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Enginyeria Tècnica de Telecomunicacions: Especialitat Telemàtica

ESTUDI PER PROVA DE CONCEPTE D'ESCRIPTORIS VIRTUALS

Annex

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Índex.

1. Requisits de sistema de StoreFront.

Citrix ha testat i dóna suport per StoreFront en les següents plataformes de productes Citrix.

Requeriments Citrix server

Els stores de StoreFront presenten escriptoris i aplicacions dels següents versions de XenApp i XenDesktop.

- XenDesktop
    - XenDesktop 7.6
    - XenDesktop 7.5
    - XenDesktop 7.1
    - XenDesktop 7
    - XenDesktop 5.6 Feature Pack 1
    - XenDesktop 5.6
    - XenDesktop 5.5
- XenApp
    - XenApp 7.6
    - XenApp 7.5
    - XenApp 6.5 Feature Pack 2
    - XenApp 6.5 Feature Pack 1 per Windows Server 2008 R2
    - XenApp 6.5 per Windows Server 2008 R2
    - XenApp 6.0 per Windows Server 2008 R2
    - XenApp 5.0 Feature Pack 3 per Windows Server 2008 x64 Edition
    - XenApp 5.0 Feature Pack 3 per Windows Server 2008
    - XenApp 5.0 Feature Pack 3 per Windows Server 2003 x64 Edition
    - XenApp 5.0 Feature Pack 3 per Windows Server 2003
    - XenApp 5.0 Feature Pack 2 per Windows Server 2008 x64 Edition
    - XenApp 5.0 Feature Pack 2 per Windows Server 2008
    - XenApp 5.0 Feature Pack 2 per Windows Server 2003 x64 Edition
    - XenApp 5.0 Feature Pack 2 per Windows Server 2003
    - XenApp 5.0 Feature Pack 1 per Windows Server 2003 x64 Edition

- o   XenApp 5.0 Feature Pack 1 per Windows Server 2003

- o   XenApp 5.0 per Windows Server 2008 x64 Edition

- o   XenApp 5.0 per Windows Server 2008

- o   XenApp 5.0 per Windows Server 2003 x64 Edition

- o   XenApp 5.0 per Windows Server 2003

- • VDI-in-a-Box

  - o   VDI-in-a-Box 5.3

  - o   VDI-in-a-Box 5.2

Per més informació sobre requeriments i limitacions sobre ViaB, podem accedir al document [Use StoreFront with VDI-in-a-Box](#) .

NetScaler Gateway requirements

Les següents versions de NetScaler Gateway es poden fer sevir per donar accés a StoreFront per usuaris tant a xarxes públiques com locals.

- • NetScaler Gateway 10.5

- • NetScaler Gateway 10.1

- • Access Gateway 10 Build 69.4 (El número de versió es pot comprobar a dalt de tot de l'eina de configuració)

- • Access Gateway 9.3, Enterprise Edition

Requeriments per el Receiver de HTML5

Si es planeja donar accés als escriptoris i aplicacions mitjançant el client Receiver per HTML5 per llocs Web, s'hauran de tenir en compte els següents requeriments extra.

Per connexions desde xarxes internes, Receiver per HTML5 habilita l'accés a aplicacions i escriptoris mitjançant els següents productes.

- • XenDesktop 7.6

- • XenDesktop 7.5

- • XenDesktop 7.1

- • XenDesktop 7

- • XenApp 7.6

- • XenApp 7.5

- • XenApp 6.5 Feature Pack 2

- XenApp 6.5 Feature Pack 1 per Windows Server 2008 R2 (amb el requeriment del Hotfix XA650R01W2K8R2X64051, que es pot trobar a http://support.citrix.com/article/CTX135757)

Per usuaris remots fora de la nostra xarxa corporativa, Receiver per HTML5 habilita l'accés a aplicacions i escriptoris mitjançant les següents versions de NetScaler Gateway.

- NetScaler Gateway 10.1

- Access Gateway 10 Build 71.6014 (El número de versió es pot comprobar a dalt de tot de l'eina de configuració)

Per els usuaris connectant a través de NetScaler Gateway, Receiver per HTML5 habilita l'accés a escriptoris i aplicacions oferits per les següents versions de producte:

- XenDesktop

  - XenDesktop 7.6

  - XenDesktop 7.5

  - XenDesktop 7.1

  - XenDesktop 7

  - XenDesktop 5.6

  - XenDesktop 5.5

- XenApp

  - XenApp 7.6

  - XenApp 7.5

  - XenApp 6.5 Feature Pack 2

  - XenApp 6.5 Feature Pack 1 per Windows Server 2008 R2

  - XenApp 6.5 per Windows Server 2008 R2

  - XenApp 6.0 per Windows Server 2008 R2

  - XenApp 5.0 Feature Pack 3 per Windows Server 2008 x64 Edition

  - XenApp 5.0 Feature Pack 3 per Windows Server 2008

  - XenApp 5.0 Feature Pack 3 per Windows Server 2003 x64 Edition

  - XenApp 5.0 Feature Pack 3 per Windows Server 2003

  - XenApp 5.0 Feature Pack 2 per Windows Server 2008 x64 Edition

  - XenApp 5.0 Feature Pack 2 per Windows Server 2008

  - XenApp 5.0 Feature Pack 2 per Windows Server 2003 x64 Edition

  - XenApp 5.0 Feature Pack 2 per Windows Server 2003

o   XenApp 5.0 Feature Pack 1 per Windows Server 2003 x64 Edition

o   XenApp 5.0 Feature Pack 1 per Windows Server 2003

o   XenApp 5.0 per Windows Server 2008 x64 Edition

o   XenApp 5.0 per Windows Server 2008

o   XenApp 5.0 per Windows Server 2003 x64 Edition

o   XenApp 5.0 per Windows Server 2003

- VDI-in-a-Box

    o   VDI-in-a-Box 5.3

    o   VDI-in-a-Box 5.2

1) Requeriments dels dispositius d'accés

Storefront dóna diferents opcions als usuaris per accedir als seus escriptoris i aplicacions publicats. Els usuaris poden accedir tant per el client Citrix Receiver com fent servir un navegador web per logar-se i fer servir el Receiver per web. Per els usuaris que no tenen la posibilitat d'instal·lar Citrix Receiver, ja sigui per restriccions de seguretat al dispositiu o perquè el sistema operatiu no ho soporta, però tenen un navegador compatible amb HTML5, poden accedir directament mitjançant el navegador sense l'instal·lació de cap tipus de client si s'habilita als Storefront i als Controller el Receiver per HTML5.

Usuaris amb dispositius que no estiguin units al domini poden accedir als escriptoris mitjançant els navegadors web. En el cas de dispositius units al domini i PCs reutilitzats que facin servir Citrix Desktop Lock[1], y clients Citrix més antics que no poden ser actualitzats, els usuaris deuen connectar-se fent servir el XenApp Services URL del store.

Si es planeja distribuir aplicacions offline als usuaris, el Plug-in Offline es requereix a més a més del Receiver per Windows. Si es volen servir entorns de Microsoft Application Virtualization (App-V) als usuaris, es requereix també una versió del client de Microsoft Virtualization Desktop Client. Per accedir a aquestes solucions, no es pot fer servir el client web.

Requeriments per accedir als stores fent servir Citrix Receiver

Les següents versions de Citrix Receiver es poden fer servir per connectar amb StoreFront stores tant per connexions internes com per connexions a través de NetScaler Gateway. Connexions mitjançant NetScaler Gateway es poden realitzar fent servir tant el NetScaler Gateway Plug-in com l'accés sense client.

Citrix Receiver per Windows 8/RT

Citrix Receiver per Windows 4.2

Citrix Receiver per Windows 4.1

Citrix Receiver per Windows 3.4

Citrix Receiver per Mac

Citrix Receiver per iOS

Citrix Receiver per Android 3.5

Citrix Receiver per Linux

Per informació sobre el temps de vida de Citrix Receiver, es pot consultar el document de Lifecycle Milestones per Citrix Receiver.

Requeriments per accedir als stores a través Receiver per Web sites

Les següentscombinacions de Citrix Receiver, Sistema operatiu, inavegador web combinations estan recomanats per accedir mitjançant Receiver per Web sites tant per connexions internes com per connexions a través de NetScaler Gateway. Connexions mitjançant NetScaler Gateway es poden realitzar fent servir tant el NetScaler Gateway Plug-in com l'accés sense client.

Citrix Receiver per Windows 4.1

Windows 8.1 (32-bit i 64-bit edicions)

Internet Explorer 11 (32-bit mode)

Google Chrome 33

Mozilla Firefox 32

Mozilla Firefox 31

Windows 8 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 32

Mozilla Firefox 31

Windows 7 Service Pack 1 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 32

Mozilla Firefox 31

Windows Embedded Standard 7 Service Pack 1 o Windows Thin PC

Internet Explorer 10 (32-bit mode)

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Windows Vista Service Pack 2 (32-bit i 64-bit edicions), Windows Embedded XP

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 32

Mozilla Firefox 31

Windows Embedded Standard 2009

Internet Explorer 8 (32-bit mode)

Citrix Receiver per Windows 4.0 o Citrix Receiver per Windows 3.4

Windows 8 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 27

Mozilla Firefox 26

Windows 7 Service Pack 1 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 27

Mozilla Firefox 26

Windows Embedded Standard 7 Service Pack 1 o Windows Thin PC

Internet Explorer 10 (32-bit mode)

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Windows Vista Service Pack 2 (32-bit i 64-bit edicions), Windows Embedded XP

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Google Chrome 33

Google Chrome 32

Mozilla Firefox 27

Mozilla Firefox 26

Windows Embedded Standard 2009

Internet Explorer 8 (32-bit mode)

Citrix Receiver per Mac 11.8 o Citrix Receiver per Mac 11.7

Mac OS X 10.9 Mavericks

Safari 7

Google Chrome 33

Mozilla Firefox 27

Mac OS X 10.8 Mountain Lion

Safari 6

Google Chrome 33

Mozilla Firefox 27

Mac OS X 10.7 Lion

Safari 5.1

Google Chrome 33

Mozilla Firefox 27

Mac OS X 10.6 Snow Leopard

Safari 5.0

Google Chrome 33

Mozilla Firefox 27

Citrix Receiver per Linux 12.1 o Citrix Receiver per Linux 13

Google Chrome 33

Mozilla Firefox 27

Citrix Receiver per Android 3.6 - Nota: Necessita que els usuaris obrin manualment el fitxer ICA.

Android 4.x i 5.0

Chrome per Android

El navegador per defecte en el dispositiu.

Citrix Receiver per iOS 5.9 - Nota: Necessita que els usuaris obrin manualment el fitxer ICA.

iOS 6.1.x, 7 i 8

Safari

Requeriments per accedir als escriptoris i aplicacions a través del Receiver per HTML5

Els següents sistemes operatius i navegadors webs estan recomanats pels usuaris per accedir als escriptoris i aplicacions fent servir sites web amb el Receiver HTML5. Estan suportades tant les connexions internes com les connexions via NetScaler Gateway. S'ha de tenir en compte que per connexions internes, Receiver HTML5 només permet connexions contra productes suportats específicament. Adicionalment, les versions

especifiques de NetScaler Gateway suportades són necessàries per habilitar l'accés extern, per més informació, revisar els requeriments d'infraestructura.

Navegadors

Internet Explorer 11 (HTTP connections only)

Internet Explorer 10 (HTTP connections only)

Safari 7

Google Chrome 33

Mozilla Firefox 27

Sistemes Operatius

Windows RT

Windows 8.1 (32-bit i 64-bit edicions)

Windows 8 (32-bit i 64-bit edicions)

Windows 7 Service Pack 1 (32-bit i 64-bit edicions)

Windows Vista Service Pack 2 (32-bit i 64-bit edicions)

Windows Embedded XP

Mac OS X 10.9 Mavericks

Mac OS X 10.8 Mountain Lion

Mac OS X 10.7 Lion

Mac OS X 10.6 Snow Leopard

Google Chrome OS 33

Ubuntu 12.04 (32-bit)

Requeriments per accedir als stores via sites de Desktop Appliance.

Les següents combinacions de Citrix Receiver, Sistema operatiu, i navegador web estan recomanats als usuaris per accedir a sites de Desktop Appliance desde la xarxa interna. Connexions a través de NetScaler Gateway no estan suportats.

Citrix Receiver per Windows 4.1

Windows 8.1 (32-bit i 64-bit edicions)

Internet Explorer 11 (32-bit mode)

Windows 8 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Windows 7 Service Pack 1 (32-bit i 64-bit edicions), Windows Embedded Standard 7 Service Pack 1, o Windows Thin PC

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Windows Embedded XP

Internet Explorer 8 (32-bit mode)

Citrix Receiver per Windows 4.0 o Citrix Receiver per Windows 3.4

Windows 8 (32-bit i 64-bit edicions)

Internet Explorer 10 (32-bit mode)

Windows 7 Service Pack 1 (32-bit i 64-bit edicions), Windows Embedded Standard 7 Service Pack 1, o Windows Thin PC

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Windows Embedded XP

Internet Explorer 8 (32-bit mode)

Citrix Receiver per Windows Enterprise 3.4

Windows 7 Service Pack 1 (32-bit i 64-bit edicions), Windows Embedded Standard 7 Service Pack 1, o Windows Thin PC

Internet Explorer 9 (32-bit mode)

Internet Explorer 8 (32-bit mode)

Windows Embedded XP

Internet Explorer 8 (32-bit mode)

Citrix Receiver per Linux 12.1

Ubuntu 12.04 (32-bit)

Mozilla Firefox 27

Requeriments per accedir als stores via XenApp Services URLs

Totes les versions de Citrix Receiver esmentades abans es poden fer servir per accedira stores de StoreFront amb funcionalitats reduides via XenApp Services URLs. A part, es poden fer servir clients més antics que no suporten un altre mètode d'accés

2. Requisits de sistema del servidor de llicències.

Citrix Licensing is compatible with the same hardware required to support the compatible operating systems. No additional hardware is required.

Note: The license server does not support multi-homing (two network cards plugged into distinct networks).

The License Administration Console manages the license server on the computer on which it is installed. It cannot manage remote license servers. The Simple License Service can install licenses only on the license server where it is installed.

Operating Systems	You can install the license server on servers running the following Microsoft operating systems. Citrix recommends that you install the latest Microsoft Service Pack and updates. • Windows Server 2008 Family • Windows Server 2008 R2 Family • Windows Server 2012 Family • Windows Server 2012 R2 Family • Windows 7, 32-bit and 64-bit editions • Windows 8, 32-bit and 64-bit editions • Windows 8.1, 32-bit and 64-bit editions
Disk Space Requirements	• 55 MB for the licensing components • 2 GB for User/Device licensing
Microsoft .NET Framework Requirements	Microsoft .NET Framework 3.5 SP1 or greater is required.
Browsers	• Internet Explorer Version 10 and 11 • Internet Explorer Version 8 and 9 in compatibility mode • Mozilla Firefox Version 14.0 and 15.0 • Chrome Version 14.0 and 15.0 • Safari Version 5.1

Requirements for installing License Server VPX

XenServer must provide adequate virtual computing resources to the License Server VPX as listed in this table.

Memory	512 MB. Sufficient for up to 500 Citrix servers and approximately 50,000 licenses, but monitor available memory during operation to

	determine if you need to add more memory. For larger environments, Citrix recommends allocating more memory.
XenServer version	XenServer 6.1 and XenServer 6.2.
Minimum Storage Requirement	8 GB on the default Storage Repository inside the XenServer pool.
Virtual CPU (VCPU)	1 VCPU. For larger environments or those leveraging User/Device licensing, consider adding a second VCPU.
Browsers	- Internet Explorer Versions 10.0 for 32-bit and 11.0 for 64-bit - Mozilla Firefox Versions 26.0 and 27.0 - Chrome Versions 31.0 and 32.0 - Safari Versions 3.0.3 and 5.1.7

3. Requisits de sistema de controladors i VDAs.

Delivery Controller

Supported operating systems:

- Windows Server 2012 R2, Standard and Datacenter Editions
- Windows Server 2012, Standard and Datacenter Editions
- Windows Server 2008 R2 SP1, Standard, Enterprise, and Datacenter Editions

Requirements:

- Disk space: 100 MB. Connection leasing (which is enabled by default) adds to this requirement; sizing depends on the number of users, applications, and mode (RDS or VDI). For example, 100,000 RDS users with 100 recently-used applications require approximately 3 GB of space for connection leases; deployments with more applications may require more space. For dedicated VDI desktops, 40,000 desktops require at least 400-500 MB. In any instance, providing several GBs of additional space is suggested.
- Microsoft .NET Framework 3.5.1 (Windows Server 2008 R2 only).
- Microsoft .NET Framework 4.5.1 (4.5.2 is also supported).
- Windows PowerShell 2.0 (included with Windows Server 2008 R2) or 3.0 (included with Windows Server 2012 R2 and Windows Server 2012).
- Visual C++ 2005, 2008 SP1, and 2010 Redistributable packages.

Database

Supported Microsoft SQL Server versions for the Site Configuration Database (which initially includes the Configuration Logging Database and the Monitoring Database):

- SQL Server 2014, Express, Standard, and Enterprise Editions.
- SQL Server 2012 SP1, Express, Standard, and Enterprise Editions. By default, SQL Server 2012 SP1 Express is installed when installing the Controller, if an existing supported SQL Server installation is not detected.
- SQL Server 2008 R2 SP2, Express, Standard, Enterprise, and Datacenter Editions.

The following database features are supported (except for SQL Server Express, which supports only standalone mode):

- SQL Server Clustered Instances
- SQL Server Mirroring
- SQL Server 2012 AlwaysOn Availability Groups

Windows authentication is required for connections between the Controller and the SQL Server database.

For information about the latest supported database versions, see CTX114501.

Studio

Supported operating systems:

- Windows 8.1, Professional and Enterprise Editions
- Windows 8, Professional and Enterprise Editions
- Windows 7 Professional, Enterprise, and Ultimate Editions
- Windows Server 2012 R2, Standard and Datacenter Editions
- Windows Server 2012, Standard and Datacenter Editions
- Windows Server 2008 R2 SP1, Standard, Enterprise, and Datacenter Editions

Requirements:

- Disk space: 75 MB
- Microsoft .NET Framework 4.5.1 (4.5.2 is also supported)
- Microsoft .NET Framework 3.5 SP1 (Windows Server 2008 R2 and Windows 7 only)
- Microsoft Management Console 3.0 (included with all supported operating systems)
- Windows PowerShell 2.0 (included with Windows 7 and Windows Server 2008 R2) or 3.0 (included with Windows 8.1, Windows 8, Windows Server 2012 R2, and Windows Server 2012)

Director

Supported operating systems:

- Windows Server 2012 R2, Standard and Datacenter Editions
- Windows Server 2012, Standard and Datacenter Editions
- Windows Server 2008 R2 SP1, Standard, Enterprise, and Datacenter Editions

Requirements:

- Disk space: 50 MB.
- Microsoft .NET Framework 4.5.1 (4.5.2 is also supported).
- Microsoft .NET Framework 3.5 SP1 (Windows Server 2008 R2 only)
- Microsoft Internet Information Services (IIS) 7.0 and ASP.NET 2.0. Ensure that the IIS server role has the Static Content role service installed. If these are not already installed, you are prompted for the Windows Server installation media, then they are installed for you.
- Supported browsers for viewing Director:
  - o Internet Explorer 11 and10.

    Compatibility mode is not supported for Internet Explorer. You must use the recommended browser settings to access Director. When you install Internet Explorer, accept the default to use the recommended security and compatibility settings. If you already installed the browser and chose not to use the recommended settings, go to Tools > Internet Options > Advanced > Reset and follow the instructions.

  - o Firefox ESR (Extended Support Release).
  - o Chrome.

Virtual Delivery Agent (VDA) for Windows Desktop OS

Supported operating systems:

- Windows 8.1, Professional and Enterprise Editions
- Windows 8, Professional and Enterprise Editions
- Windows 7 SP1, Professional, Enterprise, and Ultimate Editions

To use the Server VDI feature, you can use the command line interface to install a VDA for Windows Desktop OS on a supported server operating system; see Server VDI for guidance.

- Windows Server 2012 R2, Standard and Datacenter Editions
- Windows Server 2012, Standard and Datacenter Editions
- Windows Server 2008 R2 SP1, Standard, Enterprise, and Datacenter Editions

Requirements:

- Microsoft .NET Framework 4.5.1 (4.5.2 is also supported)
- Microsoft .NET Framework 3.5.1 (Windows 7 only)
- Microsoft Visual C++ 2005, 2008, and 2010 Runtimes (32-bit and 64-bit)

Remote PC Access uses this VDA, which you install on physical office PCs.

Several multimedia acceleration features (such as HDX MediaStream Windows Media Redirection) require that Microsoft Media Foundation be installed on the machine on which you install the VDA. If the machine does not have Media Foundation installed, the multimedia acceleration features will not be installed and will not work. Do not remove Media Foundation from the machine after installing the Citrix software; otherwise, users will not be able to log on to the machine. On most Windows 8.1, Windows 8, and Windows 7 editions, Media Foundation support is already installed and cannot be removed. However, N editions do not include certain media-related technologies; you can obtain that software from Microsoft or a third party.

During VDA installation, you can choose to install the HDX 3D Pro version of the VDA for Windows Desktop OS. That version is particularly suited for use with DirectX and OpenGL-driven applications and with rich media such as video.

You cannot install a current version of the VDA on a machine running Windows XP or Windows Vista; however, you can install an earlier Virtual Desktop Agent version on those operating systems, if needed. See CTX140941 for details. The Remote PC Access version in this release is not supported on Windows Vista operating systems.

Virtual Delivery Agent (VDA) for Windows Server OS

Supported operating systems:

- Windows Server 2012 R2, Standard and Datacenter Editions
- Windows Server 2012, Standard and Datacenter Editions
- Windows Server 2008 R2 SP1, Standard, Enterprise, and Datacenter Editions

The installer automatically deploys the following requirements, which are also available on the Citrix installation media in the Support folders:

- Microsoft .NET Framework 4.5.1 (4.5.2 is also supported)
- Microsoft .NET Framework 3.5.1 (Windows Server 2008 R2 only)
- Microsoft Visual C++ 2005, 2008, and 2010 Runtimes (32-bit and 64-bit)

The installer automatically installs and enables Remote Desktop Services role services, if they are not already installed and enabled.

Several multimedia acceleration features (such as HDX MediaStream Windows Media Redirection) require that the Microsoft Media Foundation be installed on the machine on which you install the VDA. If the machine does not have Media Foundation installed, the multimedia acceleration features will not be installed and will not work. Do not remove Media Foundation from the machine after installing the Citrix software; otherwise, users will not be able to log on to the machine. On most Windows Server 2012 R2, Windows Server 2012, and Windows Server 2008 R2 editions, the Media Foundation feature is installed through the Server Manager (for Windows Server 2012 R2 and Windows Server 2012: ServerMediaFoundation; for Windows Server 2008 R2: DesktopExperience). However, N editions do not include certain media-related technologies; you can obtain that software from Microsoft or a third party.

Hosts / virtualization resources

Supported platforms:

- XenServer.
    - XenServer 6.5
    - XenServer 6.2 SP1 plus hotfixes (you must apply SP1 to enable application of future hotfixes)
    - XenServer 6.1
- VMware vSphere. No support is provided for vSphere vCenter Linked Mode operation.
    - VMware vSphere 5.5 Update 2
    - VMware vSphere 5.5 Update 1
    - VMware vSphere 5.5
    - VMware vSphere 5.1 Update 2
    - VMware vSphere 5.0 Update 2
- System Center Virtual Machine Manager - Includes any version of Hyper-V that can register with the supported System Center Virtual Machine Manager versions.
    - System Center Virtual Machine Manager 2012 R2
    - System Center Virtual Machine Manager 2012 SP1
    - System Center Virtual Machine Manager 2012

You can also deploy this product in the following cloud environments:

- Amazon Web Services (AWS)
    - You can provision applications and desktops on supported Windows server operating systems.
    - SQL Server 2012 Enterprise is not available on AWS.
    - AWS does not offer desktop operating system instances.

- o The Amazon Relational Database Service (RDS) is not supported.
- o See the AWS documentation and [CTX140427](#) for additional information.
- Citrix CloudPlatform
    - o The minimum supported version is 4.2.1 with hotfixes 4.2.1-4.
    - o Deployments were tested using XenServer 6.2 (with Service Pack 1 and hotfix XS62ESP1003) and vSphere 5.1 hypervisors.
    - o CloudPlatform does not support Hyper-V hypervisors.
    - o CloudPlatform 4.3.0.1 supports VMware vSphere 5.5.
    - o See the CloudPlatform documentation (including the Release Notes for your CloudPlatform version) and [CTX140428](#) for additional support and Linux-based system requirements information.

See [CTX131239](#) for updated hypervisor support information.

The following virtualization resource and storage technology combinations are supported for Machine Creation Services and runtime Active Directory account injection into VMs. Combinations marked with an asterisk (*) are recommended.

Virtualization resource	Local Disks	NFS	Block Storage	Storage Link
XenServer	Yes	Yes *	Yes	No
VMware	Yes (no vMotion or dynamic placement)	Yes *	Yes	No
Hyper-V	Yes	No	Yes * (requires Cluster Shared Volumes)	No

The Remote PC Access Wake on LAN feature requires Microsoft System Center Configuration Manager 2012. See [Configuration Manager and Remote PC Access Wake on LAN](#) for details.

Active Directory functional level support

The following functional levels for the Active Directory forest and domain are supported:

- Windows 2000 native
- Windows Server 2003
- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2

HDX - Desktop Composition Redirection

The Windows user device or thin client must support or contain:

- DirectX 9
- Pixel Shader 2.0 (supported in hardware)
- 32 bits per pixel
- 1.5 GHz 32-bit or 64-bit processor
- 1 GB RAM
- 128 MB video memory on the graphic card or an integrated graphics processor

HDX queries the Windows device to verify that it has the required GPU capabilities and automatically reverts to server-side desktop composition if it does not. List the devices with the required GPU capabilities that do not meet the processor speed or RAM specifications in the GPO group for devices excluded from Desktop Composition Redirection.

The minimum available bandwidth is 1.5 Mbps; recommended bandwidth is 5 Mbps. Those values incorporate end-to-end latency.

HDX - Windows Media delivery

The following clients are supported for Windows Media client-side content fetching, Windows Media redirection, and real-time Windows Media multimedia transcoding: Receiver for Windows, Receiver for iOS, and Receiver for Linux.

To use Windows Media client-side content fetching on Windows 8 devices, set the Citrix Multimedia Redirector as a default program: in Control Panel > Programs > Default Programs > Set your default programs, select Citrix Multimedia Redirector and click either Set this program as default or Choose defaults for this program.

GPU transcoding requires an NVIDIA CUDA-enabled GPU with Compute Capability 1.1 or higher; see http://developer.nvidia.com/cuda/cuda-gpus.

HDX - Flash Redirection

The following clients and Adobe Flash Players are supported:

- Receiver for Windows (for second generation Flash Redirection features) - Second generation Flash Redirection features require Adobe Flash Player for Other Browsers, sometimes referred to as an NPAPI (Netscape Plugin Application Programming Interface) Flash Player
- Receiver for Linux (for second generation Flash Redirection features) - Second generation Flash Redirection features require Adobe Flash Player for other Linux or Adobe Flash Player for Ubuntu.
- Citrix Online plug-in 12.1 (for legacy Flash Redirection features) - Legacy Flash Redirection features require Adobe Flash Player for Windows Internet Explorer (sometimes referred to as an ActiveX player).

The major version number of the Flash Player on the user device must be greater than or equal to the major version number of the Flash Player on the server. If an earlier version of the Flash Player is installed on the user device, or if the Flash Player cannot be installed on the user device, Flash content is rendered on the server.

The machines running VDAs require:

- Adobe Flash Player for Windows Internet Explorer (the ActiveX player)
- Internet Explorer versions 7, 8, 9, 10, 11 (in non-Modern UI mode). Flash redirection requires Internet Explorer on the server; with other browsers, Flash content is rendered on the server.
- Protected mode disabled in Internet Explorer (Tools > Internet Options > Security tab > Enable Protected Mode check box cleared). Restart Internet Explorer to effect the change.

HDX 3D Pro

When installing a VDA for Windows Desktop OS, you can choose to install the HDX 3D Pro version.

The physical or virtual machine hosting the application can use GPU Passthrough or Virtual GPU (vGPU):

- GPU Passthrough is available with Citrix XenServer. GPU Passthrough is also available with VMware vSphere and VMware ESX, where it is referred to as virtual Direct Graphics Acceleration (vDGA).
- vGPU is available with Citrix XenServer; see www.citrix.com/go/vGPU (Citrix My Account credentials required).

Citrix recommends that the host computer have at least 4 GB of RAM and four virtual CPUs with a clock speed of 2.3 GHz or higher.

Graphical Processing Unit (GPU):

- For CPU-based compression (including lossless compression), HDX 3D Pro supports any display adapter on the host computer that is compatible with the application being delivered.
- For optimized GPU frame buffer access using the NVIDIA GRID API, HDX 3D Pro requires NVIDIA Quadro cards with the latest NVIDIA drivers. The NVIDIA GRID delivers a high frame rate, resulting in a highly interactive user experience.
- For vGPU using XenServer, HDX 3D Pro requirements include NVIDIA GRID K1 and K2 cards.

User device:

- HDX 3D Pro supports all monitor resolutions that are supported by the GPU on the host computer. However, for optimum performance with the minimum recommended user device and GPU specifications, Citrix recommends a maximum monitor resolution for user devices of 1920 x 1200 pixels for LAN connections, and 1280 x 1024 pixels for WAN connections.
- Citrix recommends that user devices have at least 1 GB of RAM and a CPU with a clock speed of 1.6 GHz or higher. Use of the default deep compression codec, which is required on low-bandwidth connections, requires a more powerful CPU unless the decoding is done in hardware. For optimum performance, Citrix recommends that user devices have at least 2 GB of RAM and a dual-core CPU with a clock speed of 3 GHz or higher.

- For multi-monitor access, Citrix recommends user devices with quad-core CPUs.
- User devices do not need a dedicated GPU to access desktops or applications delivered with HDX 3D Pro.
- Citrix Receiver must be installed.

HDX - Video conferencing requirements for webcam video compression

Supported clients: Citrix Receiver for Windows, Receiver for Mac, and Receiver for Linux.

Supported video conferencing applications:

- Citrix GoToMeeting HDFaces
- Adobe Connect
- Cisco WebEx
- IBM Sametime
- Microsoft Lync 2010 and 2013
- Microsoft Office Communicator
- Google+ Hangouts
- Media Foundation-based video applications on Windows 8.x, Windows Server 2012, and Windows Server 2012 R2
- Skype 6.7. To use Skype on a Windows client, edit the registry on the client and the server:
    - o Client registry key HKEY_CURRENT_USER\Software\Citrix\HdxRealTime

      Name: DefaultHeight , Type: REG_DWORD, Data: 240

      Name: DefaultWidth, Type: REG_DWORD, Data: 320

    - o Server registry key HKEY_LOCAL_MACHINE\SOFTWARE\Citrix\Vd3d\Compatibility

      Name: skype.exe, Type: REG_DWORD, Data: Set to 0

Other user device requirements:

- Appropriate hardware to produce sound.
- DirectShow-compatible webcam (use the webcam default settings). Webcams that are hardware encoding-capable reduces client-side CPU usage.
- Webcam drivers, obtained from the camera manufacturer if possible.

HDX - Other

UDP audio for Multi-Stream ICA is supported on Receiver for Windows and Receiver for Linux 13.

Echo cancellation is supported on Citrix Receiver for Windows.

Universal Print Server Requirements

- Universal Print Server - The Universal Print Server comprises client and server components. The UPClient component is included in the VDA installation. The UPServer component (which you install on each print server where the shared printers reside that you want to provision with the Citrix Universal Print Driver in user sessions) is supported on:
    - o Windows Server 2008 R2 SP1
    - o Windows Server 2008 32-bit

Other

- Citrix recommends installing or upgrading to the component software versions provided on the installation media for this release.
    - o StoreFront requires 2 GB of memory. See the StoreFront documentation for system requirements. StoreFront 2.0 is the minimum supported version with this release.
    - o When using Provisioning Services with this release, the minimum supported Provisioning Services version is 7.0.
    - o The Citrix License Server requires 40 MB of disk space. See the licensing documentation for system requirements. The minimum supported Citrix License Server version is 11.12.1.
- The Microsoft Group Policy Management Console (GPMC) is required if you store Citrix policy information in Active Directory rather than the Site Configuration database. For more information, see the Microsoft documentation.
- By default, the Receiver for Windows is installed when you install a VDA. For system requirements information on other platforms, see the Receiver for Windows documentation.
- The Receiver for Linux and the Receiver for Mac are provided on the product installation media. See their documentation for system requirements.
- When using Access Gateway versions earlier than 10.0 with this release, Windows 8.1 and Windows 8 clients are not supported.
- Desktop Lock - Supported operating systems:
    - o Windows 7, including Embedded Edition
    - o Windows XP Embedded
    - o Windows Vista

    User devices must be connected to a local area network (LAN).

    Supported Receiver: Citrix Receiver for Windows Enterprise 3.4 package (minimum)..

- Client folder redirection - Supported operating systems:
    - o Server: Windows Server 2008 R2 SP1, Windows Server 2012, and Windows Server 2012 R2
    - o Client (with latest Citrix Receiver for Windows): Windows 7, Windows 8, and Windows 8.1

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Software requirements

Systems running Profile management 5.x must be based on one of the following operating systems:

- **Desktops** - Microsoft Windows 7, Windows 8, and Windows 8.1.

    In XenDesktop environments, Windows Store applications (also known as Metro apps) are supported on dedicated desktops and on desktops with personal vDisks, but not on other desktop types.

- **Servers** - Standard, Enterprise, and Datacenter Editions of Windows Server 2008 (including Windows Server 2008 R2) and Windows Server 2012 (including Windows Server 2012 R2)

With Enhanced Protected Mode (EPM), cookies in Microsoft Internet Explorer 10 or later are not supported on Windows 7 or later. When EPM is enabled, cookies are not processed or handled by Profile management.

Every user should have access to the user store, a network folder where profiles are stored centrally. Alternatively, profiles can be stored in users' home drives if preferred. For more information, see Profile management architecture.

Unless you use XenDesktop 7, where Profile management is integrated into Desktop Studio, Active Directory (AD) Group Policy Objects (GPOs) are required for configuration. AD forest functional and domain functional levels of Windows Server 2008 and Windows Server 2012 native mode are supported. For more information, see Domain and forest support in Profile management. Alternatively, you can use a local .ini file for configuration settings, but in general the .ini file should be used for testing purposes only. Note that settings in the .ini file are applied for any setting not configured in the GPO, that is any Group Policy setting that is left in the Not Configured state.

If short file names (also known as 8.3 file names) are mandated in a Citrix product or component you are using with Profile management, do not turn off support for short file names in your Profile management deployment. Doing so may cause issues when files are copied to and from the user store.

On computers running the Profile Management Service, store profiles on a single disk mounted by drive letter. If a disk is mounted into a folder that is used to store a user's profile (a typical example is C:\Users), it might be masked from the Service and not processed.

Downloads

Profile management 5.x can be used with these Citrix products:

- XenDesktop
- XenApp
- VDI-in-a-Box

To download Profile management

1. Navigate to the Citrix download pages.
2. Log on to My Account. Your account must be associated with the licensing entitlement for the Citrix product that you have deployed. If your account is not associated with your license entitlement, contact Citrix Customer Service.
3. In Find Downloads, select your product and select Components as the download type.
4. Download the latest version of Profile management.

Diagnostics Feature

Before you can use Citrix Diagnostic Facility to capture trace logs, ensure it is available with the Citrix product or component that is used on the device, virtual desktop, or Citrix server whose profiles you want to monitor.

Application Streaming

If you use Citrix XenApp to stream applications to user devices, install the Citrix offline plug-in (formerly called XenApp Plug-in for Streamed Apps) 1.3.1 or later on user devices. Version 1.2 of this plug-in changed the location of per-user disk storage for streamed application settings, resulting in user preferences being lost at logoff. With Version 1.3.1 or later, these settings are stored in %LOCALAPPDATA%, and follow the user from device to device without data loss. No configuration of Profile management is required with this later version of the plug-in.

Although it is unsupported, if you must use XenApp Plugin for Streamed Apps 1.2 see CTX120006 for a workaround to the data-loss issue.

Cross-Platform Settings

To use the cross-platform settings feature in this release, Microsoft Core XML Services (MSXML) 6.0 Service Pack 1 or later must be installed on all computers running the Profile Management Service. This component is part of Microsoft .NET Framework 3.5 and is required in order to process definition files. For more information on MSXML 6.0 Service Pack 1, including its system requirements, see http://www.microsoft.com/downloads/en/details.aspx?FamilyID=d21c292c-368b-4ce1-9dab-3e9827b70604&displaylang=en.

Use this feature only with the supported set of operating systems and applications. For more information, see Operating systems and applications supported By cross-platform settings.

Migrating Existing Profiles to Citrix User Profiles

Migration from the following profile types to Citrix user profiles is supported:

- Windows roaming profiles
- Local profiles based on any of the following operating systems:
    - Windows 8
    - Windows 7
    - Windows Vista
    - Windows XP
    - Windows Server 2012
    - Windows Server 2008 R2
    - Windows Server 2008
    - Windows Server 2003
- Citrix user profiles created with User Profile Manager 2.0

Migration from the following profile types to Citrix user profiles is unsupported:

- Microsoft mandatory profiles.

    Tip: You can use the template profile feature of Profile management to configure a Microsoft mandatory profile as a *Citrix mandatory profile*. Citrix mandatory profiles are used for all logons and function exactly like regular Citrix user profiles except that no user changes are saved. For information, see <u>To specify a template or mandatory profile</u>.

- Citrix mandatory profiles.
- Citrix user profiles created with a User Profile Manager Technical Preview release or beta release.
- Third-party profiles (including sepagoPROFILEs).

You cannot upgrade from a 32-bit Citrix user profile to a 64-bit one.

5. Referències.

[1]   http://support.citrix.com/proddocs/