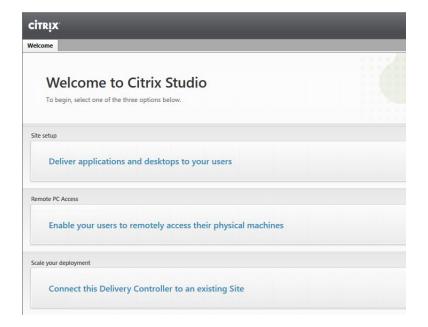




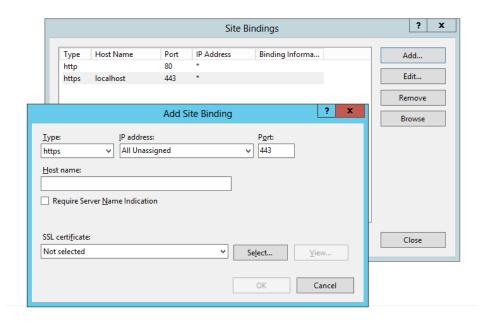


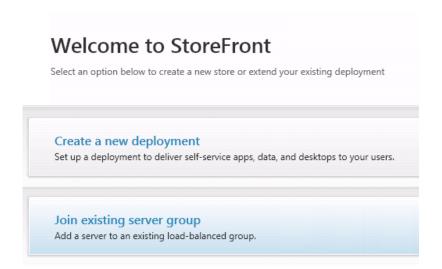




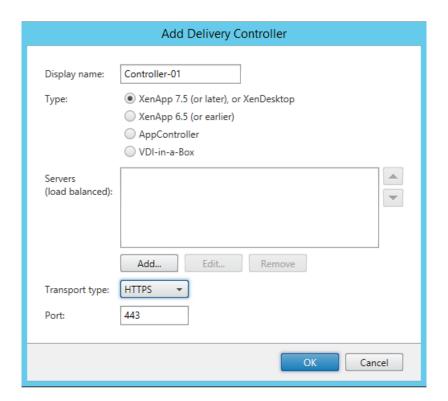


Installing and configuring StoreFront 2.6



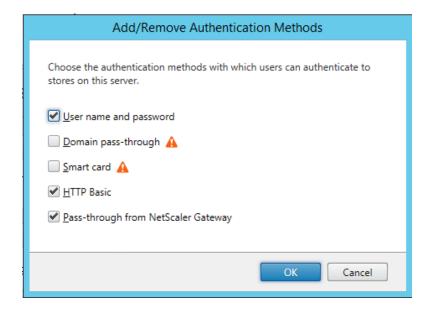


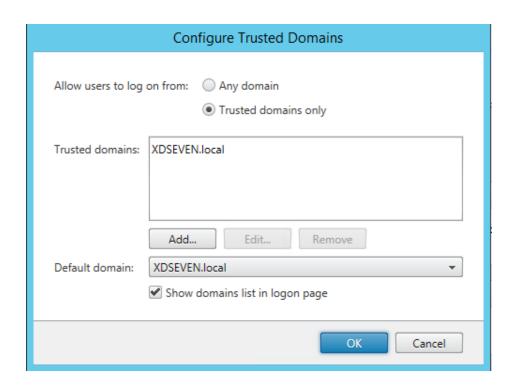




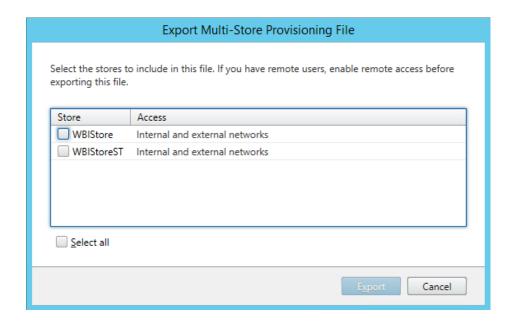




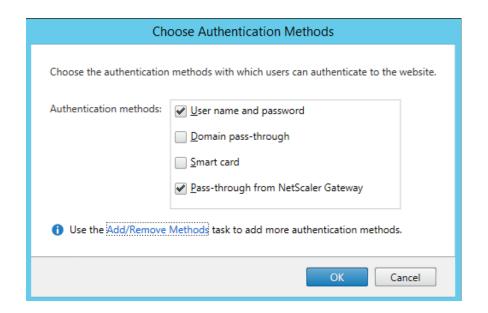




| Manage Password Options | |
|----------------------------------|--|
| Manage Password Options | |
| Allow users to change passwords: | ∆t any timeWhen expiredNever |
| | OK Cancel |

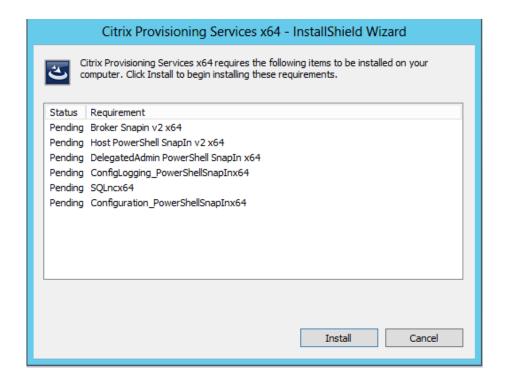


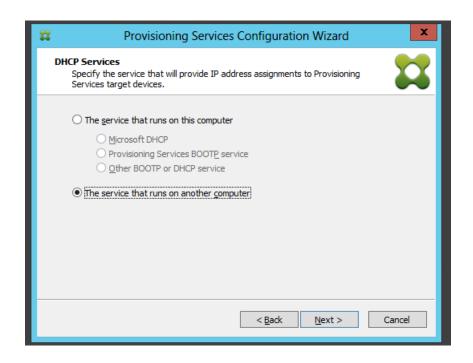


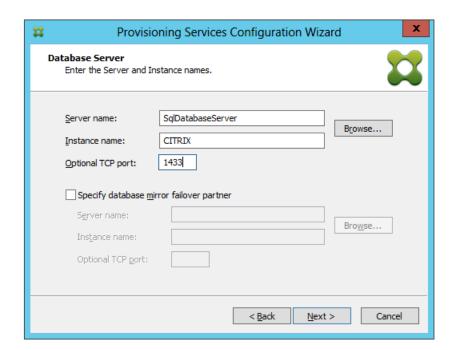


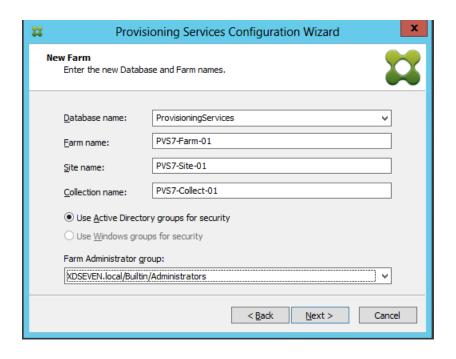


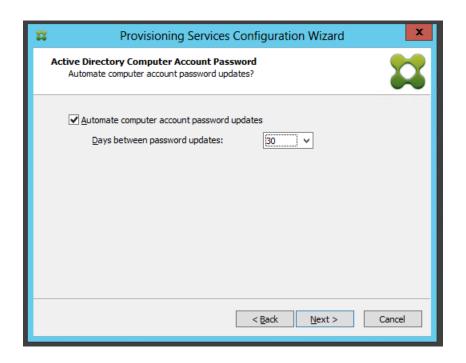
Installing and configuring Provisioning Services 7.6

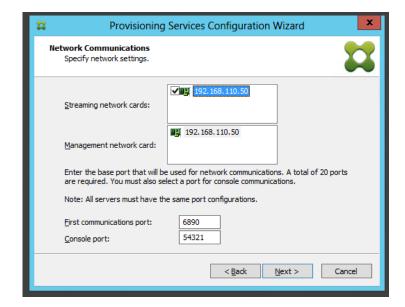


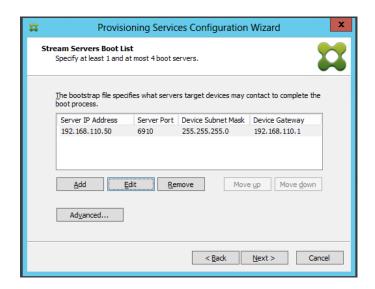


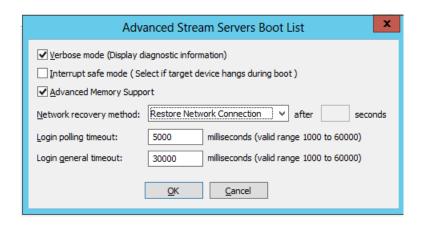




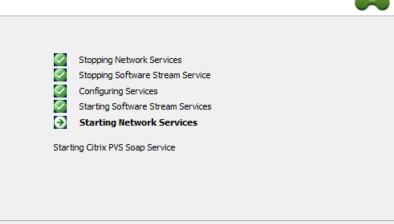








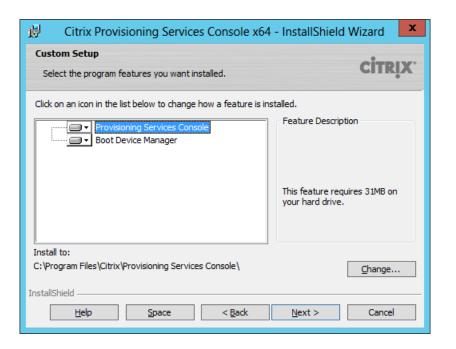
Finish Confirm configuration settings.

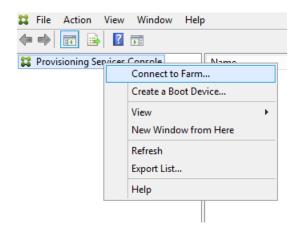


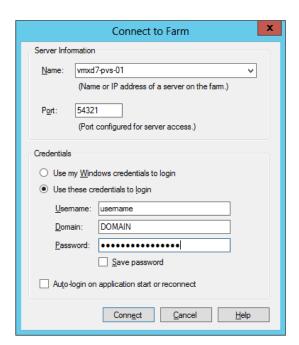
< <u>B</u>ack

Finish

Cancel



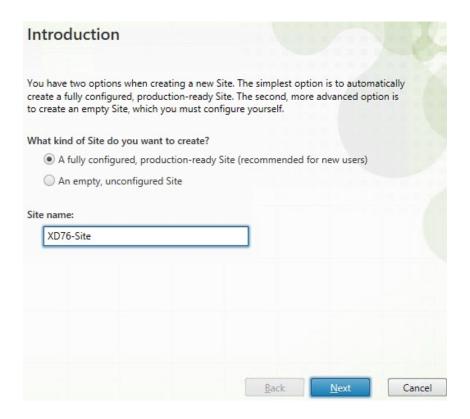


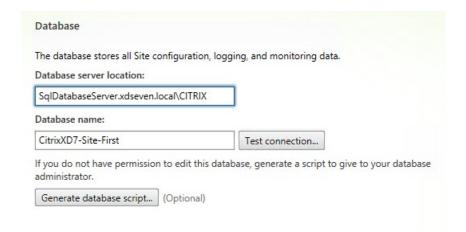


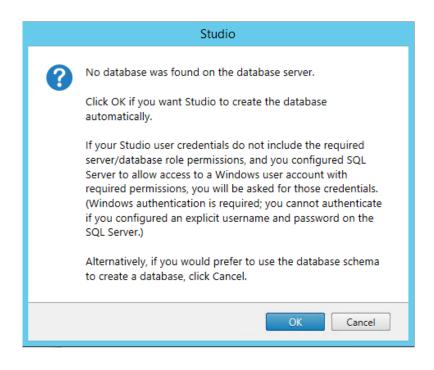
Chapter 2: Configuring and Deploying Virtual Machines for XenDesktop 7.6

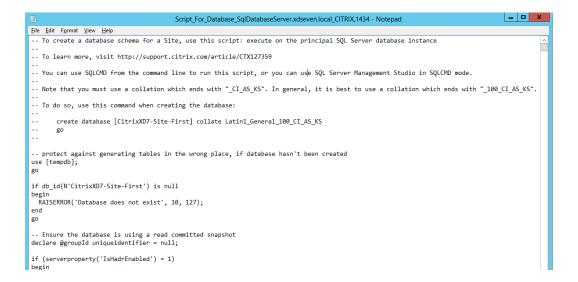
Configuring the XenDesktop Site



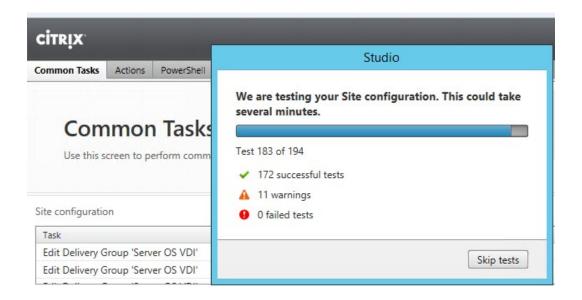




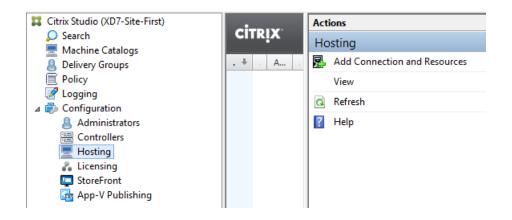


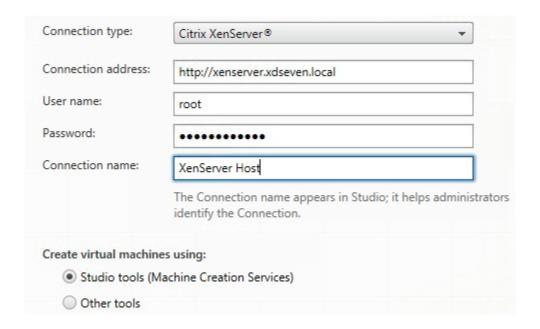


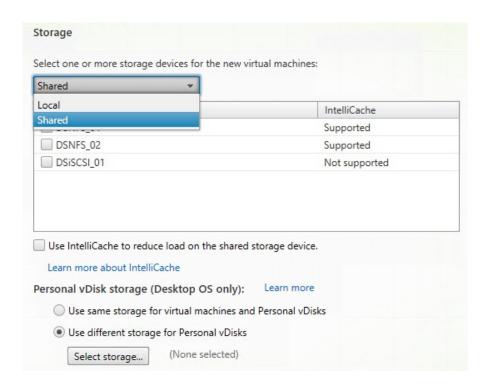


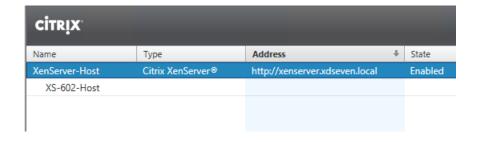


Configuring XenDesktop 7.6 to interact with Citrix XenServer 6.2

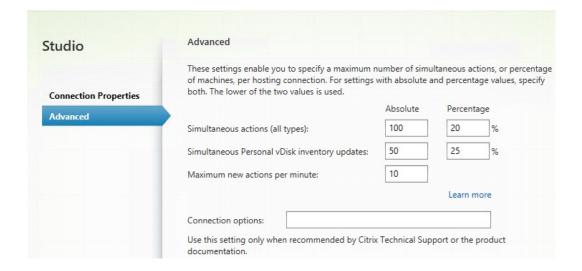






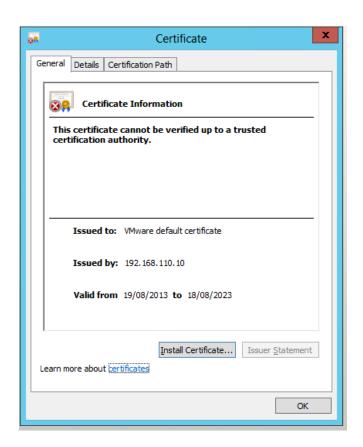




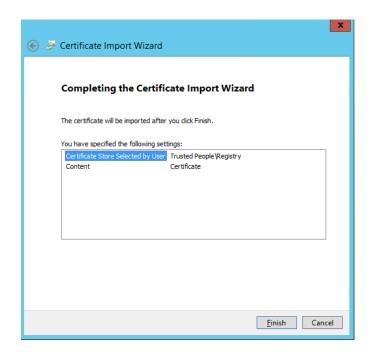


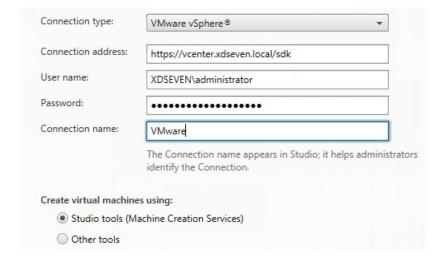
Configuring XenDesktop 7.6 to interact with VMware vSphere 5.x

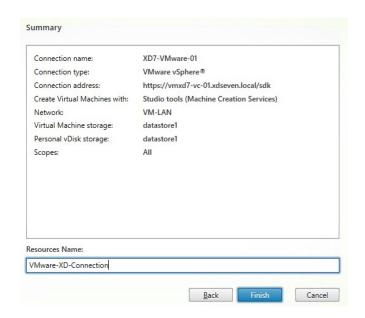


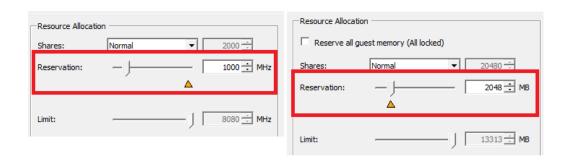


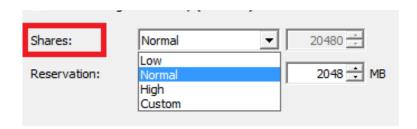




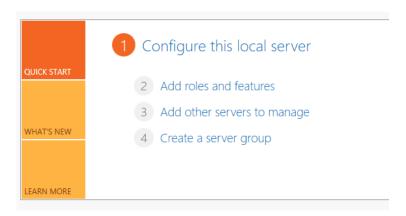








Configuring XenDesktop 7.6 to interact with Microsoft Hyper-V



Role-based or feature-based installation

Configure a single server by adding roles, role services, and features.

Remote Desktop Services installation

Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

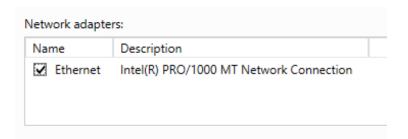
Select a server or a virtual hard disk on which to install roles and features.

Select a server from the server pool
Select a virtual hard disk

Server Pool
Filter:

Name
IP Address
Operating System
WIN-37FKPD58HPV
192.168.198.128
Microsoft Windows Server 2012 Datacenter

| | | DNS Server | |
|---|---|---------------------------------------|---|
| | | Fax Server | |
| Þ | | File And Storage Services (Installed) | |
| | ~ | Hyper-V | |
| | | Network Policy and Access Services | |
| | | Print and Document Services | |
| | | Remote Access | |
| | | Remote Desktop Services | |
| | | | ~ |



Hyper-V can be configured to send and receive live migrations of virtual machines on this server.

Configuring Hyper-V now enables any available network on this server to be used for live migrations. If you want to dedicate specific networks for live migration, use Hyper-V settings after you install the role.

Allow this server to send and receive live migrations of virtual machines

Authentication protocol

Select the protocol you want to use to authenticate live migrations.

Use Credential Security Support Provider (CredSSP)

This protocol is less secure than Kerberos, but does not require you to set up constrained delegation. To perform a live migration, you must be logged on to the source server.

Use Kerberos

This protocol is more secure but requires you to set up constrained delegation in your environment to perform tasks such as live migration when managing this server remotely.

Hyper-V uses default locations to store virtual hard disk files and virtual machine configuration files, unless you specify different locations when you create the files. You can change these default locations now, or you can change them later by modifying Hyper-V settings.

Default location for virtual hard disk files:

C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks

Browse...

Default location for virtual machine configuration files:

C:\ProgramData\Microsoft\Windows\Hyper-V

Browse...

To install the following roles, role services, or features on selected server, click Install.

Restart the destination server automatically if required

Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.

Hyper-V

Remote Server Administration Tools

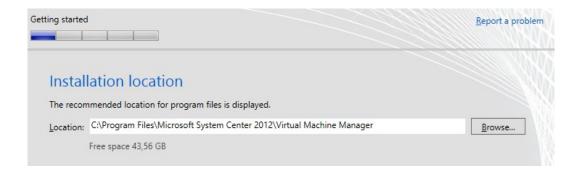
Role Administration Tools

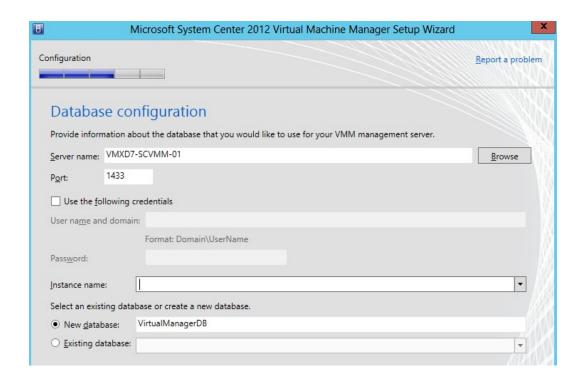
Hyper-V Management Tools

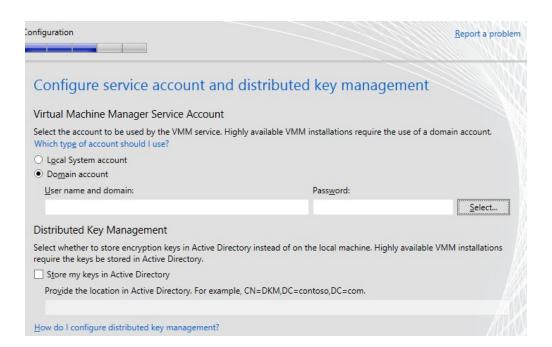
Hyper-V Module for Windows PowerShell

Hyper-V GUI Management Tools

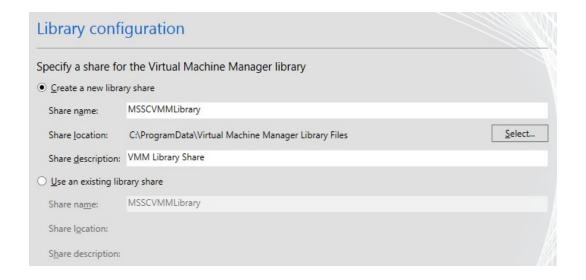








| Port co | onfiguration |
|--------------|--|
| Managen | nent Server |
| Please selec | ct the ports for various VMM features. |
| 8100 | Communication with the VMM console |
| 5985 | Communication to agents on hosts and library servers |
| 443 | Eile transfers to agents on hosts and library servers |
| 8102 | Communication with Windows <u>Deployment Services</u> |
| 8101 | Communication with $\underline{\mathbf{W}}$ indows Preinstallation Environment (Windows PE) agents |
| 8103 | Communication with Windows PE agent for \underline{t} ime synchronization |



Microsoft Update

Microsoft Update offers security and important updates for Windows and other Microsoft software, including System Center 2012 VMM. Updates are delivered using Automatic Updates, or you can visit the Microsoft Update website.

On (recommended)

Use Microsoft Update to check for updates.

Of

Do not automatically check for updates.

Installation location

The recommended location for program files is displayed.

Location: C:\Program Files\Microsoft System Center 2012\Virtual Machine Manager

Browse...

Free space 35,93 GB

Port configuration

Administrator Console

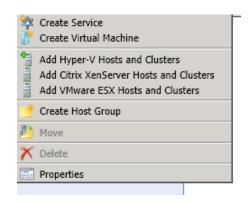
8100

Communication with the VMM management server



Virtual Machine Manager

| S <u>e</u> rver name: | VMXD7-SCVMM-01 |
|--|---|
| | Example: vmmserver.contoso.com:8100 |
| ○ U <u>s</u> e current Specify cred | Microsoft Windows session identity dentials |
| <u>U</u> ser name: | XDSEVEN\administrator |
| | Example: contoso\domainuser |
| Password: | ••••• |



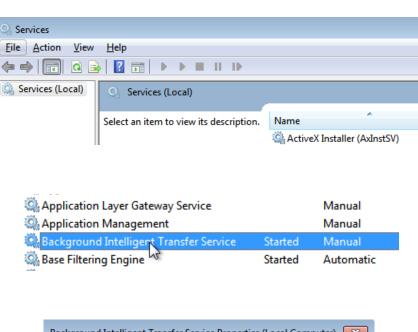
Specify the credentials to use for discovery The Run As account or credentials will be used to discover computers and to install the Hyper-V role and the Virtual Machine Manager agent if necessary. O Use an existing Run As account Run As account: Manually enter the credentials User name: Example: contoso\domainuser Password:

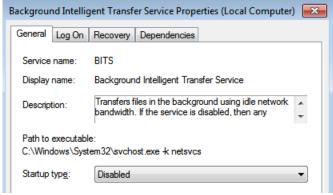
| Specify a | host group and virtual machine placement path settings for | hosts |
|----------------|---|-----------------|
| Assign the sel | ected computers to the following host group: | |
| Host group: | All Hosts | ▼ |
| | selected hosts are currently managed by another Virtual Machine Manager (VMM) envir reassociate the hosts with this VMM management server. | onment, select |
| Reassociat | e this host with this VMM environment | |
| | cual machine placement paths as default locations to store virtual machines placed on a achine placement path, specify a path and click Add. | host. To add a |
| Add the follow | mig paul. | A <u>d</u> d |
| Selected virtu | al machine placement paths: | |
| | | R <u>e</u> move |
| | | |
| | | |
| | | |
| | | |

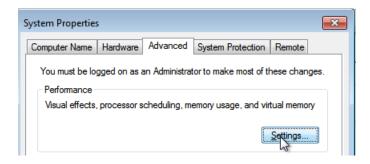
Chapter 3: Master Image Configuration and Tuning

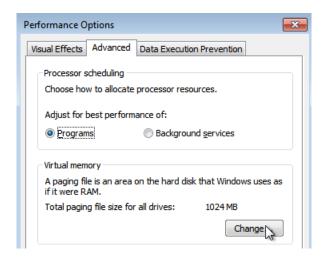
Configuring and optimizing a desktop OS master image

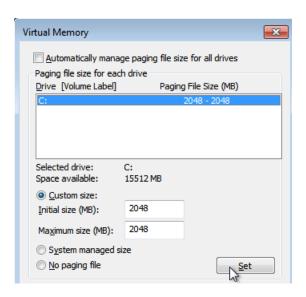
Windows 7 master image configuration:



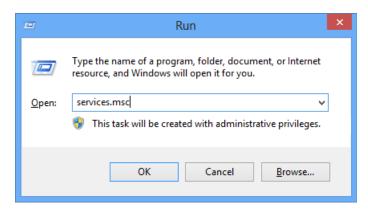






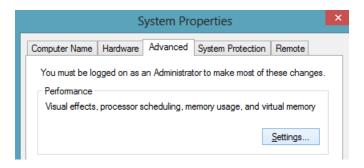


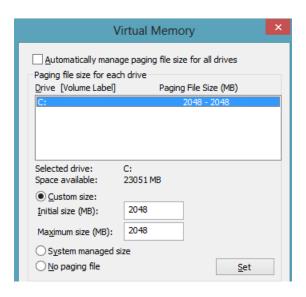
Windows 8 master image configuration



| Description St | tatus | Startup Type |
|-------------------------|--|--|
| Provides User Acco | | Manual |
| Processes applicati Ru | unning | Manual (Trigger Start) |
| Determines and ver | | Manual (Trigger Start) |
| Facilitates the runni | | Manual |
| Provides support fo | | Disabled |
| Processes installati | | Manual |
| Transfers files in th | | Disabled |
| Windows infrastruc Ru | unning | Automatic |
| The Base Filtering E Ru | unning | Automatic |
| BDESVC hosts the B | | Disabled |
| The WBENGINE ser | | Disabled |
| The Bluetooth servi | | Disabled |
| This service caches | | Disabled |
| | Provides User Acco Processes applicati R Determines and ver Facilitates the runni Provides support fo Processes installati Transfers files in th Windows infrastruc R The Base Filtering E R BDESVC hosts the B The WBENGINE ser The Bluetooth servi | Provides User Acco Processes applicati Determines and ver Facilitates the runni Provides support fo Processes installati Transfers files in th Windows infrastruc Running The Base Filtering E BDESVC hosts the B The WBENGINE ser The Bluetooth servi |







Configuring and optimizing a server OS master image

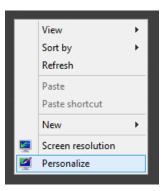
- 1 Configure this local server
 2 Add roles and features
 - 3 Add other servers to manage
 - 4 Create a server group

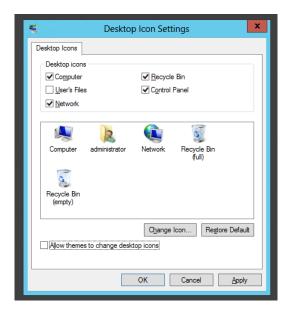
| Fea | tures | |
|-----|---|---|
| Þ | SNMP Service | ^ |
| | ☐ Subsystem for UNIX-based Applications [Deprecat | |
| | ☐ Telnet Client | |
| | ☐ Telnet Server | |
| | ☐ TFTP Client | |
| ⊿ | User Interfaces and Infrastructure (Installed) | |
| | ✓ Graphical Management Tools and Infrastructur | |
| | ✓ Desktop Experience | |
| | ✓ Server Graphical Shell (Installed) | |
| | Windows Biometric Framework | ≡ |

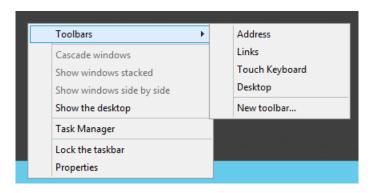
| Before You Begin | To install the following roles, role services, or features on selected |
|-------------------|---|
| Installation Type | Restart the destination server automatically if required |
| Server Selection | Optional features (such as administration tools) might be displayed |
| Server Roles | been selected automatically. If you do not want to install these op their check boxes. |
| Features | |
| Confirmation | Ink and Handwriting Services |
| Results | Media Foundation |
| | User Interfaces and Infrastructure |
| | Desktop Experience |
| | |



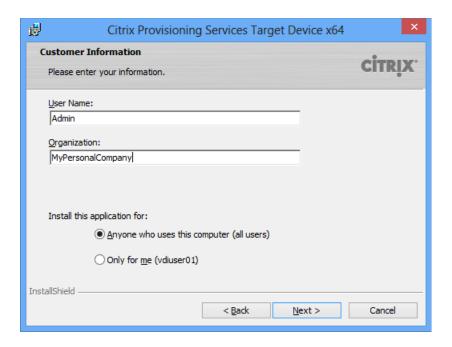






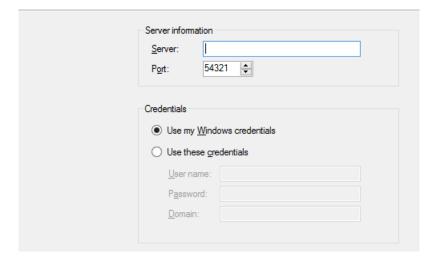


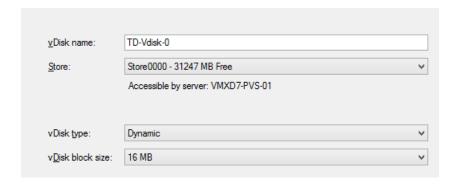
Configuring a target device – PVS architecture



Connect to Farm

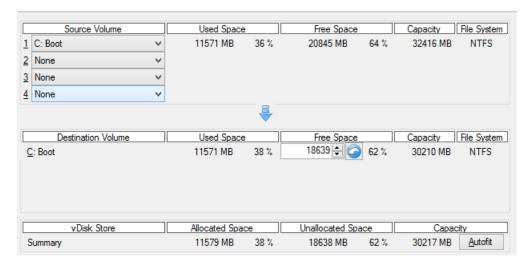
Enter the name or address of a server in the farm to connect to.

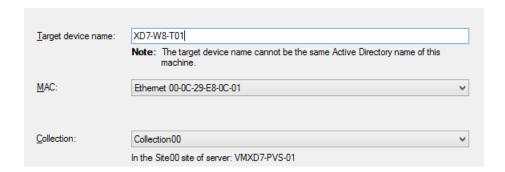


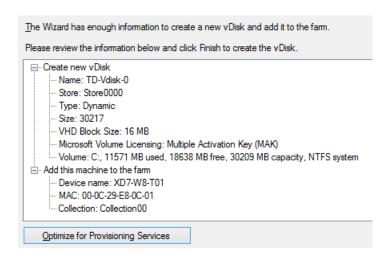


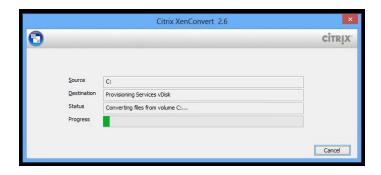
Configure Image Volumes

Define the size of each volume.



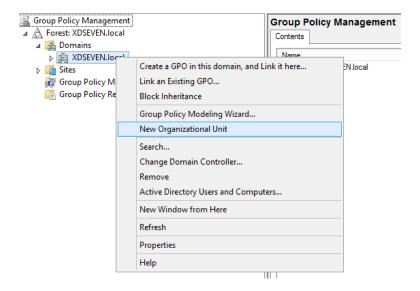




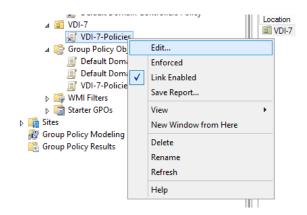


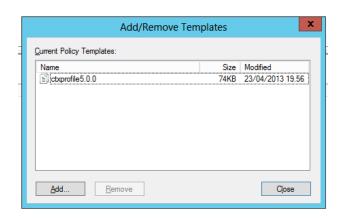


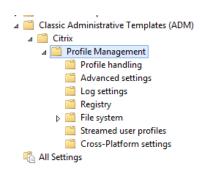
Installing and configuring the master image policies











```
Administrator: Command Prompt

Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Windows\system32>gpupdate /force
Updating policy...

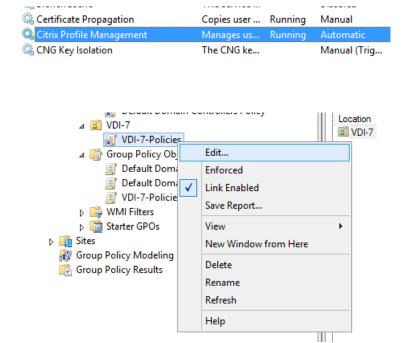
Computer Policy update has completed successfully.
User Policy update has completed successfully.

C:\Windows\system32>
```

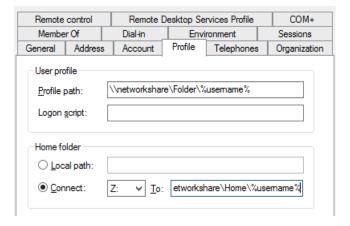
Chapter 4: User Experience – Planning and Configuring

Implementing profile architecture

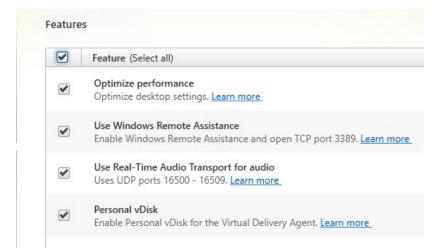
Using Citrix Profile Management 5.x



Using roaming profiles



Using Personal vDisk



:

| Options: | | Help: |
|--|---|--|
| Define events or actions which Profile management logs in depth: Common warnings Common information File system notifications | ^ | Detailed log settings. Define events or actions which Profile management logs in depth. If this setting is not configured here, Profile management uses the settings from the .ini file. |
| ✓ File system actions ✓ Registry actions ✓ Registry differences at logoff | = | If this setting is not configured here or in the .ini file, errors and general information are logged. |

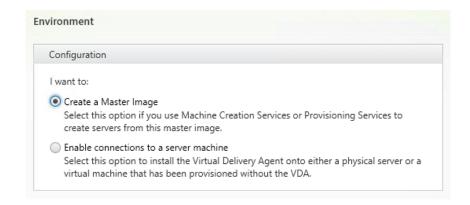
Installing Virtual Desktop Agent – server OS and desktop OS

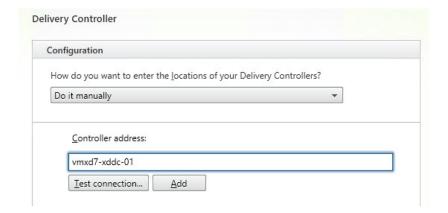
Installing VDA for a server OS machine

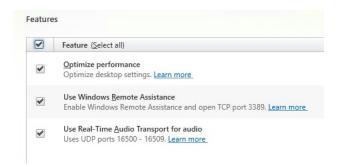
Prepare Machines and Images

Virtual Delivery Agent for Windows
Server OS

Install this agent to deliver applications and desktops from server-based VMs or physical machines.







| ote Assistance | Real Time Audio |
|----------------|-------------------|
| | |
| TCP | 16500 - 16509 UDP |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

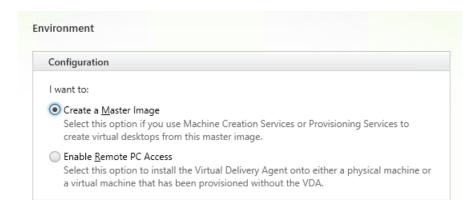
Configure firewall rules:

- <u>Automatically</u>
 - Select this option to automatically create the rules in the Windows Firewall. The rules will be created even if the Windows Firewall is turned off.
- Manually Select this option if you are not using Windows Firewall or if you want to create the rules yourself.

Installing VDA for a desktop OS machine

Virtual Delivery Agent for <u>W</u>indows Desktop OS

Install this agent to deliver applications and desktops from Windows desktop OS-based VMs or physical machines.



HDX 3D Pro

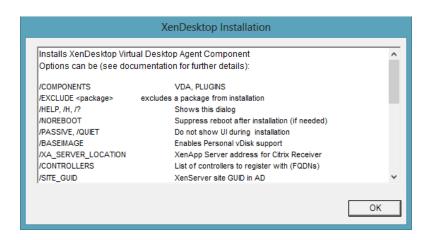
 $\ensuremath{\mathsf{HDX}}$ 3D Pro optimizes the performance of graphics-intensive programs and media-rich applications.

Configuration

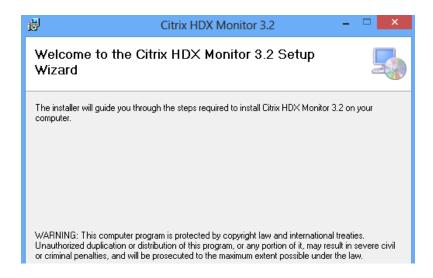
Install the Virtual Delivery Agent (VDA) for HDX 3D Pro?

- No, install the <u>standard VDA</u>
 Recommended for most desktops, including those enabled with Microsoft RemoteFX.
- Yes, install the VDA for HDX 3D Pro Recommended if the machine will access a graphics processor for 3D rendering.

Features Feature (Select all) Optimize performance Optimize desktop settings. Learn more Use Windows Remote Assistance Enable Windows Remote Assistance and open TCP port 3389. Learn more Use Real-Time Audio Transport for audio Uses UDP ports 16500 - 16509. Learn more Personal vDisk Enable Personal vDisk for the Virtual Delivery Agent. Learn more

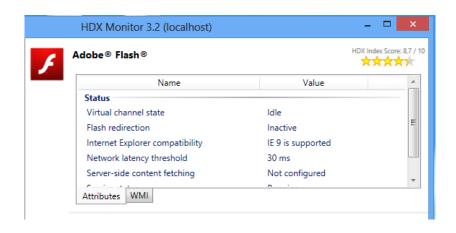


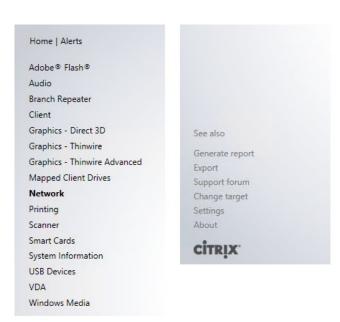
Installing and configuring the HDX Monitor

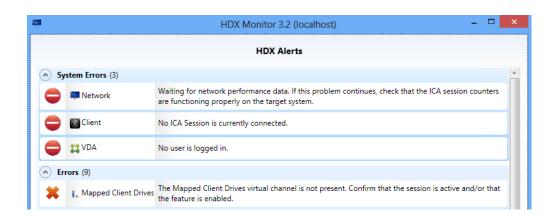












Settings

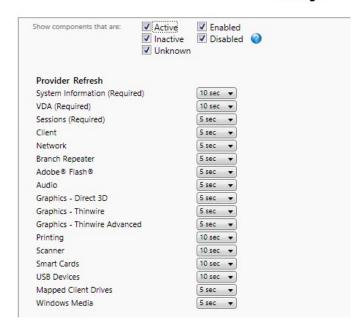
Performance Counter Update

Sessions Threshold (XenApp only)

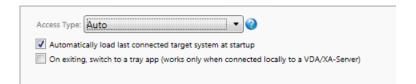
1 sec ▼

50 ▼

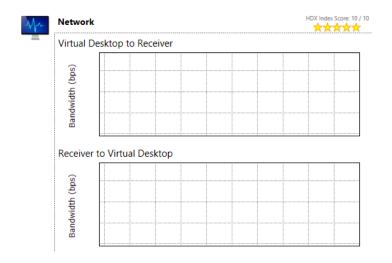
Settings

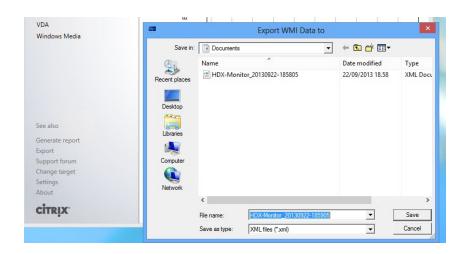


Settings

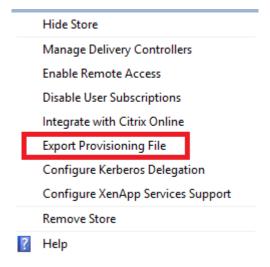


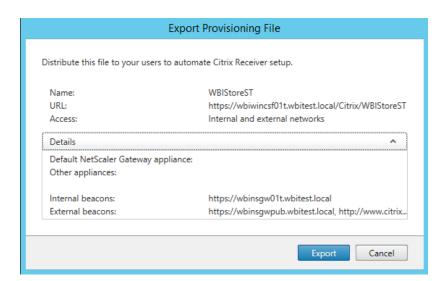
| Ignore | Component | Level | Message | URL | Condition | A |
|--------|---------------|-------------|--|--------------------------------------|--------------------|----|
| J | Adobe® Flash® | HighWarning | The HDX Flash V1 latency threshold | | HDXFlashVersion | |
| | Adobe® Flash® | HighError | The version of Internet Explorer inst | http://www.microsoft.com/windows | ieVersionNumbe | |
| | Adobe® Flash® | HighError | The installed Flash Player is not sup | | in stalled Version | П |
| | Adobe® Flash® | LowWarning | Adobe® Flash® redirection has be€ | | !isEnabled | |
| | Audio | LowWarning | Audio redirection has been disabled | | !isEnabled | lī |
| 1 | Audio | LowWarning | ? redirection has been disabled with | | !isEnabled | Ц |
| | Audio | HighError | The ? virtual channel is not present. | | isEnabled && !is | |
| | Audio | HighError | The Audio virtual channel is not pre | | isEnabled && !is | |
| 1 | Audio | HighWarning | No audio devices found. | | !ifAnyDeviceExis | |
| | Audio | HighError | The Audio service (CtxAudioSrv) has | | status == Servic | |
| V | Audio | HighWarning | Codec ? is not optimized to reduce | | ifAnyDeviceExist | |
| V | Audio | HighWarning | Virtual channel priority should be se | http://support.citrix.com/search/bas | (priority != Virtu | |
| | Audio | System | No user is logged in. | | SessionID == nu | |
| 1 | Audio | HighWarning | Virtual channel priority should be $s\boldsymbol{\varepsilon}$ | http://support.citrix.com/search/bas | (priority != Virtu | |
| | Audio | LowWarning | Audio over UDP could not be used | | CurrentUDPProg | |
| | Audio | HighWarning | Audio capture is disabled. Input from | | ifAnyDeviceExist | |



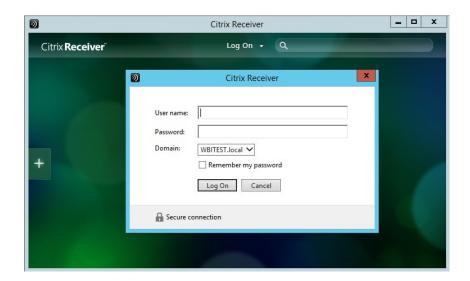


Configuring the Citrix Receiver

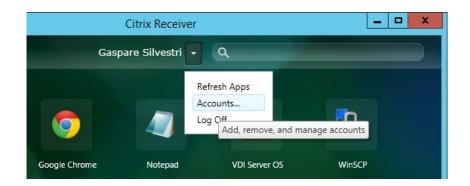


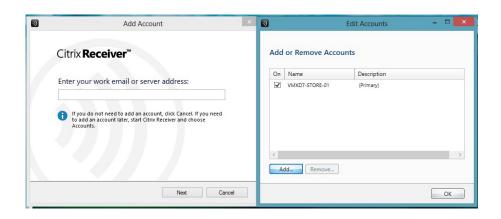


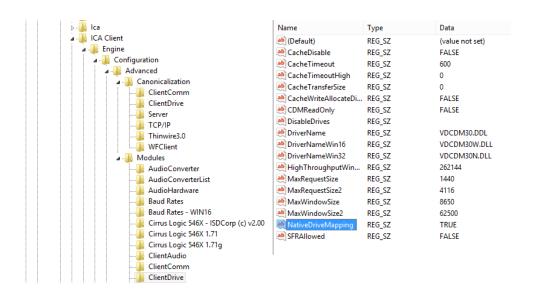








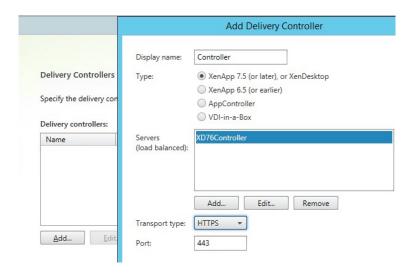


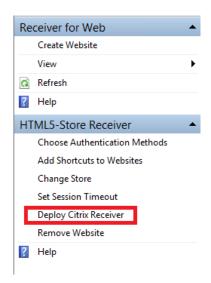


[ClientDrive] DriverName = VDCDM30.DDL DriverNameWin16 = VDCDM30W.DLL DriverNameWin32 = VDCDM30N.DLL MaxWindowSize = 8650 MaxWindowSize2 = 62500 = 1440 MaxRequestSize MaxRequestSize2 = 4116 CacheTimeout = 600 CacheTimeoutHigh = 0 CacheTransferSize CacheDisable = FALSE CacheWriteAllocateDisable = FALSE DisableDrives CDMReadOnlv = FALSE NativeDriveMapping = TRUE SFRAllowed = FALSE HighThroughputWindowSize = 262144

Configuring Citrix Receiver for HTML 5 1.5 – clientless





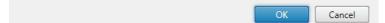


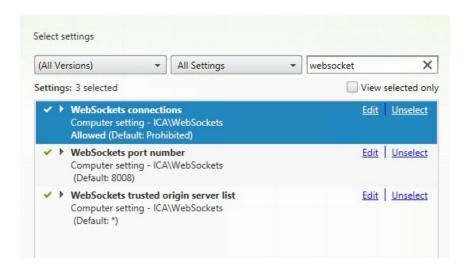
Deploy Citrix Receiver

For the best user experience, Receiver for Web sites detect Windows and Mac OS X devices and offer users the opportunity to download and install Citrix Receiver. If users cannot install Citrix Receiver, enable Receiver for HTML5.

Choose how to deploy Citrix Receiver:

- Install locally
- Use Receiver for HTML5 if local install fails 1
- Always use Receiver for HTML5





WebSockets connections

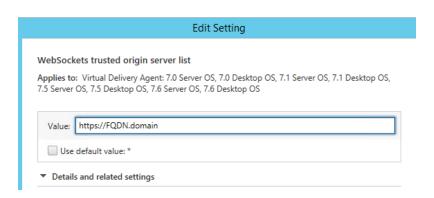
Applies to: Virtual Delivery Agent: 7.0 Server OS, 7.0 Desktop 7.5 Server OS, 7.5 Desktop OS, 7.6 Server OS, 7.6 Desktop OS



WebSockets port number

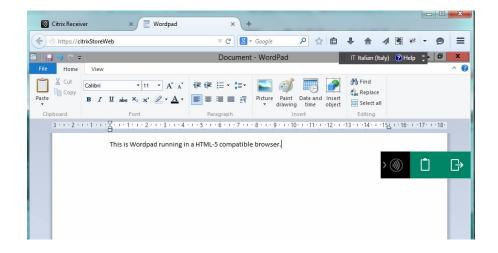
Applies to: Virtual Delivery Agent: 7.0 Server OS, 7.0 Desktop 9.7.5 Server OS, 7.5 Desktop OS, 7.6 Server OS, 7.6 Desktop OS













Chapter 5: Creating and Configuring a Desktop Environment

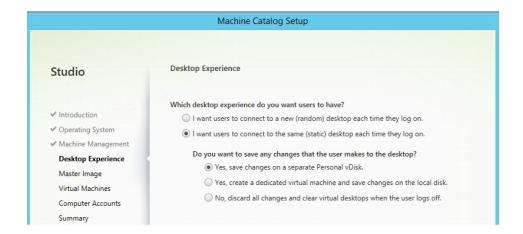
Creating and configuring the machine catalog

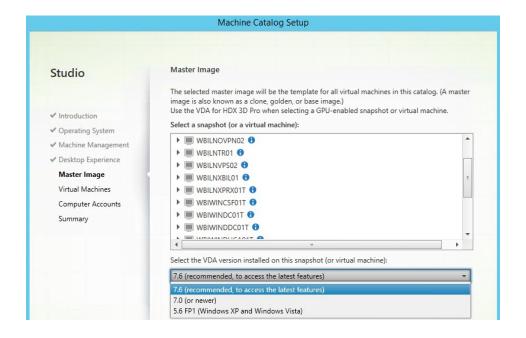


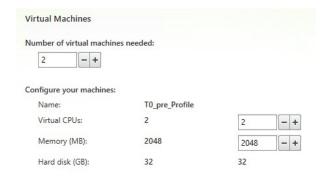


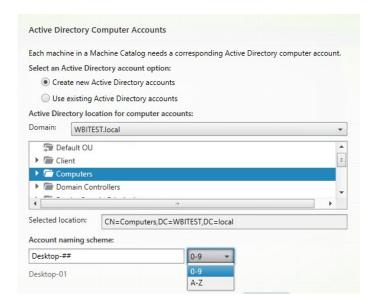
| | Machine Catalog Setup |
|--------------------|---|
| Studio | Operating System |
| | Select an operating system for this Machine Catalog. |
| | ○ Windows Server OS |
| ✓ Introduction | The Server OS Machine Catalog provides hosted shared desktops for a large-scale |
| Operating System | deployment of standardized machines. |
| Machine Management | Windows Desktop OS The Desktop OS Machine Catalog provides VDI desktops ideal for a variety of different |
| Desktop Experience | users. |
| Master Image | Remote PC Access |
| Virtual Machines | The Remote PC Access Machine Catalog provides users with remote access to their physical office desktops, allowing them to work at any time. |

| Machine Catalog Setup | | | |
|-----------------------|--|--|--|
| Studio | Machine Management | | |
| | This Machine Catalog will use: | | |
| ✓ Introduction | Machines that are power managed (for example, virtual machines or blade PCs) | | |
| ✓ Operating System | Machines that are not power managed (for example, physical machines) | | |
| Machine Management | | | |
| Desktop Experience | Deploy machines using: | | |
| Master Image | Citrix Machine Creation Services (MCS) | | |
| Virtual Machines | Resources: XS-LAN | | |
| Computer Accounts | Citrix Provisioning Services (PVS) | | |
| Summary | Another service or technology I am not using Citrix technology to manage my machines. I have existing machines already prepared. | | |

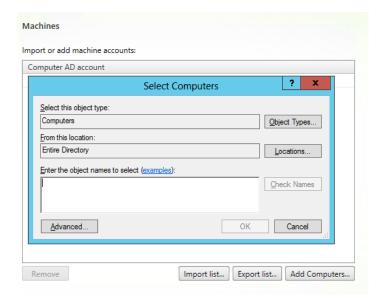




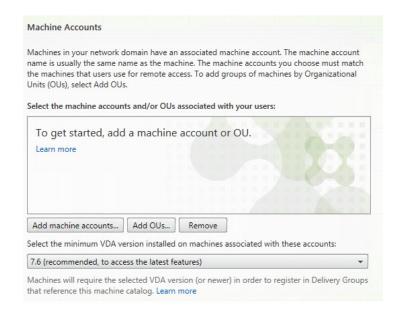


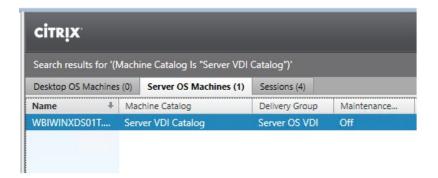


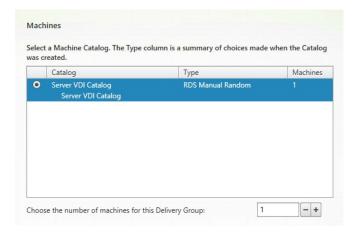




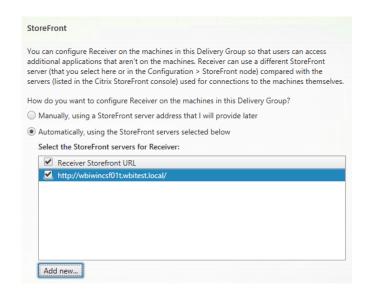
Remote PC Access - catalog configuration

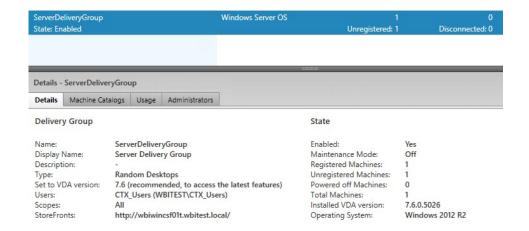


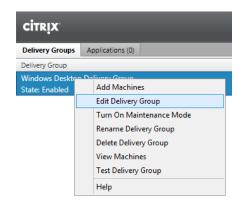


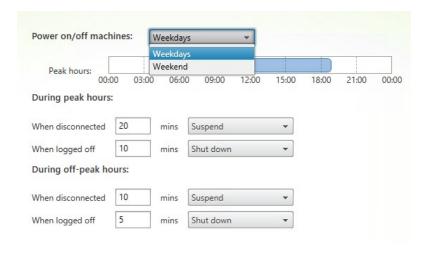


| | can use the application ups who log on with authenticated users. | | Group. You can a additionally, you | |
|--------------|--|--|------------------------------------|--|
| Assign users | : | | | |
| WBITEST\C | ΓX_Users | | | |
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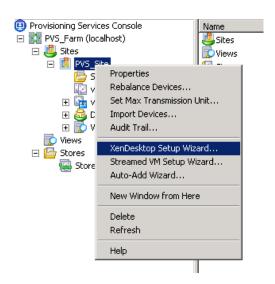












Specify the size and location of the Personal vDisk:

10

+

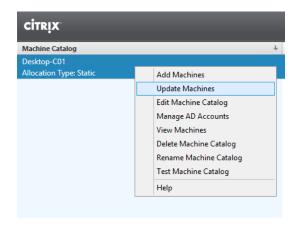
Personal vDisk drive letter: P:

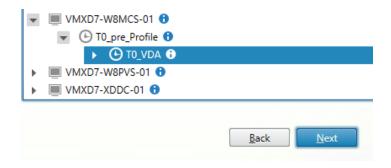
Personal vDisk size (GB):

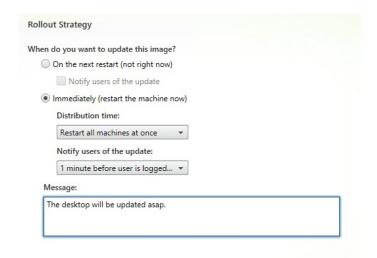
| Number of virtual machines to cre | ate: | 1 🚉 |
|-----------------------------------|---------|-----------|
| vCPUs: | 1 | 1 📑 |
| Memory: | 1024 MB | 1024 🛨 MB |
| | | |
| Local write cache disk: | 4096 MB | 4096 MB |
| Personal vDisk size: | 10 GB | 10 😛 GB |
| Personal vDisk drive letter: | P: | P: 😩 |

Modifying an existing machine catalog

Updating virtual desktop machines

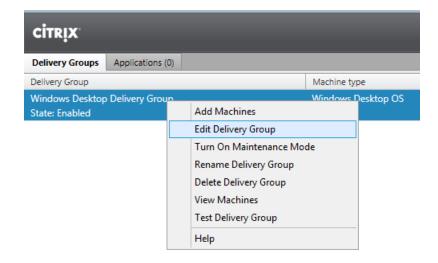


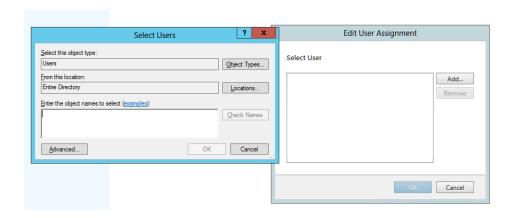




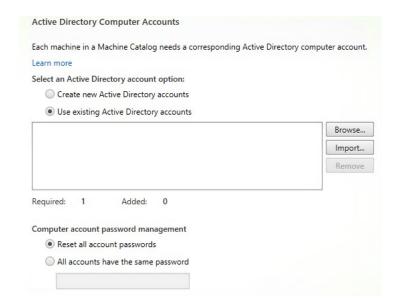


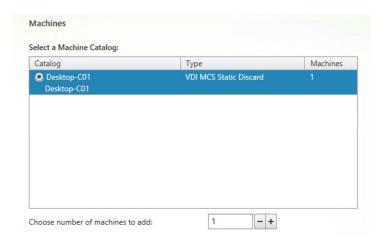
Modifying the machine assignment



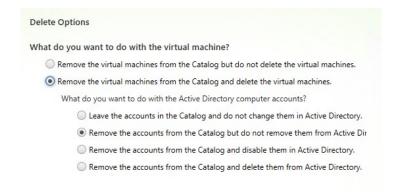


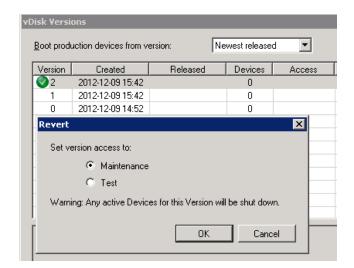
Adding new machines to an existing catalog:



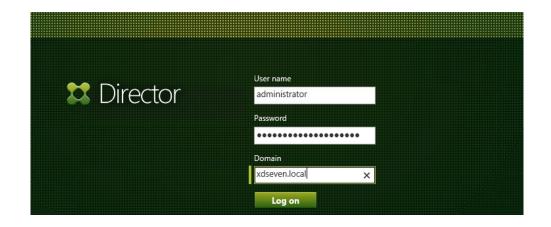


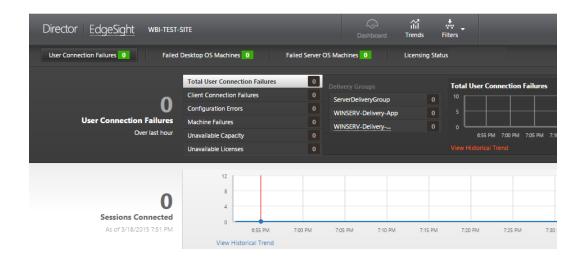
Removing assigned machines from an existing catalog





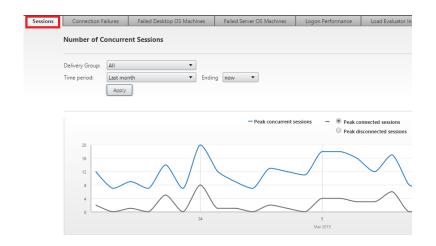
Using the Citrix Director7.6 platform

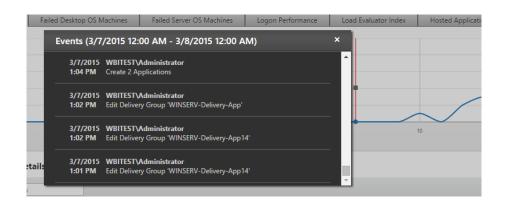


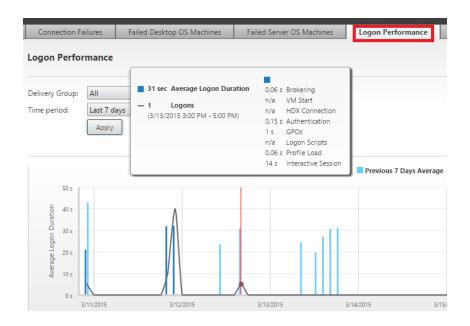


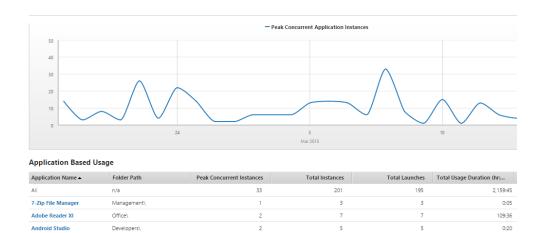






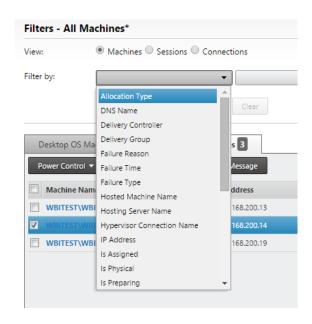


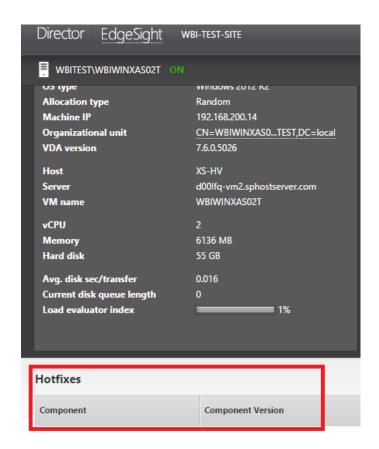


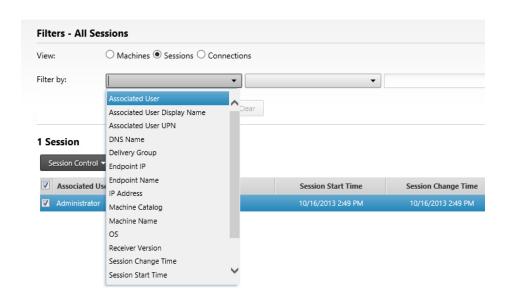


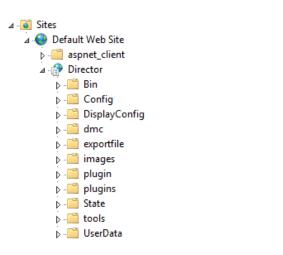


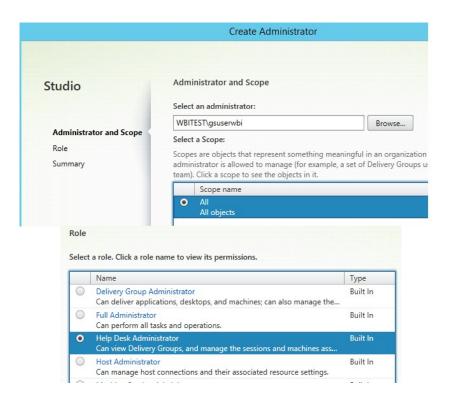








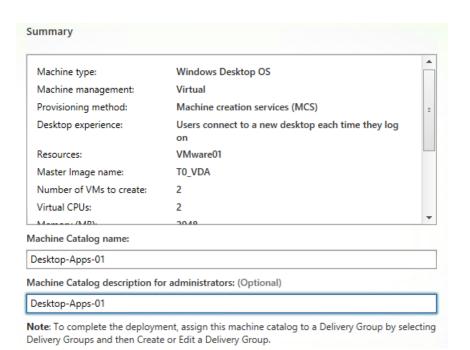






Chapter 6: Deploying Applications

Publishing the hosted applications

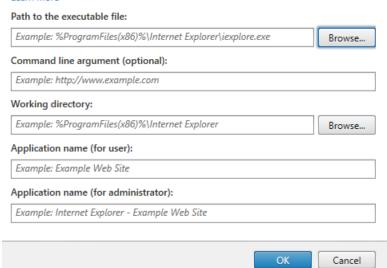




Add an Application Manually

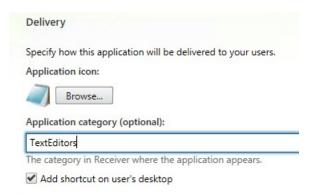
You can manually add applications from the virtual desktop machine or from a different network location.

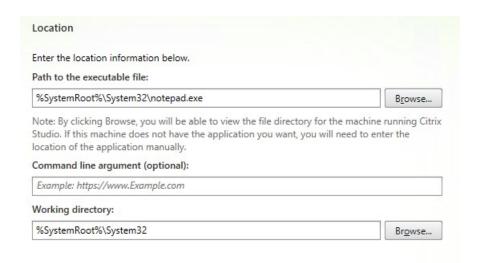
Learn more



Summary VDI Source Machine Catalog: Windows Desktop OS Machine type: Allocation type: Static Number of machines added: 1 unassigned Delivery type: Applications Users: 1 Applications: Scopes: All Delivery Group name: Application-Group Delivery Group description for users: (Optional) Application-Group

Identification Identify this application. Application name (for user): Notepad Application name (for administrator): Notepad Description and keywords: This is the description that will be seen by the user. You can also use this field to enter keywords for StoreFront. Learn More







Select an operating system and machine type for this Machine Catalog.

Windows Desktop OS

The Desktop OS Machine Catalog provides VDI desktops ideal for a variety of different users.

Windows Server OS

The Server OS Machine Catalog provides hosted shared desktops for a large-scale deployment of standardized machines.

Remote PC Access

The Remote PC Access Machine Catalog provides users with remote access to their physical office desktops, allowing them to work at any time.

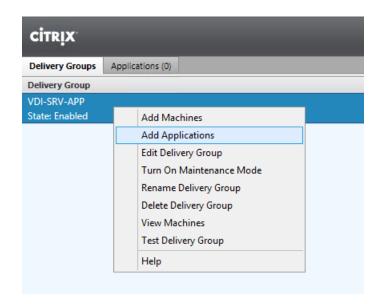
Delivery Type

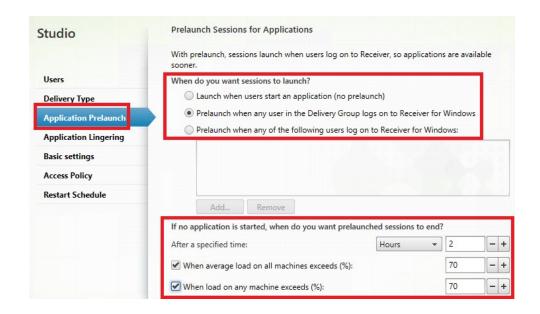
You can use the machines in the Catalog to deliver desktops and applications to your users.

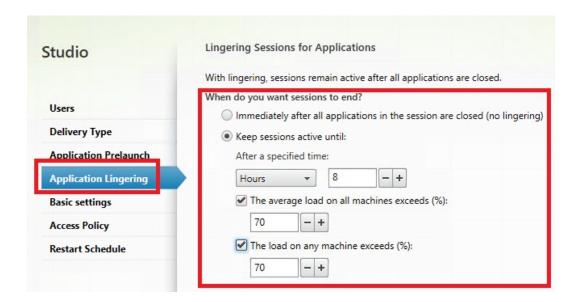
Learn more

Use the machines to deliver:

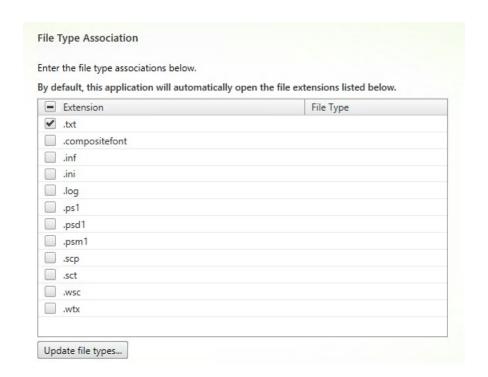
- Desktops
- Desktops and Applications
- Applications



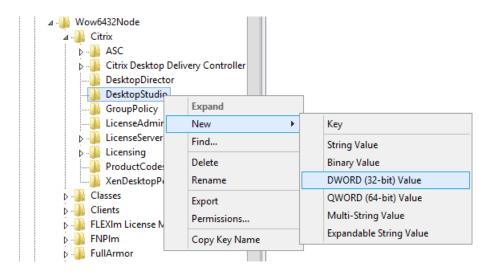


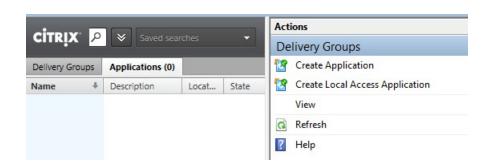


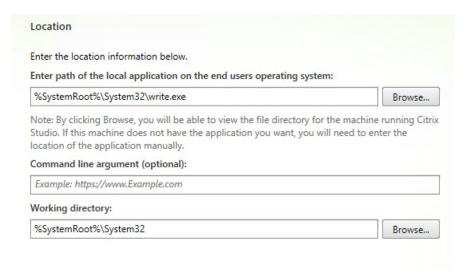


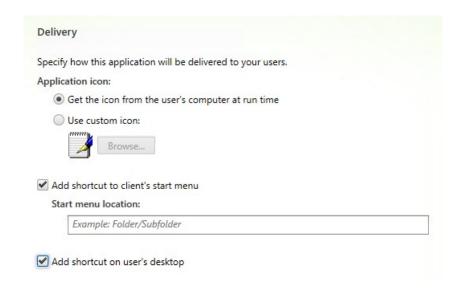


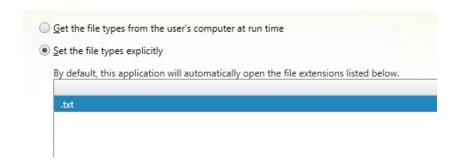
Publishing the Local Access Apps (LAA)

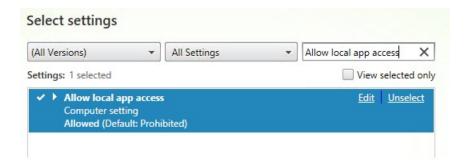


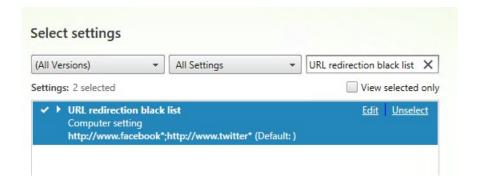


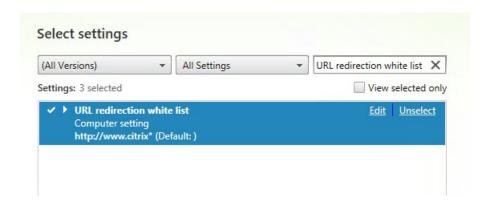


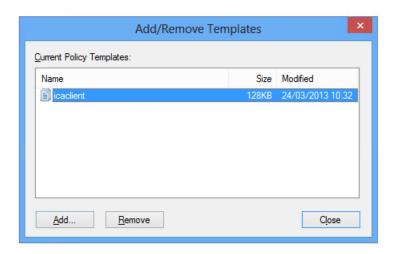


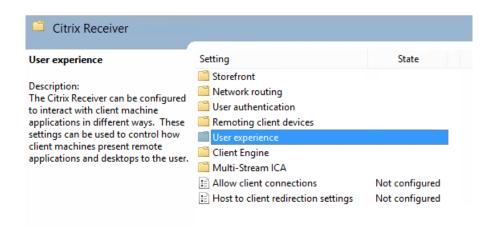


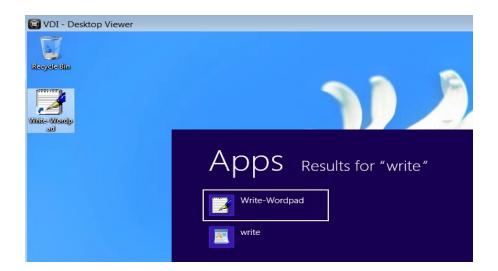






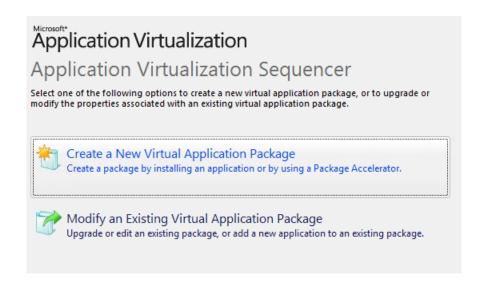






Publishing applications using Microsoft App-V





Select the method for creating a package.



Create <u>Package</u> (default)

Create a package by installing an application on this computer while App-V monitors the installation.



O Create Package Using a Package Accelerator

Create a package by applying a previously created Package Accelerator. Package Accelerator uses application setup files to create a virtual application package automatically.

Describe the type of application you want to package.



Standard Application (default)

Create a package that contains an application or suite of applications. You should select this option for most applications.



O Add-on or Plug-in

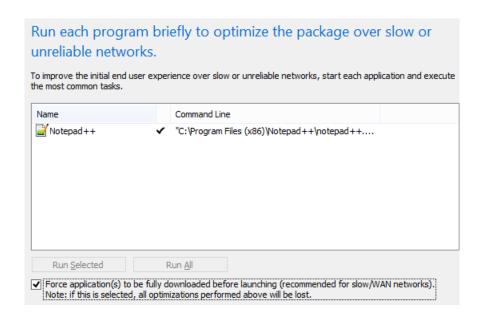
Create a package that extends the functionality of standard applications. For example, a plug-in for Microsoft Excel \otimes .



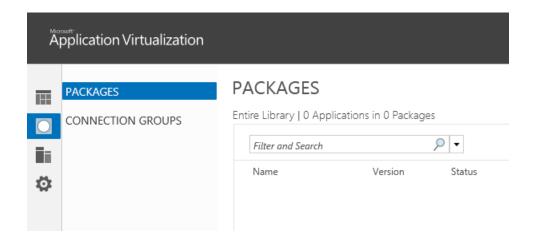
<u>M</u>iddleware

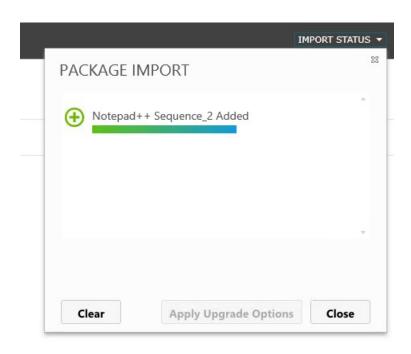
 $\label{lem:continuous} \mbox{Create a package for middleware or framework software that is required by a standard package.}$



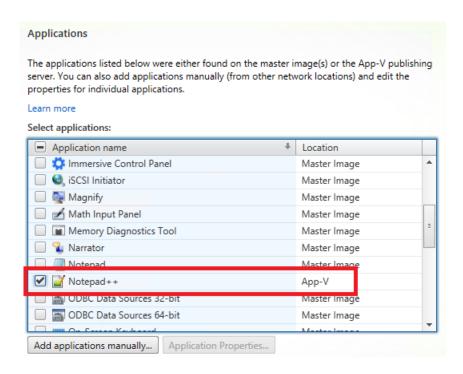


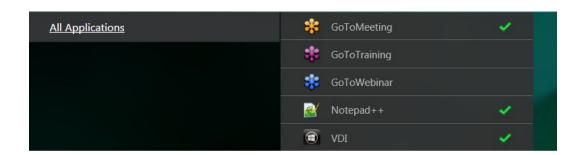














Create Package Accelerator

Select Package

Installation Files

Gathering Information

Verify Applications

Select Guidance

Create Package Accelerator

Completion

Select Files.

The following files were detected in the Package Accelerator. You should review all files and then unch files you want to remove from the Package Accelerator.

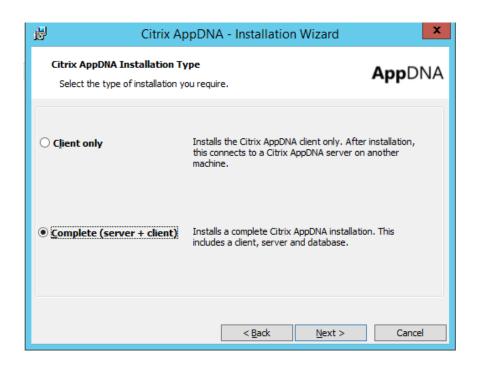
 File Name
 File T...
 File Location
 Include

 Scratch\Root\VFS\AppVSystem32Logfiles\Scm\82b820f9-de95-401a-bc63-421918b11f56

☑ 82b820f9-de95-401a-bc63-4... Scrat... C: \Users\administrator\AppDat... Yes

 $\label{logical-scale} Scratch\Root\VFS\AppVSystem32Logfiles\Scm\e725e967-85b5-4142-8416-ca38961be13a \\ \hline \end{vmatrix} e725e967-85b5-4142-8416-... Scrat... C:\Users\administrator\AppDat... Yes$

Using Citrix AppDNA 7.6



Citrix AppDNA installation locations Click change if you want to change the default locations. Install client files to: C:\Program Files (x86)\Citrix\AppDNA\ Install server files to: C:\Program Files (x86)\Citrix\AppDNA\Server\ Change

Installation Wizard Completed

AppDNA

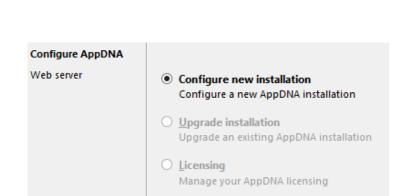
The Installation Wizard has successfully installed Citrix AppDNA. Click Finish to exit the wizard.

Launch the Configuration Wizard to configure this new installation.

<u>F</u>inish

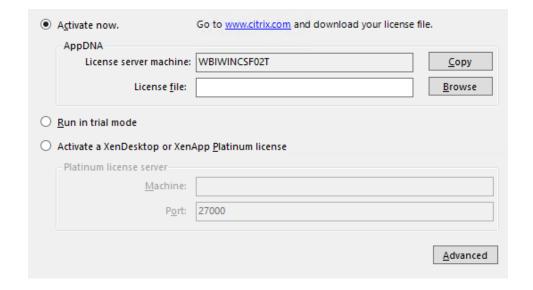
Cancel

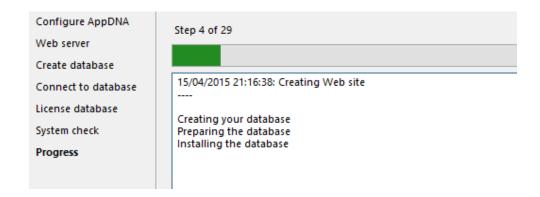
CITRIX



< Back







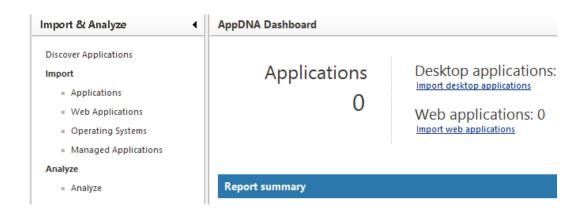


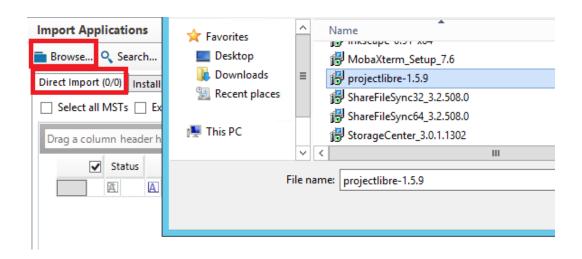


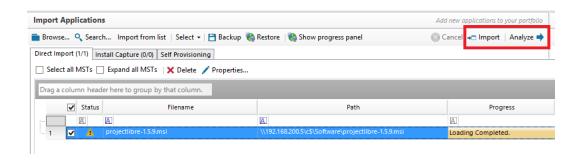
| Welcome | | |
|----------------|---|-------------------------------|
| Desktop | My enterprise is working on a Window. | s server migration project |
| Server | Select the operating systems you are | moving from and to: |
| Virtualization | From | То |
| Web Browser | Windows Server 2003 | Windows Server 2008 R2 |
| XenApp Hosted | ✓ Windows Server 2008 | ✓ Windows Server 2012/2012 R2 |
| Progress | ✓ Windows Server 2008 R2 | |
| | | |
| | | |
| | | |

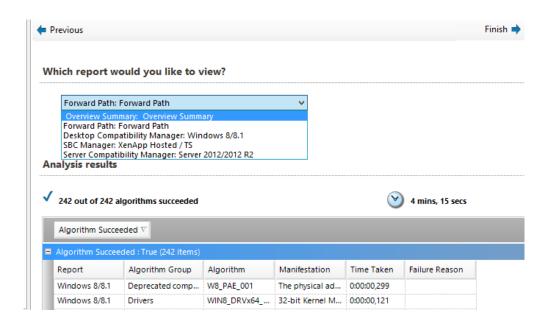
| Welcome Desktop Server Virtualization Web Browser XenApp Hosted Progress | My enterprise is working on an application virtualization project Select the technologies and versions for which you want to evaluate App-V App-V 4.5 |
|--|--|
| | My enterprise is not working on an application virtualization project at this time |

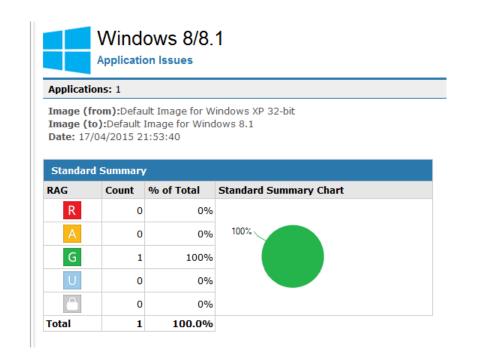
| Welcome Desktop | My enterprise is working on adopting new Web browsers |
|---|--|
| Server Virtualization Web Browser XenApp Hosted | Select the browsers for which you want to evaluate Web applications. Internet Explorer Internet Explorer 8.0 Internet Explorer 9.0 Internet Explorer 10.0 |
| Progress | ○ Internet Explorer 11.0 ✓ FireFox ● FireFox (all versions) ✓ WorxWeb ● WorxWeb (all versions) O My enterprise is not working on adopting new Web browsers at this time |

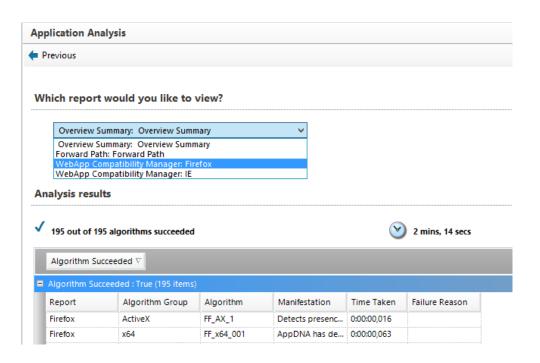




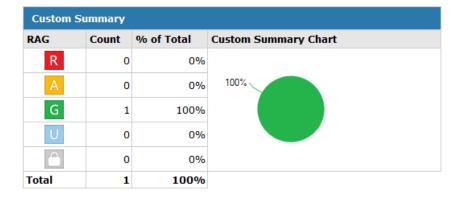






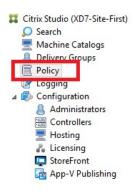


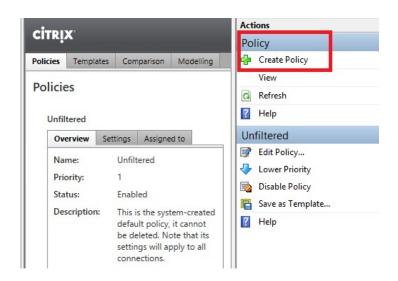
Options: Change images . Export: Detailed . Excel . PDF . MHT . Print

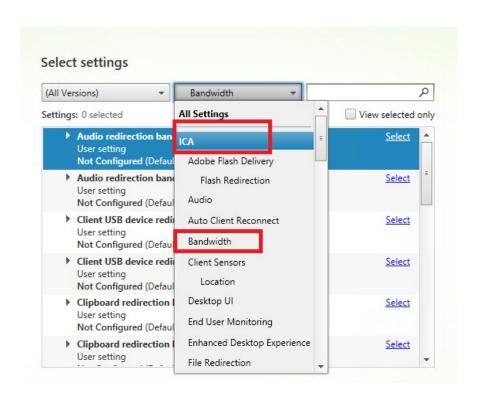


Chapter 7: XenDesktop Infrastructure Tuning

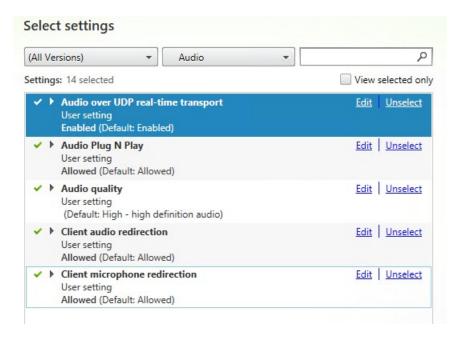
Configuring the XenDesktop policies



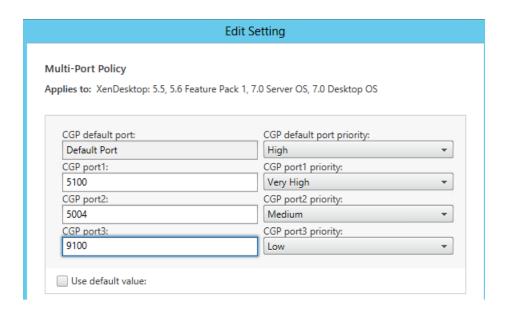




Audio subsection



Multi-Stream Connections subsection



WebSockets subsection

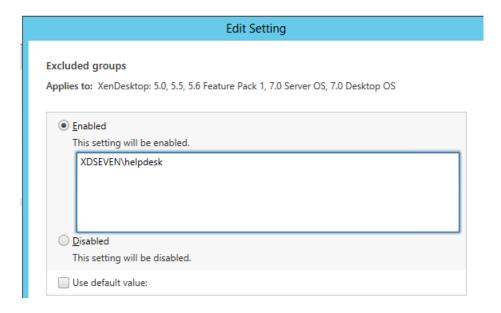
WebSockets trusted origin server list

Applies to: XenDesktop: 7.0 Server OS, 7.0 Desktop OS

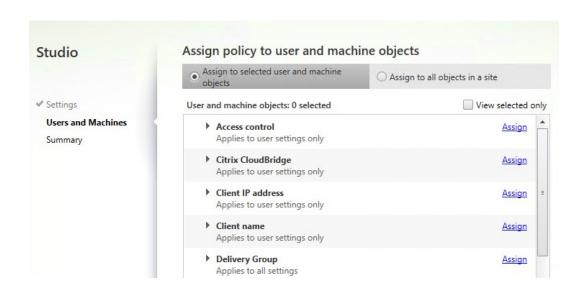
| Value: http | os://192.168.* |
|---------------|--|
| Use defa | ult value: * |
| ▼ Details and | d related settings |
| Comma-separa | ated list of trusted origin servers expressed as URLs with the option of using |

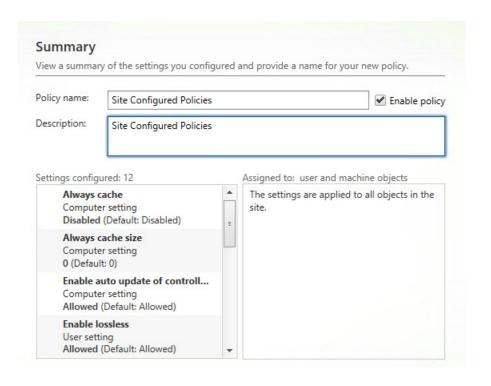
Comma-separated list of trusted origin servers expressed as URLs with the option of using wildcards.

Basic settings subsection

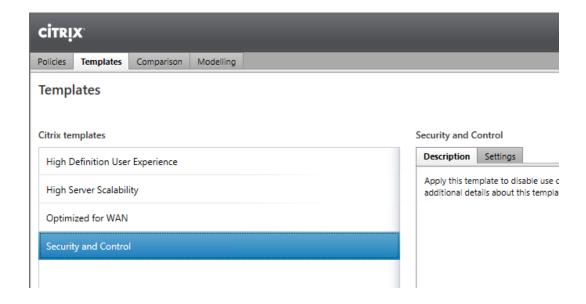


Virtual Delivery Agent Settings section

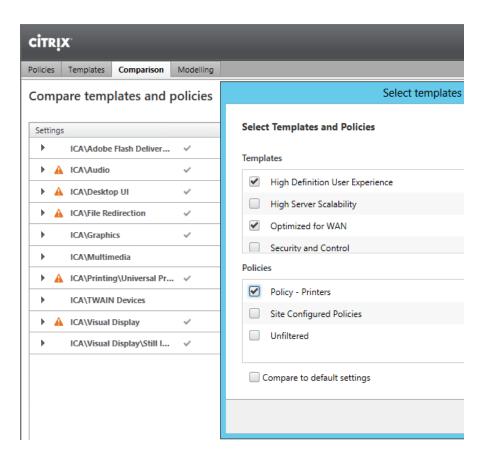




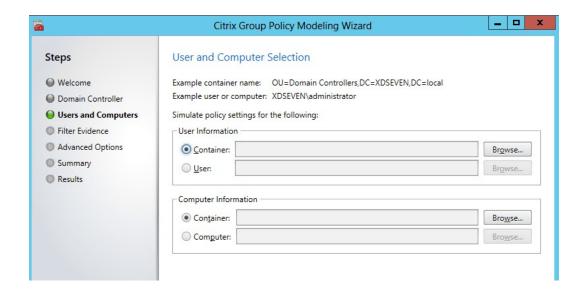
Policy templates

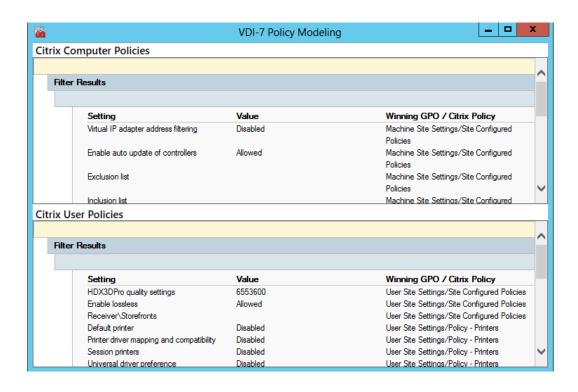


Policy comparison

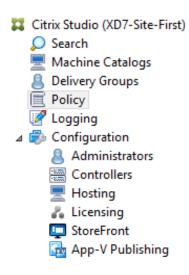


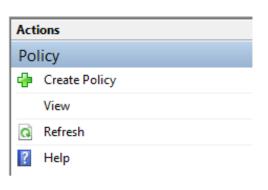
Policy modeling

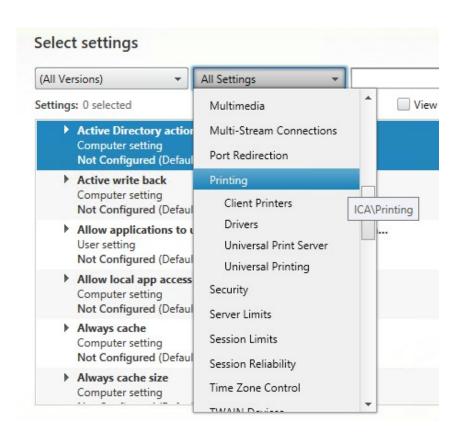


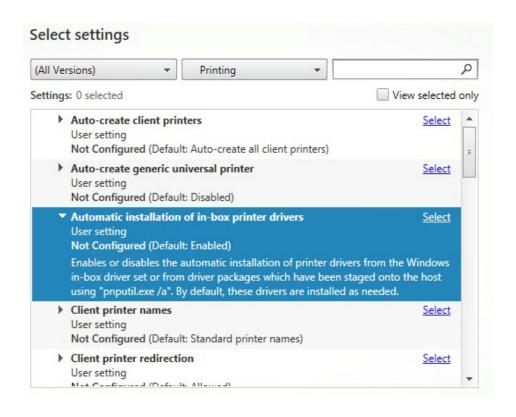


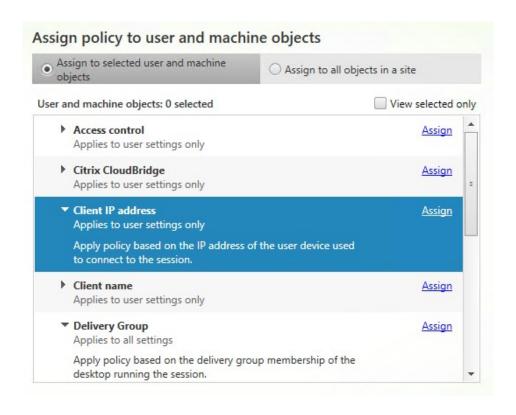
Configuring printers



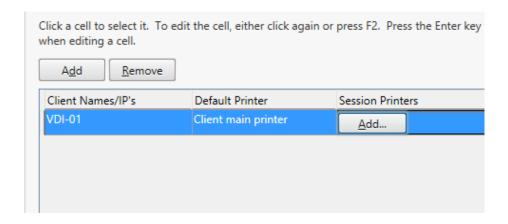


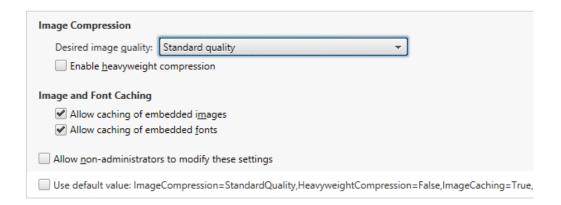


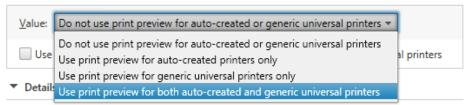




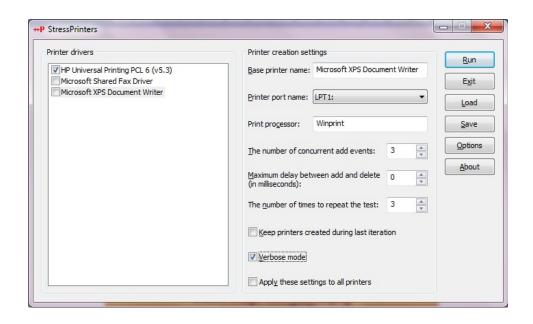
| Summary | | |
|---------------|---|------------------------|
| View a summar | y of the settings you configured and provide a name for | or your new policy. |
| Policy name: | Policy - Printers | ✓ Enable policy |
| Description: | Policy - Printers configuration | |
| | | |

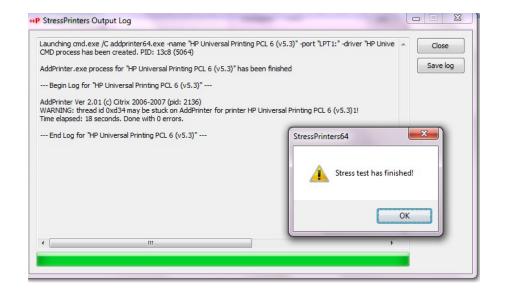






Specifies whether to use the print preview function for auto-created or generic universal printers. By default, print preview is not used for auto-created or generic universal printers.



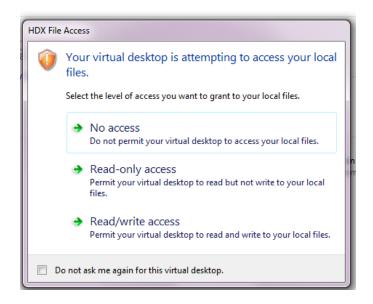


Configuring USB devices



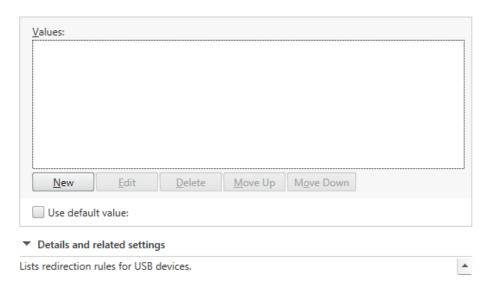
Choose how to access files on your computer from your virtual desktop

- Read and write
- Read only
- No access
- <u>A</u>sk me each time



Client USB device redirection rules

Applies to: XenDesktop: 5.0, 5.5, 5.6 Feature Pack 1, 7.0 Server OS, 7.0 Desktop OS



Configuring the XenDesktop logging

| Citrix. | | | | |
|-----------------------|---|-----------------------|-----------------------|------------|
| Administrator | Main task | Start 1 | End | Status |
| ■ Today | | | | |
| XDSEVEN\Administrator | Update HDX Policies | 10/11/2013 : 11.29.49 | 10/11/2013 : 11.29.52 | Successful |
| | | | | |
| XDSEVEN\Administrator | Update HDX Policies | 09/11/2013 : 17.41.29 | 09/11/2013 : 17.41.32 | Successful |
| ▲ Three Weeks Ago | | | | |
| XDSEVEN\Administrator | Create Application 'Notepad++' | 27/10/2013 : 02.57.41 | 27/10/2013 : 02.58.20 | Successful |
| XDSEVEN\Administrator | Remove Machine Configuration '5' from Deskt | 27/10/2013 : 02.47.53 | 27/10/2013 : 02.47.56 | Successful |
| XDSEVEN\Administrator | Delete Application 'Notepad++' | 27/10/2013 : 02.47.29 | 27/10/2013 : 02.47.59 | Successful |
| XDSEVEN\Administrator | Update Application 'Notepad++' | 27/10/2013 : 02.36.36 | 27/10/2013 : 02.36.52 | Successful |
| XDSEVEN\Administrator | Update Application 'Notepad++' | 27/10/2013 : 02.33.58 | 27/10/2013 : 02.34.19 | Successful |
| | | | | |

Configuration Logging

Disable

Enable

Logging database (where configuration logs are stored)

Database size: 0

Server location: SqlDatabaseServer.xdseven.local\CITRIX,1434

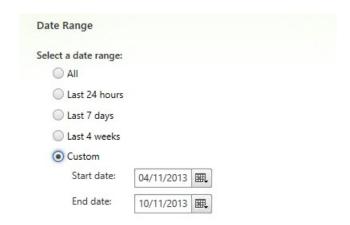
Database name: CitrixXD7-Site-First

Change logging database...

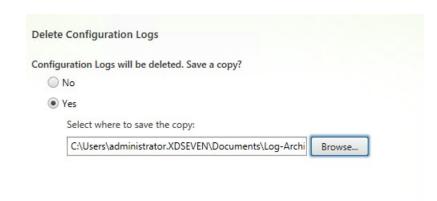
Security:

Allow changes when the database is disconnected

Administrators can make untracked changes.



| ormat and Location | |
|---|--------|
| elect a format: | |
| CSV file | |
| Best for exporting to a spreadsheet. | |
| ● HTML | |
| Best for viewing or printing. | |
| Both | |
| | |
| | |
| ocation where you want to save your report: | |
| | Browse |



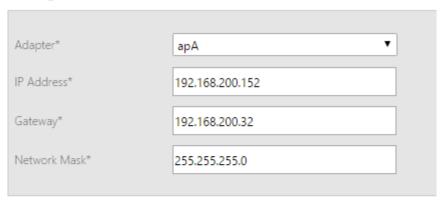
Chapter 8: XenDesktop Component Integration

Configuring the CloudBridge 7.4 platform

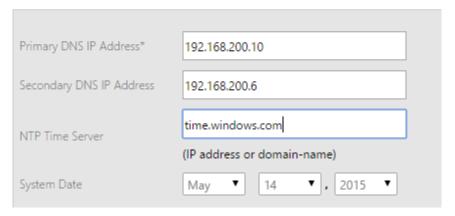
| Use the "help" command t Example: help show confi | to display help for a specific command. ig-script |
|--|--|
| -1-:-> -1 | |
| admin> show adapter apA apA | |
| Status: | Enabled |
| IP Address: | 192.168.200.152 |
| Network Mask: | 255.255.255.0 |
| Gateway: | 192.168.200.32 |
| IPv6 Address/PrefixLen: | 0.0.0.0/0 |
| IPv6 Gateway: | 0.0.0.0 |
| DHCP: | Enabled |
| Web Management Access: | Enabled |
| SSH Management Access: | Enabled |
| VLAN: | Disabled |
| VLAN Group: | 0 |
| Done | |
| admin> | |



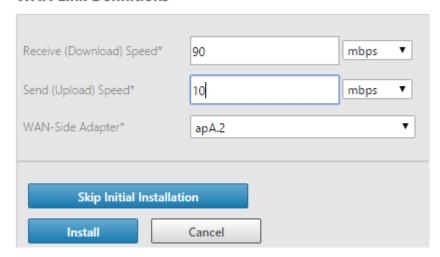
Management Access

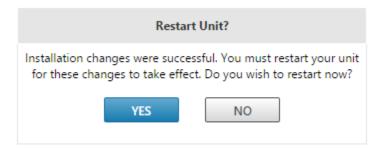


System Services



WAN Link Definitions

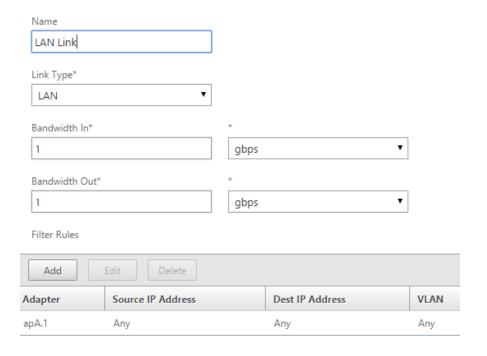


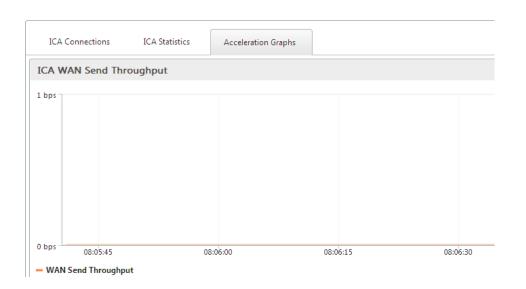


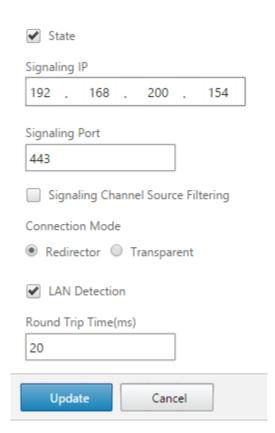




Configure Application Classifiers Name* ICA Description XenApp and XenDeskop Traffic (ICA) Application Group* Available (26) Select All Configured (1) Remove All Backup and Replication Citrix Protocols -Client-Server + 4 Content Delivery + Custom + Classification Type* • TCP Port* 1494







Installing and configuring Citrix Netscaler Gateway 10.5

| !There is no ns.conf in the /nsconfig! |
|---|
| Start Netscaler software tput: no terminal type specified and no TERM environmental variable. Enter NetScaler's IPv4 address []: 192.168.200.53 Enter Netmask []: 255.255.255.0 Enter Gateway IPv4 address []: 102.168.200.1 |
| Netscaler Virtual Appliance Initial Network Address Configuration. This menu allows you to set and modify the initial IPv4 network addresses. The current value is displayed in brackets ([]). Selecting the listed number allows the address to be changed. |
| After the network changes are saved, you may either login as nsroot and use the Netscaler command line interface, or use a web browser to http://192.168.200.53 to complete or change the Netscaler configuration. |
| 1. NetScaler's IPv4 address [192.168.200.53] 2. Netmask [255.255.255.0] 3. Gateway IPv4 address [102.168.200.1] 4. Save and quit Select item (1-4) [4]: 4 |

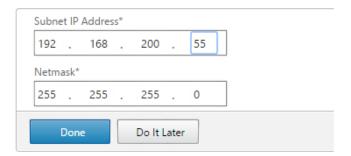


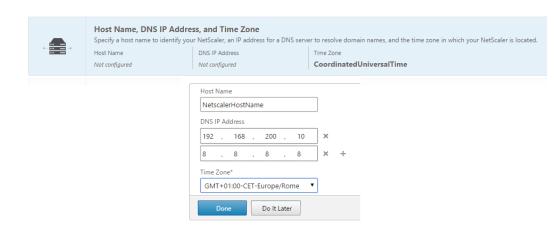


Subnet IP Address

Specify an IP address for your NetScaler to communicate with the backend servers. Subnet IP Address

Not configured







Licenses

Upload licenses from your local computer or allocate licenses from the Citrix licensing portal. There are **0** license file(s) present on this NetScaler.



Licenses

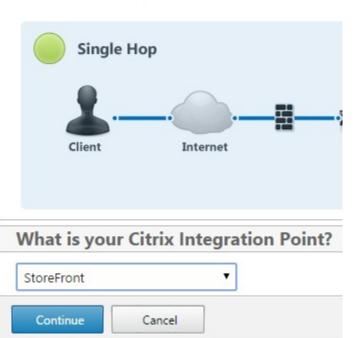
If a license is already present on your local computer, email by Citrix) to allocate licenses from the Citrix lice

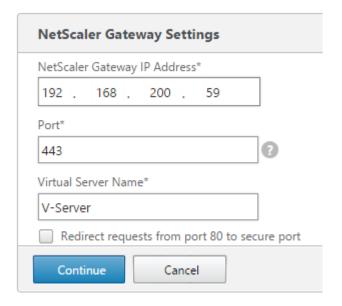
- Upload license files from a local computer
- Use Serial Number (HE2H91SCZ6)
- Use License Activation Code

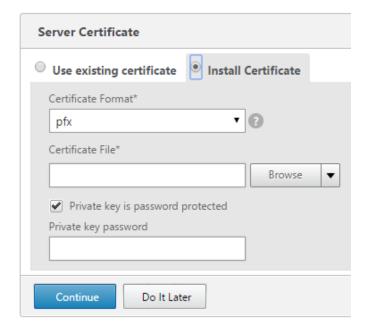




XenApp/XenDesktop Setup Wizard What is your deployment

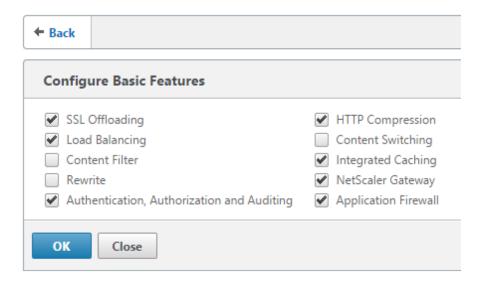


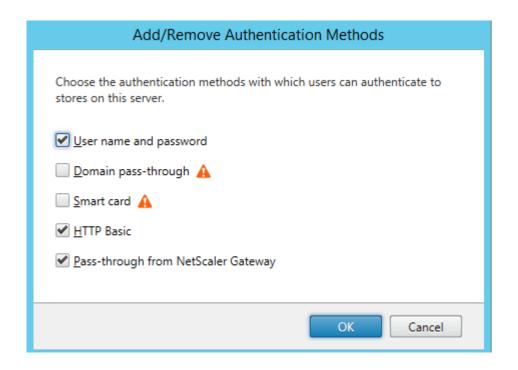




| rii | mary authentication method* |
|-----|---------------------------------------|
| Α | ctive Directory/LDAP |
|) | Use existing server Add new server |
| I | P Address* |
| | 192 . 168 . 200 . 10 🗌 IP |
| | Load Balancing |
| F | Port* |
| | 389 |
| 1 | Fime out (seconds)* |
| | 3 |
| E | Base DN* |
| | CN=Users,DC=WBITEST,DC=local |
| 5 | Service account* |
| | administrator@wbitest.local |
| (| Group Extraction |
| 9 | Server Logon Name Attribute* |
| | sAMAccountName/userPrincipalNam |
| F | Password* |
| | |



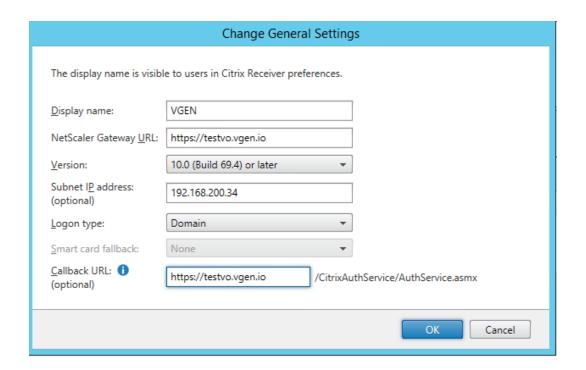


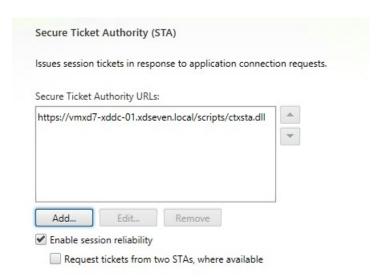


Enable Remote Access

Select NetScaler Gateway appliances to provide user access from external networks.

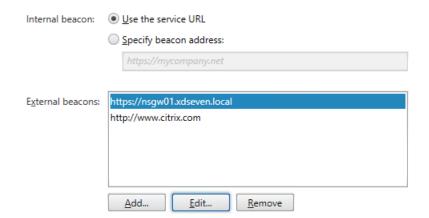




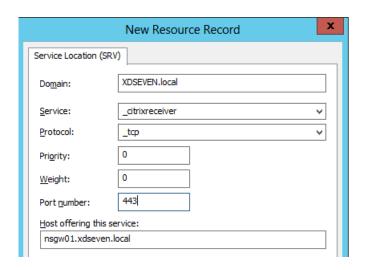


Manage Beacons

Beacon points are used to determine whether users are connecting from internal or external networks. Two external addresses that can be resolved from the Internet are required.



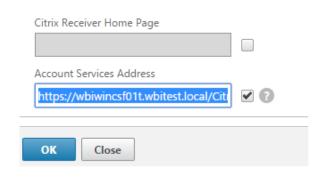


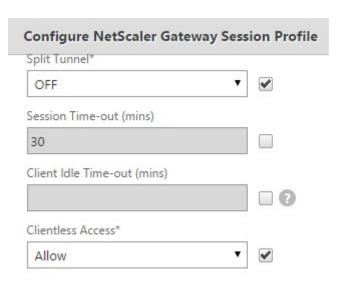


Configure NetScaler Gateway Session Profile Unchecked Override Global check box indicates that the value is inherited from Global NetScaler Gateway Parameters.

Network Configuration Client Experience Security Published Applications

Override Global







Installing and configuring Citrix XenMobile 10

```
elcome to the XenMobile First Time Use wizard. This wizard
e initial configuration of XenMobile. Accept options offer
leturn or type your own response and then press Enter/Return
ommand prompt window administrator account:
This is the user name and password you use when logging on
 mand prompt.
Username: admin
New password:
Re-enter new password:
 twork settings:
 IP address []: 192.168.200.89
 Netmask [1: 255.255.255.0
 Default gateway []: 192.168.200.1
 Primary DNS server []: 192.168.200.10
Secondary DNS server (optional) [1: 192.168.200.6
Commit settings (y/n) [y]:
```

```
Hostname []: xenmobile.wbitest.local

Commit settings (y/n) [y]:
Applying fqdn settings...

Communication ports:
HTTP [80]:
HTTPS with certificate authentication [443]:
HTTPS with no certificate authentication [8443]:
HTTPS for management [4443]:

Commit settings (y/n) [y]:
```

```
Do you want to use the same password for all the certificates of the PKI [y]:

New password:

Re-enter new password:

Commit settings (y/n) [y]:

Generating SAML signing certificate...

Generating server and client certificates...

XenMobile console administrator account:

This is the user name and password you use when logging on to the XenMobile console through a web browser.

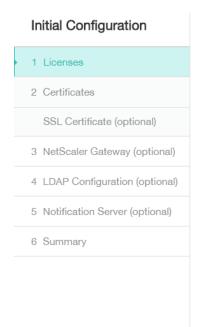
Username [administrator]:

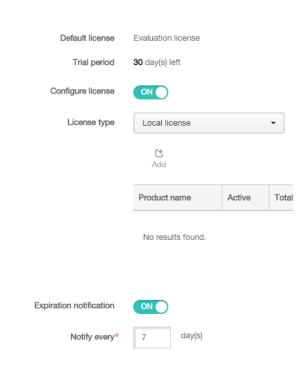
Password:

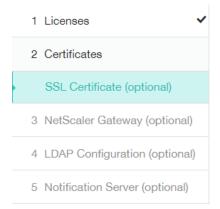
Re-enter new password:

Commit settings (y/n) [y]:
```









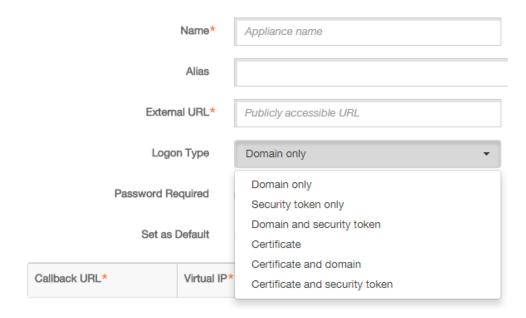
While SSL Certificate is an optional setting, once data is entered into the interest interest into the interest into the interest into the interest interest into the interest into the interest into the interest interest into the interest interest

your HTTPS connections.

NetScaler Gateway

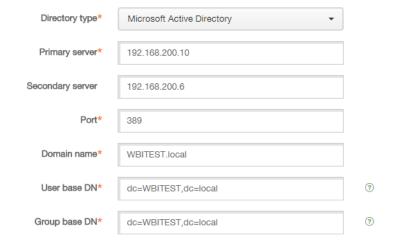
Enables secure mobile user access.

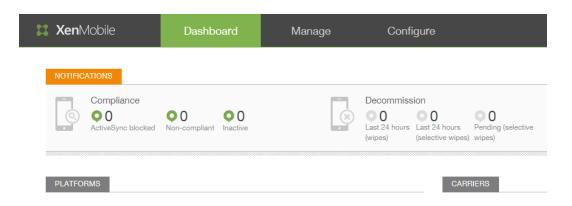
While NetScaler Gateway is an optional setting, once data is entered into the form, the required fields n page.

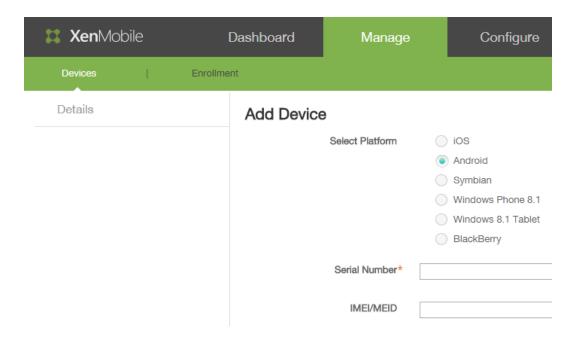


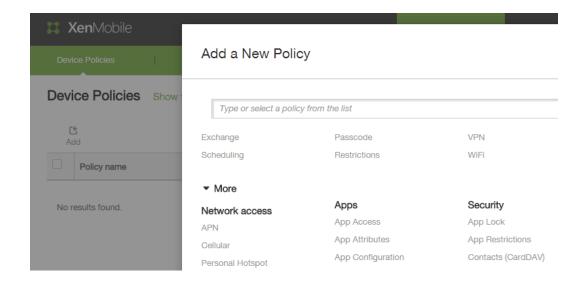
LDAP Configuration

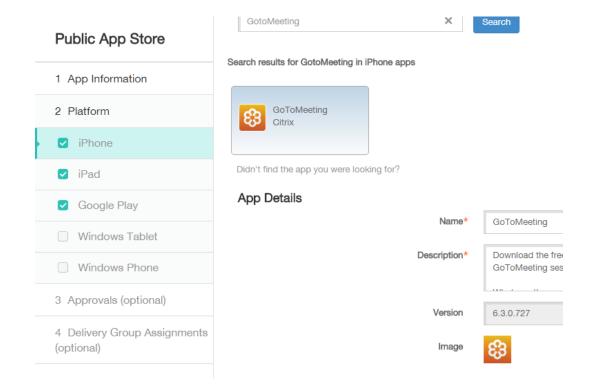
Provides connection to one or more LDAP-compliant directories, such as Active Directory, to import groups, user accounts, While LDAP Configuration is an optional setting, once data is entered into the form, the required fields must be cleared or cc the page.

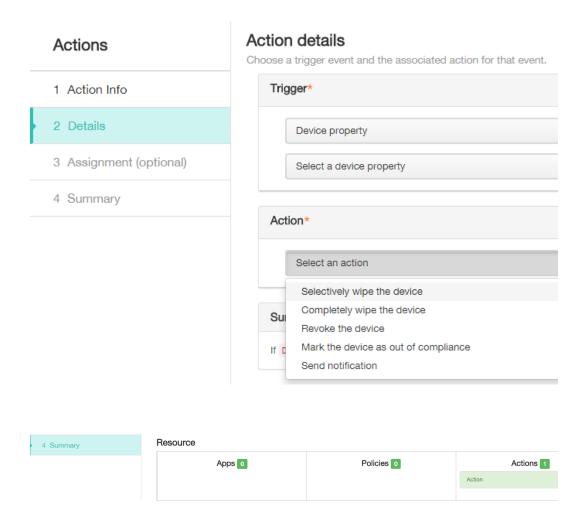






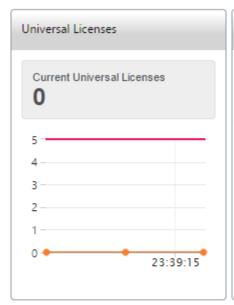


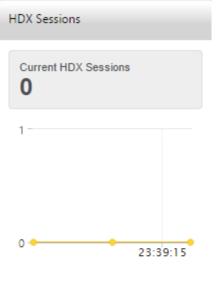




| NetScaler for XenMobile |
|---|
| Select the settings you want to configure as you set up NetScaler for your XenMobile deployment. |
| Access through NetScaler Gateway Set up Micro VPN to which Worx Mobile Apps connect. |
| ✓ Load Balance XenMobile Servers Use NetScaler to load balance XenMobile Servers. |
| Load Balance Microsoft Exchange Servers Use NetScaler and XenMobile NetScaler Connector to load balance Exchange Servers with email filtering. |
| Load Balance ShareFile StorageZones Controllers Use NetScaler to load balance ShareFile StorageZones Controllers based on the type of content requested. |
| Continue Cancel |

NetScaler Gateway





XenMobile Server Load Balancing



Load Balancing Throughput (port :8443)

Current Requests

Chapter 9: Working with XenDesktop PowerShell

Retrieving system information – configuration service cmdlets

```
Administrator: Windows PowerShell

PS C:\Users\administrator.XDSEVEN\Desktop> .\c9r1s1.ps1

XenDesktop - Configuration Service CmdLets
Clearing any previous DB connection - Status: DBUnconfigured
Configuring the DB string connection - Status: OK
The new configured DB connection string is: Server=SqlDatabaseServer.xdseven.local
D7-Site-First; Integrated Security=True
PS C:\Users\administrator.XDSEVEN\Desktop> ___
```

Managing Active Directory accounts – ADIdentity cmdlets

```
Administrator: Windows PowerShell

PS C:\Users\administrator: XDSEVEN\Desktop> .\c9r2s1.ps1

XenDesktop - Creating an Identity Pool
Pool creation activities - Status:

AvailableAccounts: 0
Domain : XDSEVEN.local
ErrorAccounts : 0
IdentityPoolName : Test-Pool-01
IdentityPoolUid : a942b55f-cfbe-47b6-a0cd-6f17a98e45ed
InUseAccounts : 0
Lock : False

MetadataMap :
NamingScheme : Desk-T##
NamingSchemeType : Numeric
OU :
StartCount : 1
IaintedAccounts : 0
Scopes : {}

Identity Pool correctly created.
SuccessfulAccountsCount : 3
FailedAccountsCount : 3
FailedAccountsCount : 0
```

Managing the Citrix Desktop Controller and its resources – Broker and AppV cmdlets

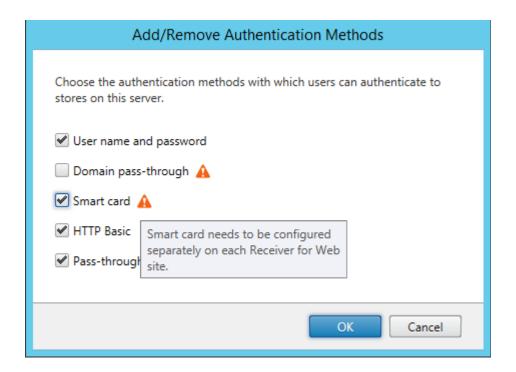
```
Administrator: Windows PowerShell

ExtensionData : System.Runtime.Serialization.ExtensionDataObject
AllocationType : Random
AssignedCount : 0
AvailableAssignedCount : 0
AvailableCount : 0
AvailableUnassignedCount : 0
AvailableUnassignedCount : 0
HypervisorConnectionUid : Catalog-Book-Number-01

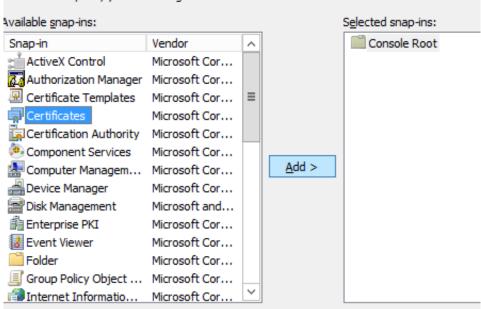
IsRemotePC : False
MetadataMap : {}
MetadataMap : {}
MinimumFunctionalLevel : L7
Name : SRV-APP-00
PersistUserChanges : OnLocal
ProvisioningSchemeId :
ProvisioningType : Manual
```

Chapter 10: Configuring the XenDesktop Advanced Logon

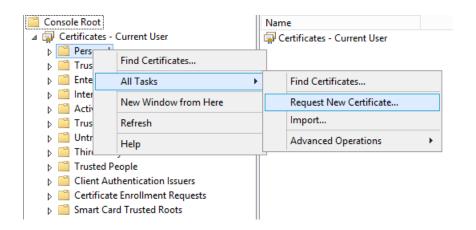
Implementing the two-factor hardware authentication for XenDesktop 7

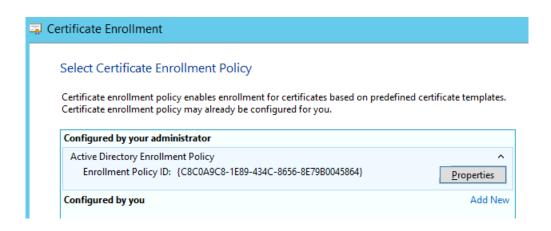


You can select snap-ins for this console from those available on your computer and configure extensible snap-ins, you can configure which extensions are enabled.







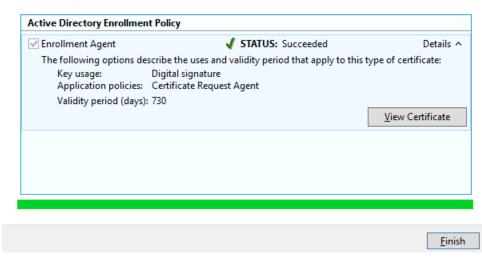




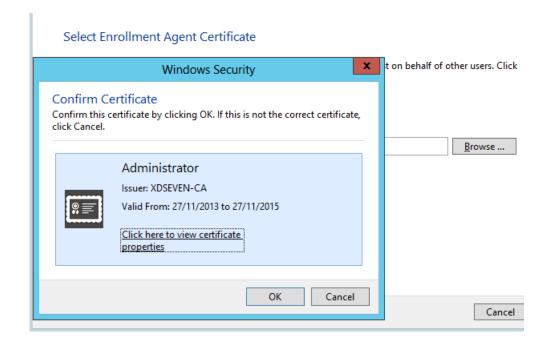


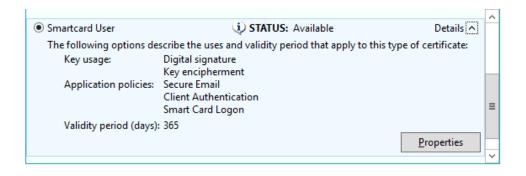
Certificate Installation Results

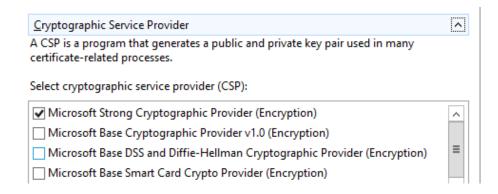
The following certificates have been enrolled and installed on this computer.



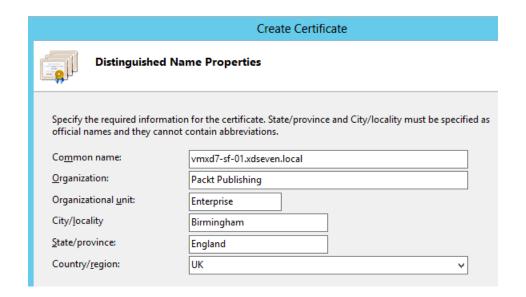


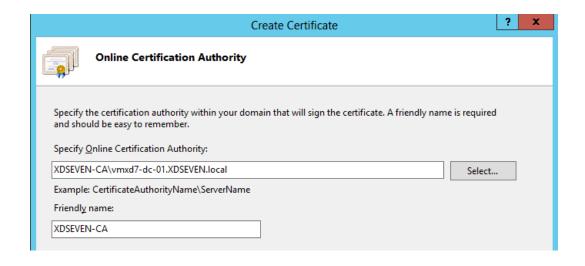


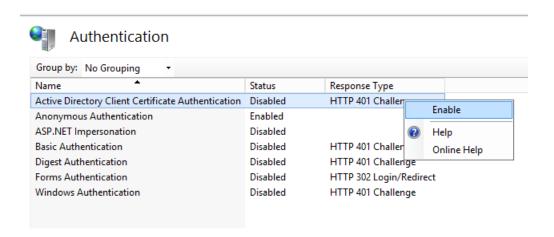


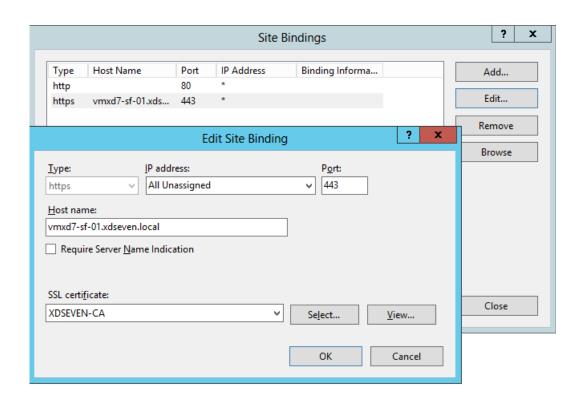


















Providers Session State SMTP E-mail

















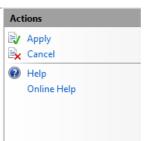
SSL Settings

This page lets you modify the SSL settings for the content of a website or application.

▼ Require SSL

Client certificates:

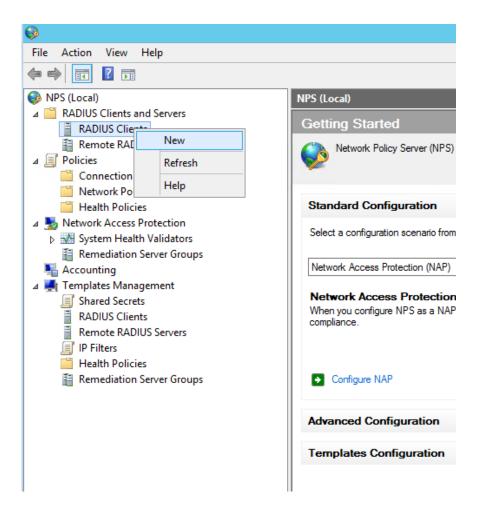
- O <u>Ig</u>nore
- <u>A</u>ccept
- \bigcirc Require

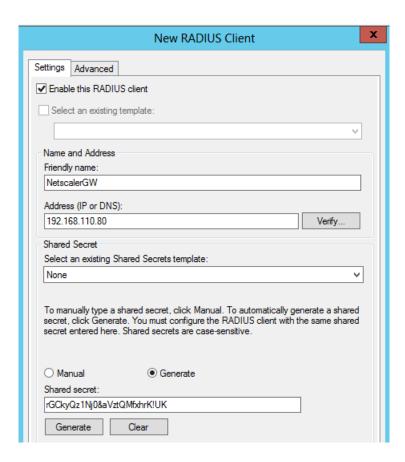


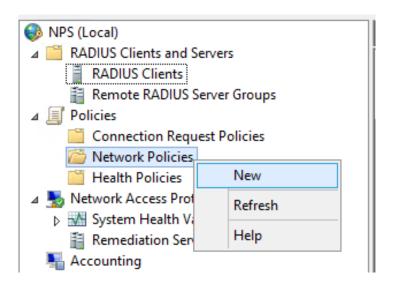
| Smart card authentication | | | |
|---|---------------|--|--|
| ○ Not Configured | Comment: | | |
| O Disabled | Supported on: | | |
| Options: Allow smart card authentication | | | |
| ✓ Use pass-through authentication for PIN | | | |

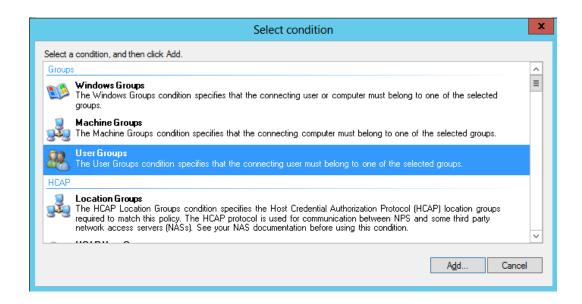
[Application]
TransportDriver=TCP/IP
DoNotUseDefaultCSL=On
BrowserProtocol=HTTPonTCP
LocHttpBrowserAddress=!
WinStationDriver=ICA 3.0
ProxyTimeout=30000
AutologonAllowed=ON
DisableCtrlAltDel=Off

Implementing strong authentication for XenDesktop 7 – Radius platform









| | New Network Policy |
|------------------------------------|--|
| | Specify Access Permission Configure whether you want to grant network access or deny network access if the connection request matches this policy. |
| O Access <u>d</u> er Deny acces | ss if client connection attempts match the conditions of this policy. |
| U Micro U Encr | bsoft Encrypted Authentication version 2 (MS-CHAP-v2) ser can change password after it has expired bsoft Encrypted Authentication (MS-CHAP) ser can change password after it has expired sypted authentication (CHAP) incrypted authentication (PAP, SPAP) or clients to connect without negotiating an authentication method. |

New Network Policy



Configure Settings

NPS applies settings to the connection request if all of the network policy conditions matched.

Configure the settings for this network policy.

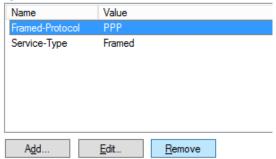
If conditions and constraints match the connection request and the policy grants access, settings are appl

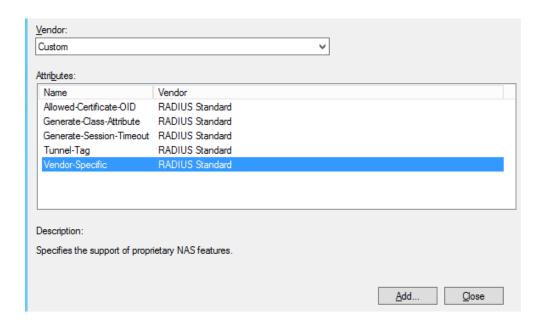
Settings:

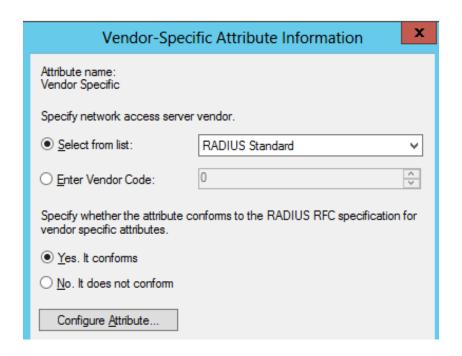


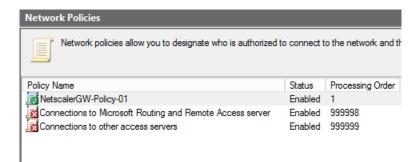
To send additional attributes to RADIUS clients, select a RADIU then click Edit. If you do not configure an attribute, it is not sent your RADIUS client documentation for required attributes.

Attributes:



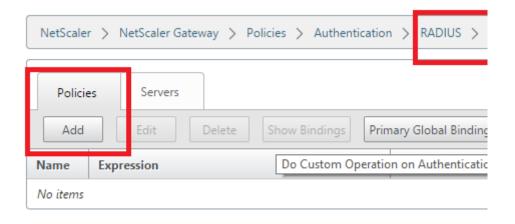


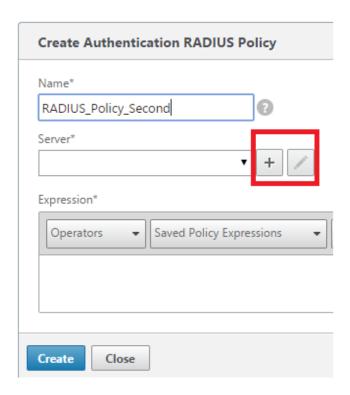


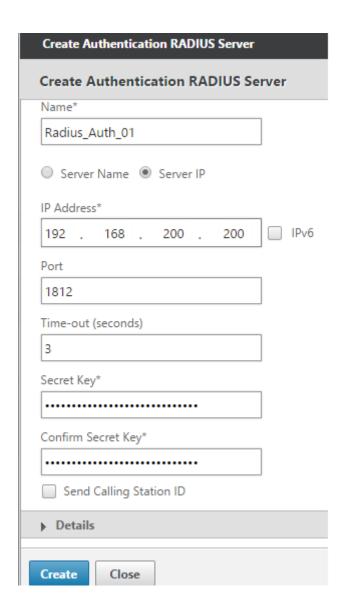


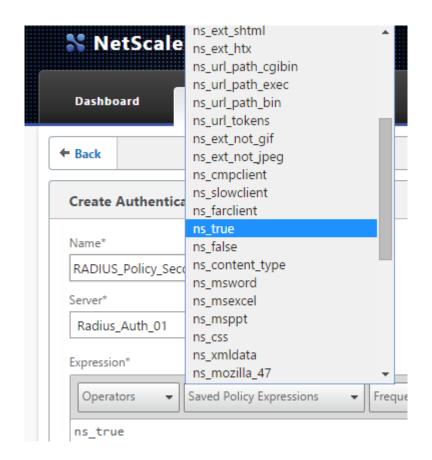


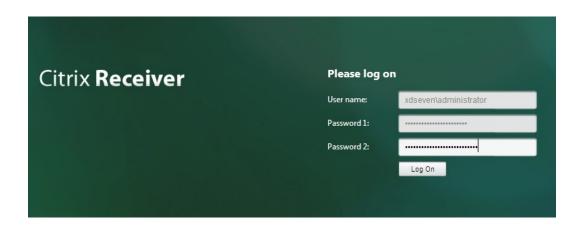


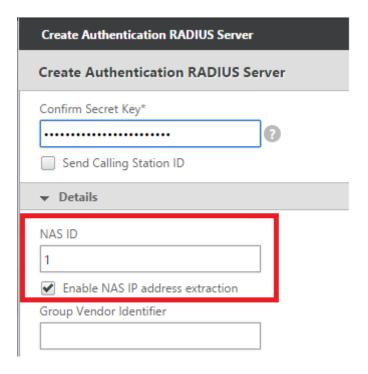






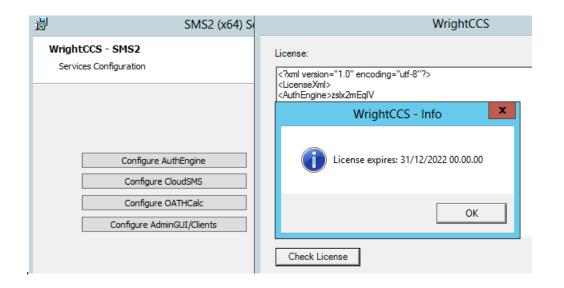


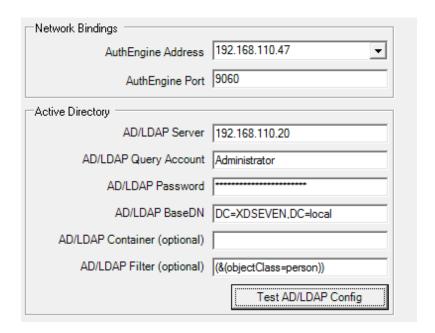




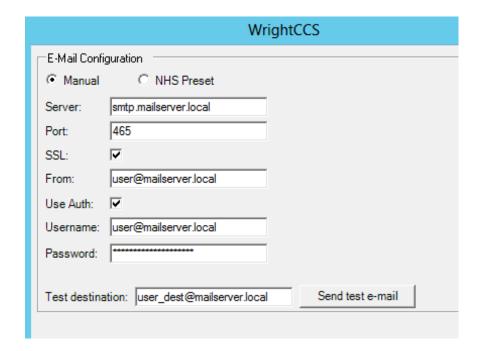
Implementing the two-factor software authentication for XenDesktop 7

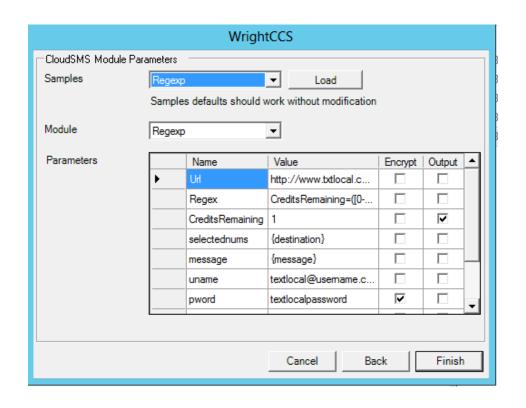












| WrightCCS | |
|------------------------------|--|
| OATHCalc Configuration | |
| TOTP Time Window (secs.) 10 | |
| HOTP Counter Window (tokens) | |

