



Release Notes for VMware Horizon 7 version 7.1

Released 16 March 2017

Last Updated: 14 March 2021

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What's New in This Release

VMware Horizon 7 version 7.1 provides the following new features and enhancements. This information is grouped by installed component.

- [View Connection Server](#)
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- [View Composer](#)
- [Horizon GPO Bundle](#)
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For information about the issues that are resolved in this release, see [Resolved Issues](#).

View Connection Server

- **VMware Blast Extreme**
 - Extra mouse buttons, such as the back and forward buttons on Logitech MX620, are supported.
 - Connections to physical machines that have no monitors attached are supported with NVIDIA graphics cards. This is a technical preview feature for Horizon 7 version 7.1.
 - The Blast Secure Gateway includes Blast Extreme Adaptive Transport (BEAT) networking, which dynamically adjusts to network conditions such as varying speeds and packet loss.
- **URL Content Redirection Enhancements**
 - You can configure and manage client-to-agent redirection settings by running `vdmutil` commands on the Connection Server host. You still configure agent-to-client redirection by using GPOs.
 - Client-to-agent redirection is supported for Mac clients when you configure client-to-agent redirection by running `vdmutil` commands on the Connection Server host.
 - If you have a Cloud Pod Architecture environment, you can use `vdmutil` commands to create

global URL content redirection settings, which are visible across the pod federation. With global URL content redirection settings, you can redirect URL links in the client to global resources, such as global desktop entitlements and global application entitlements.

- The `urlRedirection-enUS.admx` template file contains settings that enable you to control whether a URL link is opened on the client (agent-to-client redirection) or in a remote desktop or application (client-to-agent redirection).
- **Smart Card Authentication**

Administrators can specify multiple Certificate Revocation Lists (CRLs). For more information, see the VMware Knowledge Base (KB) article 2149447, [Configuring Multiple Certificate Revocation Lists](#).
- **Published Desktops and Applications**
 - You can create an automated instant-clone farm and schedule maintenance for the instant-clone farm.
 - You can select multiple vLAN networks to create a larger instant-clone desktop pool. Only the static port group is supported.
 - You can configure unauthenticated access for users to access published applications from Horizon Client without requiring Active Directory credentials.
- **Instant Clones**
 - You can use NVIDIA GRID vGPUs with instant-clone desktop pools. Configuring PCoIP as the display protocol with NVIDIA GRID vGPU is a technical preview feature.
 - You can select multiple vLAN networks to create a larger instant-clone desktop pool. Only the static port group is supported.
 - You can use the internal VM debug mode to troubleshoot internal virtual machines in an instant-clone desktop pool or in an instant-clone farm.
 - Administrators can perform a restart or reset of the virtual desktops managed by the vCenter Server.
 - You can perform maintenance on instant-clone virtual machines by putting the ESXi hosts into maintenance mode. Use vSphere Web Client to put the ESXi host into maintenance mode. The ESXi host maintenance operation automatically deletes the parent virtual machines from that ESXi host.
- **Cloud Pod Architecture Enhancements**
 - If you enable the multiple sessions per user policy when you create a global desktop entitlement, users can initiate separate desktop sessions from different client devices.
 - You can configure the restricted global entitlements feature to restrict access to global entitlements based on the Connection Server instance that users initially connect to when they select global entitlements.
 - If you use the URL Content Redirection feature, you can use `vdmutl` commands to create global URL content redirection settings, which are visible across the pod federation. With global URL content redirection settings, you can redirect URL links in the client to global resources, such as global desktop entitlements and global application entitlements.
- vSphere Virtual Machine Encryption (in vSphere 6.5) for full clone desktop pools is supported.
- Connection Server now supports the Windows Server 2016 operating system.
- You can use Horizon PowerCLI advanced functions to change the icon of a published application.
- You can perform a graceful restart of the virtual desktops managed by vCenter Server.

Horizon Agent for Linux

Linux desktops now support the following features:

- RHEL 7.3, CentOS 7.3, SLED 12 SP2, and SLES 12 SP2 are now supported.
- Linux Agent Single Sign Support on Ubuntu 14.04 and Ubuntu 16.04 has been added.
- The Client Drive Redirection (CDR) feature is now available as a technology preview.
- The USB Redirection feature is available on Ubuntu 14.04 and Ubuntu 16.04 as a technology preview.
- The Keyboard Layout and Locale Synchronization feature is supported for Horizon Client for Windows and only for English, French, German, Japanese, Korean, Spanish, Simplified Chinese, and Traditional Chinese locales.

Horizon Agent

- **Operating Systems for Instant-Clone Desktops on RDS Hosts**

The following operating systems are now supported:

- Windows Server 2008 R2
- Windows Server 2012 R2
- Windows Server 2016

- **IPv6 Environment**

Virtual printing is supported for Windows clients in an IPv6 environment.

View Composer

View Composer now supports the Windows Server 2016 operating system.

Horizon GPO Bundle

The ADM template files are deprecated and ADMX template files are added.

Unified Access Gateway (formerly Access Point)

Beginning with version 2.9, VMware Access Point is renamed to VMware Unified Access Gateway. This change is not yet reflected in the Horizon 7 version 7.1 and Horizon Client 4.4 documentation sets.

VMware Identity Manager

Horizon 7 provides proxy support for the VMware Identity Manager (vIDM) server. The proxy details such as hostname and port number can be configured in the ADAM database and the HTTP requests are routed through the proxy. This feature supports hybrid deployment where the on-premise Horizon 7 deployment can communicate with a vIDM server that is hosted in the cloud.

Horizon Client Information Plug-In

You can use the Horizon Client Information (HCI) plug-in installer to get client information from both published applications and virtual desktops. The HCI plug-in is available as an ActiveX plug-in and supports Internet Explorer. For more information about the HCI plug-in installer, see the VMware Knowledge Base (KB) article 2149400, [Horizon Client Information Plug-In](#).

Horizon Client

For information about new features in Horizon Client 4.4, including resolved and known issues, see the [Horizon Clients Documentation](#) page.

Before You Begin

- **Important note about installing VMware View Composer**

If you plan to install or upgrade to View Composer 7.1, you must upgrade the Microsoft .NET framework to version 4.6.1. Otherwise, the installation will fail.

- **Important note about installing VMware Tools**

If you plan to install a version of VMware Tools downloaded from VMware Product Downloads, rather than the default version provided with vSphere, make sure that the VMware Tools version is supported. To determine which VMware Tools versions are supported, go to the [VMware Product Interoperability Matrix](#), select the solution VMware Horizon View and the version, then select VMware Tools (downloadable only).

- If you want to install Horizon Composer silently, see the VMware Knowledge Base (KB) article 2148204, [Microsoft Windows Installer Command-Line Options for Horizon Composer](#).
- The Horizon 7 release includes new configuration requirements that differ from some earlier

releases. See the *View Upgrades* document for upgrade instructions.

- If you intend to upgrade a pre-6.2 installation of View, and the Connection Server, security server, or View Composer server uses the self-signed certificate that was installed by default, you must remove the existing self-signed certificate before you perform the upgrade. Connections might not work if the existing self-signed certificates remain in place. During an upgrade, the installer does not replace any existing certificate. Removing the old self-signed certificate ensures that a new certificate is installed. The self-signed certificate in this release has a longer RSA key (2048 bits instead of 1024) and a stronger signature (SHA-256 with RSA instead of SHA-1 with RSA) than in pre-6.2 releases. Note that self-signed certificates are insecure and should be replaced by CA-signed certificates as soon as possible, and that SHA-1 certificates are no longer considered secure and should be replaced by SHA-2 certificates.

Do not remove CA-signed certificates that were installed for production use, as recommended by VMware. CA-signed certificates will continue to work after you upgrade to this release.

- To take advantage of Horizon 7 features such as Virtual SAN 6.1, GRID vGPU, and Virtual Volumes, install vSphere 6.0 and subsequent patch releases.
- When you upgrade to this release, upgrade all Connection Server instances in a pod before you begin upgrading Horizon Agent, as described in the *View Upgrades* document.
- The download page in this release includes a Horizon View HTML Access Direct-Connection file that provides web server static content for supporting HTML Access with View Agent Direct-Connection (VADC). For information about setting up HTML Access for VADC, see [Setting Up HTML Access](#) in the *View Agent Direct-Connection Plug-in Administration* document.
- Selecting the Scanner Redirection setup option with Horizon Agent installation can significantly affect the host consolidation ratio. To ensure the optimal host consolidation, make sure that the Scanner Redirection setup option is only selected for those users who need it. (By default, the Scanner Redirection option is not selected when you install Horizon Agent.) For users who need the Scanner Redirection feature, configure a separate desktop pool and select the setup option only in that pool.
- Horizon 7 uses only TLSv1.1 and TLSv1.2. In FIPS mode, it uses only TLSv1.2. You might not be able to connect to vSphere unless you apply vSphere patches. For information about re-enabling TLSv1.0, see [Enable TLSv1 on vCenter Connections from Connection Server](#) and [Enable TLSv1 on vCenter and ESXi Connections from View Composer](#) in the *View Upgrade* document.
- FIPS mode is not supported on releases earlier than 6.2. If you enable FIPS mode in Windows and upgrade Horizon Composer or Horizon Agent from a release earlier than Horizon View 6.2 to Horizon 7 version 7.1, the FIPS mode option is not shown. You must do a fresh install instead to install Horizon 7 version 7.1 in FIPS mode.
- Linux desktops use port 22443 for the VMware Blast display protocol.
- The following documentation changed in this release:
 - The *Setting Up Desktop and Application Pools in View* document is redundant.
 - The *Setting Up Published Desktops and Applications in Horizon 7* document is added.
 - The *Setting Up Virtual Desktops in Horizon 7* document is added.
 - The *Configuring Remote Desktop Features in Horizon 7* document is added.

Internationalization

The Horizon Administrator user interface, Horizon Administrator online help, and Horizon 7 product documentation are available in Japanese, French, German, Spanish, simplified Chinese, traditional Chinese, and Korean. For the documentation, see the [Documentation Center for VMware Horizon 7](#).

Compatibility Notes

- For the supported guest operating systems for Horizon Agent on single-user machines and RDS hosts, see [Supported Operating Systems for Horizon Agent](#) in the *View Installation* document.
- If you use Horizon 7 servers with a version of View Agent older than 6.2, you will need to enable TLSv1.0 for PCoIP connections. View Agent versions that are older than 6.2 support the security protocol TLSv1.0 only for PCoIP. Horizon 7 servers, including connection servers and security servers, have TLSv1.0 disabled by default. You can enable TLSv1.0 for PCoIP connections on these

- servers by following the instructions in VMware Knowledge Base (KB) article 2130798, [Configure security protocols for PCoIP for Horizon 6 version 6.2 and later, and Horizon Client 3.5 and later](#).
- For the supported Linux guest operating systems for Horizon Agent, see [System Requirements for Horizon 7 for Linux](#) in the *Setting Up Horizon 7 Version 7.1 for Linux Desktops* document.
 - For the supported operating systems for Connection Server, security server, and View Composer, see [System Requirements for Server Components](#) in the *View Installation* document.
 - Horizon 7 functionality is enhanced by an updated set of Horizon Clients provided with this release. For example, Horizon Client 4.0 or later is required for VMware Blast Extreme connections. See the [VMware Horizon Clients Documentation](#) page for information about supported Horizon Clients.
 - The instant clones feature requires vSphere 6.0 Update 1 or later.
 - Windows 7 and Windows 10 are supported for instant clones, but not Windows 8 or Windows 8.1.
 - See the [VMware Product Interoperability Matrix](#) for information about the compatibility of Horizon 7 with current and previous versions of vSphere.
 - For the supported Active Directory Domain Services (AD DS) domain functional levels, see [Preparing Active Directory](#) in the *View Installation* document.
 - For more system requirements, such as the supported browsers for Horizon Administrator, see the *View Installation* document.
 - RC4, SSLv3, and TLSv1.0 are disabled by default in View components, in accordance with RFC 7465, "Prohibiting RC4 Cipher Suites," RFC 7568, "Deprecating Secure Sockets Layer Version 3.0," PCI-DSS 3.1, "Payment Card Industry (PCI) Data Security Standard", and SP800-52r1, "Guidelines for the Selection, Configuration, and Use of Transport Layer Security (TLS) Implementations." If you need to re-enable RC4, SSLv3, or TLSv1.0 on a View Connection Server, security server, View Composer, or Horizon Agent machine, see [Older Protocols and Ciphers Disabled in View](#) in the *View Security* document.
 - If a PCoIP Secure Gateway (PSG) has been deployed for PCoIP connections, zero client firmware must be version 4.0 or later.
 - When using Client Drive Redirection (CDR), deploy Horizon Client 3.5 or later and View Agent 6.2 or later to ensure that CDR data is sent over an encrypted virtual channel from an external client device to the PCoIP security server and from the security server to the remote desktop. If you deploy earlier versions of Horizon Client or View Agent, external connections to the PCoIP security server are encrypted, but within the corporate network, the data is sent from the security server to the remote desktop without encryption. You can disable CDR by configuring a Microsoft Remote Desktop Services group policy setting in Active Directory. For details, see [Managing Access to Client Drive Redirection](#) in the *Configuring Remote Desktop Features in Horizon 7* document.
 - The USB Redirection setup option in the Horizon Agent installer is deselected by default. You must select this option to install the USB redirection feature. For guidance on using USB redirection securely, see [Deploying USB Devices in a Secure View Environment](#) in the *View Security* document.
 - The Global Policy, Multimedia redirection (MMR), defaults to **Deny**. To use MMR, you must open Horizon Administrator, edit Global Policies, and explicitly set this value to **Allow**. To control access to MMR, you can enable or disable the Multimedia redirection (MMR) policy globally or for an individual pool or user.
Multimedia Redirection (MMR) data is sent across the network without application-based encryption and might contain sensitive data, depending on the content being redirected. To ensure that this data cannot be monitored on the network, use MMR only on a secure network.
 - Before you set the level of Transparent Page Sharing (TPS) in Horizon Administrator, VMware recommends that the security implications be understood. For guidance, see the VMware Knowledge Base (KB) article 2080735, [Security considerations and disallowing inter-Virtual Machine Transparent Page Sharing](#).
 - To use View Storage Accelerator in a vSphere 5.5 or later environment, a desktop virtual machine must be 512GB or smaller. View Storage Accelerator is disabled on virtual machines that are larger than 512GB. Virtual machine size is defined by the total VMDK capacity. For example, one VMDK file might be 512GB or a set of VMDK files might total 512GB. This requirement also applies to virtual machines that were created in an earlier vSphere release and upgraded to vSphere 5.5.
 - Horizon 7 does not support vSphere Flash Read Cache (formerly known as vFlash).
 - In Horizon (with View) version 6.0 and later releases, the View PowerCLI cmdlets Get-TerminalServer, Add-TerminalServerPool, and Update-TerminalServerPool have been deprecated.
 - Screen DMA is disabled by default in virtual machines that are created in vSphere 6.0 and later.

View requires screen DMA to be enabled. If screen DMA is disabled, users see a black screen when they connect to the remote desktop. When Horizon 7 provisions a desktop pool, it automatically enables screen DMA for all vCenter Server-managed virtual machines in the pool. However, if Horizon Agent is installed in a virtual machine in unmanaged mode (VDM_VC_MANAGED_AGENT=0), screen DMA is not enabled. For information about manually enabling screen DMA, see VMware Knowledge Base (KB) article 2144475, [Manually enabling screen DMA in a virtual machine](#).

- vGPU enabled instant clone desktop pools are supported for vSphere 2016 and later.
- Microsoft Windows Server requires a dynamic range of ports to be open between all Connection Servers in the Horizon 7 environment. These ports are required by Microsoft Windows for the normal operation of Remote Procedure Call (RPC) and Active Directory replication. For more information about the dynamic range of ports, see the Microsoft Windows Server documentation.

Supported Windows 10 Operating Systems

For an updated list of supported Windows 10 operating systems, see VMware Knowledge Base (KB) article 2149393, [Supported Versions of Windows 10 on Horizon View](#).

For more information on upgrade requirements for Windows 10 operating systems, see VMware Knowledge Base (KB) article 2148176, [Upgrade Requirements for Windows 10 Operating Systems](#) here.

Support for Red Hat Enterprise Linux Workstation

Horizon Agent for Linux supports installation on systems running Red Hat Enterprise Linux Workstation. Red Hat Enterprise Linux Server is not supported.

In the [Setting Up Horizon 7 for Linux Desktops](#) document, all occurrences of "Red Hat Enterprise Linux" and "RHEL" refer to Red Hat Enterprise Linux Workstation only.

For the list of supported versions of Red Hat Enterprise Linux Workstation, see [System Requirements For Horizon 7 for Linux](#).

Prior Releases of View

Features that were introduced in prior releases of View are described in the release notes for each release, along with existing known issues.

Resolved Issues

- Users in a domain configured with a one-way trust cannot update an expired password from Horizon Client.
- If a user never logs out from a virtual desktop, then Persona Management keeps writing log messages to the same log file and does not rotate the log file. This feature is available only with the ADMX template file.
- Horizon Agent becomes unavailable with a FATAL error after you disable and stop the Windows Management Instrumentation service and restart the operating system.
- Horizon Administrator shows a red status for vCenter Server even when the vCenter service is up and running in a cluster of Connection Server instances. The incorrect vCenter Server status is displayed after you configure a valid signed SSL certificate for vCenter Server.
- The "Persona Management process exclusions" policy does not exist in the ViewPMAdv.adm file because this policy serves the same function as the "Excluded Process" policy in the ViewPMAdv.adm file.
- The zero client intermittently fails to connect to a published desktop when port B is the only display port in use.
- Automated pool provisioning can halt while using VSAN 6.6.1. Use ESXi 6.5 Express Patch 4 to resolve this issue.

Known Issues

The known issues are grouped as follows:

- [Installation, Upgrade, and Uninstall Operations](#)
- [Instant Clones](#)
- [Smart Policies](#)
- [Published Desktops and Applications](#)
- [Configuration and Horizon Administrator](#)
- [Horizon Client and Remote Desktop Experience](#)
- [Horizon 7 for Linux Desktops](#)
- [Flash Media MMR](#)
- [3D Graphics Acceleration](#)
- [Smart Cards](#)
- [Scanner Redirection](#)
- [Serial Port Redirection](#)
- [USB Redirection](#)
- [URL Content Redirection](#)
- [View Persona Management](#)
- [vSphere Platform Support](#)
- [View Composer](#)
- [Windows 10 Support](#)
- [Windows 8.x Support](#)
- [Windows Server for Desktop Use](#)
- [VMware Identity Manager \(formerly VMware Workspace Portal\) Integration](#)
- [Virtual SAN and Virtual Volumes](#)
- [Cloud Pod Architecture](#)
- [Miscellaneous](#)

Installation, Upgrade, and Uninstall Operations

- The USB HUB device driver might not be installed properly when you install Horizon Agent on a desktop in a manual desktop pool. This issue can occur if, during the Horizon Agent installation, you restart the system before the USB HUB device driver is fully installed.
Workaround: When you install Horizon Agent and you are prompted to restart the system, check the system tray to see if the USB HUB device driver software is still being installed. Wait until the device driver software is completely installed (typically about 30 seconds) before you restart the system.
If you use a command-line script to install Horizon Agent silently, make sure to wait or sleep the script for long enough to allow the driver installation to complete before you restart the system.
If you encounter this issue after Horizon Agent is installed, or you could not delay the system restart during a silent installation, update the USB HUB device driver by taking these steps:
 1. In the Device Manager, under **Other Devices**, right-click **VMware View Virtual USB Hub**.
 2. Click **Update Driver Software > Browse my computer for driver software**.
 3. Go to `C:\Program Files\VMware\VMware View\Agent\bin\drivers` and click **Next** to let Windows install the driver.
- To upgrade a desktop from Windows 8 to Windows 8.1, you must uninstall View Agent, upgrade the operating system from Windows 8 to Windows 8.1, and then reinstall Horizon Agent. Alternatively, you can perform a fresh installation of Windows 8.1 and then install Horizon Agent.
- If you upgrade to vSphere 5.5 or a later release, verify that the domain administrator account that you use as the vCenter Server user was explicitly assigned permissions to log in to vCenter Server by a vCenter Server local user.
- USB redirection fails in linked-clone images after you upgrade the master image from View Agent 5.1.x or earlier to the current Horizon Agent version. This issue does not occur if you upgrade from View Agent 5.2 or later to the current version.

Workaround: See VMware Knowledge Base (KB) article 2062215, [USB redirection fails in linked-clone images after you upgrade to View Agent 5.3](#).

- When you run the Horizon Agent installer on a Windows 8 virtual machine, the Windows desktop appears black when the video driver is being installed. The Windows desktop might appear black for several minutes before the installation completes successfully.

Workaround: Apply the Windows 8.0 May 2013 roll-up before you install Horizon Agent. See [Microsoft KB article 2836988](#).

- When you run any Horizon 7 installer on a Windows 8.1 or Windows Server 2012/2012 R2 virtual machine (deployed as an RDS host or virtual desktop), the installer can take an unusual amount of time to finish. This problem occurs if the virtual machine's domain controller, or another domain controller in its hierarchy, is unresponsive or unreachable.

Workaround: Verify that the domain controllers have the latest patches, enough free disk space, and can communicate with each other.

- When you uninstall Horizon Agent from an RDS host, an error dialog can be displayed, which prevents the uninstall operation from being completed. The dialog states that the uninstall operation failed to stop an RDS video driver. This issue can occur when disconnected desktop sessions are still running on the RDS host.

Workaround: Reboot the RDS host to complete the uninstallation of Horizon Agent. As a best practice, ensure that all RDS sessions are logged off before you uninstall Horizon Agent.

- In FIPS mode, Horizon Agent fails to pair with Connection Server and the pool status is not available when Horizon Agent is installed to a drive other than the C drive.

Workaround: When operating in the FIPS mode, install Horizon Agent on the C drive.

- After you install a replica server on a Windows 2016 operating system, the PCoIP Secure Gateway (PSG) service does not start due to contention for the control port.

Workaround: Change the PSG control port to another TCP port number such as 52060. For more information, see "Replace the Default Control Port for PCoIP Secure Gateway on Connection Server Instances and on Security Servers" in the *View Installation* document.

- A warning message about applications in use appears when you uninstall Horizon Agent on Windows 2016.

Workaround: Click "Ignore" in the dialog box that appears when you use Windows Add or Remove Programs to uninstall Horizon Agent. If you uninstall Horizon Agent from the command line, use the command `msiexec /x /qn {GUID of Agent}` instead of the command `msiexec /x {GUID of Agent}`.

- After you install an enrollment server on a 64-bit Windows 2016 operating system, the enrollment server is not online and fails to list details.

Workaround: See VMware Knowledge Base (KB) article 2149256, [Enrollment Server is Not Online](#).

Instant Clones

- During provisioning of an instant-clone desktop pool, if there is not enough space available on the datastores, the error message that is displayed in Horizon Administrator is "Cloning of VM <VM name> has failed - VC_FAULT_FATAL: Failed to extend swap file from 0 KB to 2097152 KB." This message does not clearly indicate the root cause of the problem.

Workaround: Not required.

- In Horizon Administrator, if you go to Catalog > Desktop Pools, double-click an instant-clone desktop pool, go to the Inventory tab and click Machines (InstantClone Details), the window displays details of the instant clones. However, the OS Disk datastore column displays no information.

Workaround: None

- If the vGPU profile for the Horizon Agent on the parent virtual machine does not match the vGPU profile for an instant clone desktop pool configured to use NVIDIA GRID vGPU, then all the virtual desktops in the pool display an incorrect NVIDIA display driver.

Workaround: Choose the parent virtual machine configured with the same vGPU profile on the instant clone desktop pool configured to use NVIDIA GRID vGPU.

- An instant-clone desktop pool configured to use NVIDIA GRID vGPU fails to launch instant-clone virtual desktops or instant-clone virtual desktops with black screen and never recovers with the PCoIP or Blast display protocol using non h264 hardware encode. Non h264 hardware encode is

uncommon for Blast. An example of non h264 hardware encode is any NVIDIA GPU profile that limits frame buffer to 512MB and has Windows 10 as the remote desktop operating version.
Workaround: Use the VMware Blast display protocol with h264 hardware encode to launch the instant-clone virtual desktops in the desktop pool configured with NVIDIA GRID vGPU.

- Provisioning of virtual machines based on View Composer desktop pools or instant clone desktop pools configured to use NVIDIA GRID vGPU fails with the following error: The amount of graphics resource available in the parent resource pool is insufficient for the operation.

Workaround: Use a single vGPU profile for all virtual desktops configured for 3D rendering in a cluster.

If multiple vGPU profiles are required, design the multiple cluster topologies such that each cluster only has virtual machines with the same profile.

To resolve the error messages in Horizon 7, you must delete the failed desktop pool. Decide which vGPU profile you want to use for each cluster, then delete the pool that does not have the correct vGPU profile from the cluster, and create the pool for that vGPU profile again in the correct cluster.

- In a large scale environment, some of the desktops in an instant-clone desktop pool might go into the Invalid IP state.

Workaround: In Horizon Administrator, go to Pool Inventory, select the desktops in the Invalid IP state and click Recover.

- When you restart a virtual machine for which an end user session exists in a desktop pool from vCenter Server, the virtual machine restarts but the status of the virtual machine might appear in the "Already Used" state in Horizon Administrator.

This problem can occur for the following pool types:

- Instant-clone desktop pools.
- Linked-clone floating desktop pools with "Delete on logOff" enabled.
- Linked-clone floating desktop pools with "Refresh on logOff" enabled.
- Full-clone floating desktop pools with "Delete on logOff" enabled.

Workaround: Use Horizon Administrator or Horizon Client to restart the virtual machine in the desktop pool. If the virtual machine is already in the "Already Used" state, remove the virtual machine. This action automatically creates a new virtual machine based on the pool provisioning settings.

Smart Policies

- If you use Horizon Client 3.5.x or earlier for Linux, Mac OS X, or Windows with USB auto-connection enabled, and you connect to a remote desktop for which USB redirection has been disabled with Smart Policies, USB devices attached to the client system disappear from the client system.

Workaround: Upgrade to Horizon Client 4.0 or later, or implement one of the workarounds described in VMware Knowledge Base (KB) article 2144334, [USB devices on your local system disappear when you connect to a remote desktop with Horizon Client 3.5.x or earlier](#).

Published Desktops and Applications

- For this release, Windows Universal apps are not supported as hosted remote applications. For example, Universal apps do not appear in the list of apps provided by a Windows Server 2016 RDS farm. Universal apps, such as the Edge browser or the Calculator included with Windows 10 or a Windows Server 2016 RDS host, are built on the Universal Windows Platform (UWP). Universal apps require Windows Explorer to be run. In addition, manually launching Universal apps through the Command Prompt will show an error message.
- If you deploy an automated farm from a Windows Server 2012 parent virtual machine that has the RDS role enabled, Sysprep customization will fail on the deployed linked-clone virtual machines. This 3rd-party issue does not occur on other Windows Server versions that have the RDS role enabled.

Workaround: On the Windows Server 2012 parent virtual machine, apply the Microsoft hotfix available at <https://support.microsoft.com/en-us/kb/3020396>.

- When multiple connections are made consecutively to a single RDS host, a few users (for example, one or two of 120 users) might not be able to start or restart RDS desktop sessions.

Workaround: Increase the number of vCPUs and the RAM size on the RDS host.

- The first connection to an RDS desktop or application fails if it has been more than 120 days since the RDS role was configured on the RDS host, and no previous connection was made. This issue also occurs with RDP.
Workaround: Wait a few seconds and connect to the RDS desktop or application again.
- Persistent settings for location-based printers are not supported if the settings are saved in the printer driver's private space and not in the DEVMODE extended part of the printer driver, as recommended by Microsoft.
Workaround: Use printers that have the user preference settings saved in the DEVMODE part of the printer driver.
- Horizon Agent cannot install the virtual printing feature on RDS hosts that are physical machines. Virtual printing is supported on RDS desktops when Horizon Agent is installed on RDS hosts that are virtual machines.
Workaround: Configure RDS hosts on virtual machines and install Horizon Agent.
- In a desktop session running on a Windows Server 2008 R2 SP1 RDS host, you cannot play back an H.264 video file, or play back AAC audio with a video file, in Windows Media Player. This is a known third-party issue.
Workaround: Go to the [Microsoft KB article 2483177](#) and download the Desktop Experience Decoder Update for Windows Server 2008 R2 package.
- When you play a YouTube video in a Chrome browser in a desktop session running on a Windows Server 2012 R2 RDS host, the video display can be corrupted. For example, black boxes might pop up in the browser window. This issue does not occur on any other browser or on Windows Server 2008 R2 SP1 RDS hosts.
Workaround: In your Chrome browser, select Chrome > Settings > Show advanced settings > System, and deselect Use hardware acceleration when available.
- If you play a video in a desktop running on a Windows 2008 R2 SP1 physical RDS host, and you move the video display from the main monitor to another monitor, the video stops playing or the visual frames stop updating (although the audio might continue to play). This issue does not occur on a virtual machine RDS host or in a single monitor configuration, and it only occurs on Windows Server 2008 R2 SP1.
Workaround: Play videos on the main monitor only, or configure your RDS desktop pool on a virtual machine RDS host.
- If you launch a remote application that becomes unresponsive and then launch another application, the second application's icon is not added to the taskbar on the client device.
Workaround: Wait for the first application to become responsive. (For example, an application might be unresponsive while large files are being loaded.) If the first application continues to be unresponsive, terminate the application process on the RDS virtual machine.
- The application Lync 2013 that does not have the February, 2013 update and is hosted on an RDS host running Windows Server 2012 R2 will crash shortly after launch with the error message "Microsoft Lync has stopped working." This is a known issue with Lync 2013.
Workaround: Apply the February, 2013 update of Lync. The update is available at [Microsoft KB article 2812461](#).
- For RDS host farms that are created with VMware Blast display protocol support, enabling the UDP network protocol for VMware Blast sessions reduces Blast Secure Gateway scale and sessions might fall back to the TCP network protocol.
Workaround: Do not enable the UDP network protocol for VMware Blast sessions on RDS hosts.
- Customized application icons with the .ico file extension do not appear on the Shortcut and Start Menu on a Windows desktop.
Workaround: Use the .png file extension when you save the customized application icon.
- Customized application icons with the .ico file extension do not display correctly on the Horizon Client for Android.
Workaround: Do not use the .ico file extension when you save the customized application icon.

Configuration and Horizon Administrator

- For True SSO, the connectivity status between the connection server and the enrollment server is displayed only on the System Health Status dashboard for the connection server that you are using to access Horizon Administrator. For example, if you are using

`https://server1.example.com/admin` for Horizon Administrator, the connectivity status to the enrollment server is collected only for the `server1.example.com` connection server. You might see one or both of the following messages:

- The primary enrollment server cannot be contacted to manage sessions on this connection server.
- The secondary enrollment server cannot be contacted to manage sessions on this connection server.

It is mandatory to configure one enrollment server as primary. Configuring a secondary enrollment server is optional. If you have only one enrollment server, you will see only the first message (on error). If you have both a primary and a secondary enrollment server and both have connectivity issues, you will see both messages.

- When you setup True SSO in an environment with CAs and SubCAs with different templates setup on each of them, you are allowed to configure True SSO with a combination of template from a CA or SubCA with another CA or SubCA. As a result, the dashboard might display the status of True SSO as green. However, it fails when you try to use True SSO.
- When using Horizon Administrator from a Firefox browser, if you enter Korean characters in a text field using the Korean Input Method Editor (IME), the Korean characters are not displayed correctly. This issue occurs only with Firefox. This is a 3rd-party issue.

Workaround: Use a different browser. If you still want to use Firefox, input Korean characters one by one.

- If you change the Blast Secure Gateway (`absbg.log`) log level on a Connection Server instance from `Info` to `Debug`, the log level remains `Info`. (You change the log level by opening the **Set View Connection Server Log Levels** on a Connection Server instance, changing the `absbg` log level, and restarting the VMware View Blast Secure Gateway service.) Changing the log level from `Debug` to `Info` works properly.

Workaround: None.

- The View PCoIP ADM (`pcoip.adm`) group policy setting, **Configure SSL connections to satisfy Security Tools**, is not supported in this release of Horizon 7. If you attempt to implement certain options in this group policy setting, unexpected results might occur in your View deployment.

Workaround: Do not use this setting in this release of Horizon 7.

- Setting the size of the retry port range to 0 when configuring the **Configure the TCP port to which PCoIP Server binds and listens** or **Configure the UDP port to which PCoIP Server binds and listens** group policy causes a connection failure when users log in to the desktop with the PCoIP display protocol. Horizon Client returns the error message `The Display protocol for this desktop is currently not available. Please contact your system administrator.` The help text for the group policies incorrectly states that the port range is 0 through 10.

Note: On RDS hosts, the default base TCP and UDP port is 4173. When PCoIP is used with RDS hosts, a separate PCoIP port is used for each user connection. The default port range that is set by the Remote Desktop Service is large enough to accommodate the expected maximum of concurrent user connections.

Workaround:

- **PCoIP on single-user machines:** Set the retry port range to a value between 1 and 10. (The correct port range is 1 through 10.)
- **PCoIP on RDS hosts:** As a best practice, do not use these policy settings to change the default port range on RDS hosts, or change the TCP or UDP port value from the default of 4173. Most important, do not set the TCP or UDP port value to 4172. Resetting this value to 4172 will adversely affect PCoIP performance in RDS sessions.

- On rare occasions, the system health status of Event Database may be displayed as red on the Horizon Administrator dashboard, with the error message "Cannot drop the view 'VE_user_events', because it does not exist or you do not have permission." This condition does not indicate a real error and will resolve itself after a short period.

Workaround: None.

- Horizon Administrator incorrectly shows Windows Server 10 as the RDS host for a Windows Server 2016 RDS host.

Workaround: This problem occurs because the value of the operating system registered in the Horizon Connection Server LDAP is 11, which is the value for Windows Server 10. To enable Horizon Administrator to display the correct version of the RDS host, set `pae-OSVersion = 12` in the Horizon

Connection Server ADAM database using ADAM ADSI Edit. For more information, see the VMware Knowledge Base article 2146850 [Setting the RDS Host Operating System Version](#).

- Clicking a help icon in Horizon Administrator displays the Horizon 7 version 7.0 online help.
Workaround: You can access the online help for Horizon 7 version 7.1 from the [Documentation Center](#).
- To reduce the possibility of memory exhaustion, vGPU profiles with 512 MB or less of frame buffer support only one virtual display head on a Windows 10 guest operating system. The following vGPU profiles have 512 Mbytes or less of frame buffer:
 - Tesla M6-OB, M6-OQ
 - Tesla M10-OB, M10-OQ
 - Tesla M60-OB, M60-OQ
 - GRID K100, K120Q
 - GRID K200, K220Q

Workaround: Use a profile that supports more than one virtual display head and has at least one GB of frame buffer.

Horizon Client and Remote Desktop Experience

- Horizon Client cannot connect to a Connection Server instance if the server name or fully qualified domain name (FQDN) for the Connection Server instance contains non-ASCII characters.
Workaround: None.
- On remote desktops that connect using PCoIP and are configured with multiple monitors, if a user plays a slide show in Microsoft PowerPoint 2010 or 2007, specifies a resolution, and plays the slides on the second monitor, part of each slide appears on each monitor.
Workaround: On the host client system, resize the screen resolution on the second monitor to the desired resolution. Return to the View desktop and start the slide show on the second monitor.
- On remote desktops that connect using PCoIP, if users play slides in Microsoft PowerPoint 2010 or 2007 and specify a resolution, the slides are played at that chosen resolution and are not scaled to the current resolution.
Workaround: Choose "Use current resolution" as the playback resolution.
- The virtual printing feature is supported only when you install it from Horizon Agent. It is not supported if you install it with VMware Tools.
- When you play videos in Windows Media Player on a desktop, PCoIP disconnections might occur under certain circumstances.
Workaround: On the desktop, open the Windows registry and navigate to the `HKLM\Software\Wow6432Node\Policies\Teradici\PCoIP\pcoip_admin_defaults` registry key for 64-bit Windows or the `HKLM\Software\Policies\Teradici\PCoIP\pcoip_admin_defaults` registry key for 32-bit Windows. Add the `pcoip.enable_tera2800` DWORD registry value and set the value to 1.
- For Windows 2008 R2 SP1 desktop pools hosted on an RDS host, the language sync setting (from client to guest) is turned on by default and cannot be turned off. Therefore, disabling the group policy "Turn on PCoIP user default input language synchronization" for Horizon Agent has no effect. The remote desktop language always synchronizes with the language used on the client system.
Workaround: None.
- Copying and pasting an image from a remote desktop to the client system, or from the client system to a remote desktop, can fail because the clipboard memory size is not large enough to accommodate the image, even though the configured clipboard memory size is greater than or the same as the size of the image on disk. This problem occurs because the image size on disk is less than the image size in clipboard memory. For example, the size of the image in the clipboard memory can be two to three times size of the image on disk.
Workaround: Increase the clipboard memory size until it can accommodate the image.
- Using the VMware Blast protocol and with Blast Secure Gateway (BSG) disabled, Horizon Client sometimes cannot recover from a brief (about 1 minute) network outage and the

connection to the desktop is disconnected. This issue does not occur when BSG is enabled.
Workaround: Reconnect the session.

- After a brief network outage and the VMware Blast session between Horizon Client and a remote desktop has recovered or has been reconnected, certain features might stop working, such as:

- Smart card
- Client Drive Redirection (CDR) and File Association
- Multimedia Redirection (MMR)
- Lync/Skype

Workaround: Disconnect and reconnect the session.

- Sometimes, when using Lync VDI to make a video call, the local image is not displayed.

Workaround: Update Microsoft Lync VDI to the latest version.

- If a user connects to an F5 server to access a remote desktop, and the F5 server is configured to use an RSA server, the user must input an RSA username and passcode. If the RSA user's PIN is not set, Horizon Client might fail to submit the passcode for the user. This problem is an F5 limitation.

Workaround: Users must contact their RSA administrator to set their PINs before using their PINs in an F5 and RSA setup.

- Data transfer is slow when copying and pasting text and images between Horizon Client and a remote desktop.

Workaround: Reduce the effective clipboard size so that less data is transferred at one time.

Horizon 7 for Linux Desktops

- When you configure a virtual desktop for multi-monitor support with a maximum 2560x1600 screen resolution, the submenu dialogs do not open.

- If you configure two monitors with different resolutions, and the resolution of the primary screen is lower than that of the secondary screen, you might not be able to move the mouse or drag application windows to certain areas of the screen.

Workaround: Make sure that the primary monitor's resolution is at least as large as the secondary monitor's.

- Configuring four monitors at 2560x1600 resolution on RHEL 6.6 or CentOS 6.6 virtual machines in vSphere 6.0 is not supported.

Workaround: Use 2048x1536 resolution or deploy this configuration in vSphere 5.5.

- If you configure two or more monitors at 2560x1600 resolution on RHEL 6.6 virtual machines in a vDGA environment, desktop performance is poor. For example, application windows do not move smoothly. This issue occurs when RHEL Desktop Effects are enabled.

Workaround: Disable Desktop Effects by going to **System > Preference > Desktop Effects** and selecting **Standard**.

- Unicode keyboard input does not work correctly with HTML Access in Horizon 7 for Linux Desktops.

- When you connect to a Linux desktop, some keyboard inputs do not work. For example, if you are using a non-English IME on both the client device and the remote desktop, some non-English keys are not displayed correctly.

Workaround: Set the English IME on the client device and set the non-English IME on the remote desktop.

- The Linux Agent's keyboard layout and locale do not synchronize with the client if the Keyboard Input Method System is set to `fcitx`.

Workaround: Set the Keyboard Input Method System to `iBus`.

Flash Media MMR

- If you switch browser tabs while playing a redirected video in Internet Explorer, part of the video window continues to be displayed behind or next to the browser window. This issue only occurs on Windows 7 desktops.

Workaround: Use Windows 8.1 desktops. Alternatively, do not switch to another tab while a redirected video is playing.

- An action script error occurs when you play a YouTube Flash video on a remote desktop that has Flash MMR enabled.

Workaround:

- Option 1. Open the script support for the YouTube Web site and add appMode=1 with the URL of the YouTube site to the UriWhiteList.
- Option 2. Open Internet Explorer > Tools > Internet Options > General. Under “Browsing history” click the “Settings” button. In the next window, click the “View files” button. Delete all files from the INetCache folder.

3D Graphics Acceleration

- For Intel vDGA, only the Haswell and Broadwell series of Intel integrated GPUs are supported. Broadwell integrated GPUs are supported only on vSphere 6 Update 1b and later. Haswell integrated GPUs are supported on vSphere 5.5 and later. The GPU needs to be enabled in the BIOS before it can be recognized by ESXi. For more information, see the documentation for your specific ESXi host. Intel recommends leaving the graphics memory settings in the BIOS set to their default values. If you choose to change the settings, keep the aperture setting at its default (256M).
- For Intel vDGA, multiple-monitor support is limited to no more than 3 monitors. The Intel driver supports only up to 3 monitors with a resolution of up to 3840 X 2160. If you try to connect with 4 monitors, the connection shows 3 black screens with just one screen working.
- When 4K monitors are configured on machines where 3D Rendering and vSGA are enabled, moving, resizing, or toggling the Windows Media Player window to full screen mode can be very slow. This issue does not occur with 2D, software 3D Rendering, or monitors with 2560x1440 resolution.

Workaround: None

- If NVIDIA drivers are installed on a virtual machine that you use as a parent or template to deploy a desktop pool, and the machines are deployed on non-NVIDIA GRID hardware on the ESXi hosts, users might not be able to start desktop sessions correctly. This issue might occur if the virtual machine was used previously in an NVIDIA GRID vGPU deployment.

Workaround: Remove the NVIDIA drivers from the virtual machine before you take a snapshot or make a template and deploy the desktop pool.

- If vDGA is enabled on a Windows 7 virtual machine that is configured to use NVIDIA driver version 347.25, the desktop session can be disconnected. This issue does not occur on Windows 8.1 or on other NVIDIA driver versions.

Workaround: Do not use NVIDIA driver version 347.25.

- On Windows 8/8.1 desktops, 3D screen savers operate even when the 3D Renderer setting is disabled, and the screen savers do not render correctly. This issue does not occur on Windows 7 desktops.

Workaround: Make sure your end users do not use 3D screen savers, or enable the 3D Renderer setting for the desktop pool.

- With NVIDIA M60 GPU and driver version 361.89 or 361.94, users might see a blurred screen when they first connect to the Windows desktop, or when they right click on the desktop and then select NVIDIA Control Panel > System Information.

Workaround: Changing the resolution of the display or changing to full-screen mode fixes the problem and you can revert to the original resolution or screen mode. The problem disappears after the first time it occurs. Also, the problem does not occur with NVIDIA driver 361.51.

- A published desktop launches with a black screen after you install Horizon Agent with the 3D RDSH custom option on a Windows 2016 RDS host.

Workaround: To use the 3D RDSH feature, use a Windows 2012 RDS host.

- When you create full-clone desktop pools, sometimes wrong templates are displayed and valid templates are hidden due to a cache issue.

Workaround: Restart the Connection Server.

- An NVIDIA GRID vGPU enabled desktop pool on a Windows 10 operating system starts only one desktop and displays a black screen on the other monitor when the display setting is “All Monitors”.

Workaround: Use the “Full screen” display setting to start desktops in one monitor.

Smart Cards

- Using a smart card to log in to an RDS desktop takes longer than with a virtual, single-user desktop. This issue is less acute on Windows clients than other clients.

Workaround: None.

- On Windows 7 client machines, Horizon Client exits when the smart card removal policy is triggered.
- Users running View Client 5.4.2 (the executable is wswc.exe) fail to login using smart card authentication.

Workaround: Install and run Horizon Client 3.0 or later.

- When you use a proxy server for the connection between the client and Connection Server, the smart card user name hints feature does not work and always uses the default account that is mapped to the certificate for authentication.

Workarounds:

- Option 1: Disable the proxy server for HTTPS when the Horizon Client is connecting to Connection Server 7.0.2.
- Option 2: Set up Access Point 2.7.2 with Connection Server 7.0.2. The Horizon Client connects to the Access Point server with the smart card user name hint.

Scanner Redirection

- Microsoft Windows Fax and Scan does not work with Scanner Redirection on Windows 10 desktops.

Workaround: Use another scan application on Windows 10 desktops or change to another desktop platform.

- Selecting the Scanner Redirection setup option with Horizon Agent installation can significantly affect the host consolidation ratio. By default, the Scanner Redirection option is not selected when you install Horizon Agent.

Workaround: Make sure that the Scanner Redirection setup option is not selected for most users. For users who need the Scanner Redirection feature, configure a separate desktop pool and select the setup option only in that pool.

- Sometimes the scanner settings do not take effect on WIA scanners. For example, if you select grayscale mode and select a partial area of the original image, the scanner might use color and scan the whole image.

Workaround: Use a TWAIN scanner.

- In some environments, if you switch to a different WIA scanner, the images might continue to be scanned from the original scanner.

Workaround: Log off the remote desktop session. Launch a new desktop session and perform the scan using the selected scanner.

- When you uninstall Horizon Agent with the Scanner Redirection feature installed, the uninstall process requires you to close any running applications.

Workaround: None. You must close the listed applications before you continue to uninstall Horizon Agent.

- When you use the Ambir ImageScan Pro 490i to perform a scan on a remote desktop or application, the dialog box always displays “Scanning...” and does not complete.

Workaround: Perform a scan on the client. The client scan calibrates the scanner. After the calibrate operation is finished, run the scan within the remote desktop or application.

Serial Port Redirection

- The **Bandwidth limit** group policy setting does not take effect. The value you enter in the setting is ignored, and the existing bandwidth is used for serial port redirection. The bandwidth consumption depends on the number of concurrently used serial port devices and the baud rate used by each device.

Workaround: None.

USB Redirection

- When you use the TOPAZ signature pad for multiple remote desktop sessions on Windows 2012 remote desktops, you might get only one device for a session that is redirected successfully. This problem can occur because the TOPAZ signature pads have the same serial number.

Workaround: Use TOPAZ signature pad devices with different serial numbers. You can use the serial number modifier software provided by the TOPAZ manufacturer to modify the serial numbers.

URL Content Redirection

- When you use the `vdmutil` command to create a URL content redirection setting, you must name the setting `url-filtering`. If the setting name is not `url-filtering`, there will be no redirection. For example:

```
vdmutil --createUrlSetting --urlSettingName url-filtering --urlScheme http
--entitledApplication iexplore2012
--agentURLPattern "http://google.*" --urlRedirectionScope LOCAL --authAs
johndoe --authDomain mydomain --authPassword secret
```

- VMware does not recommend creating more than one URL content redirection setting in this release.

Persona Management

- Persona Management might not correctly replicate a user persona to the central repository if the desktop virtual machine is extremely low on disk space.
- With Persona Management, you can use group policy settings to redirect user profile folders to a network share. When a folder is redirected, all data is stored directly on the network share during the user session. Windows folder redirection has a check box called **Grant user exclusive rights to *folder-name***, which gives the specified user exclusive rights to the redirected folder. As a security measure, this check box is selected by default. When this check box is selected, administrators do not have access to the redirected folder. If an administrator attempts to force change the access rights for a user's redirected folder, Persona Management no longer works for that user.

Workaround: See VMware Knowledge Base (KB) article 2058932, [Granting domain administrators access to redirected folders for View Persona Management](#).

- Persona Management is not supported on session-based desktop pools that run on RDS hosts.

Workaround: Install Persona Management in automated or manual desktop pools that run on single-user machines.

- After every login, Persona Management take a long time to replicate the first user persona on a guest operating system that uses the "v6" version of the user profile.

vSphere Platform Support

- View Storage Accelerator might take tens of minutes to generate or regenerate the digest files for large virtual disks (for example, a 100GB virtual disk). As a result, the desktop might be inaccessible for longer than expected.

Workaround: Use the blackout period to control when digest regeneration operations are allowed. Also, use the digest regeneration interval to reduce the frequency of these operations. Alternatively, disable View Storage Accelerator in desktop pools that contain very large virtual machines.

- If a linked-clone pool consists of vSphere 5.5 virtual machines, a View Composer rebalance operation can fail with a `FileAlreadyExists` error. This problem occurs only when the desktop pool uses different datastores for the OS disk and the user data disk and the datastore selection for the user data disk changes before the View Composer rebalance operation takes place.

Workaround: Detach the persistent disk from the linked clone desktop that has the `FileAlreadyExists` error. Later, you can attach the archived disk to a new virtual machine and recreate the linked-clone desktop or attach it to an existing linked-clone desktop as a secondary disk. You can prevent this problem from occurring by either keeping the OS disk and user data disk on the same datastore or by not changing the datastore selections before a View Composer rebalance operation.

- After you upgrade to vSphere 5.5, a heap size error can occur if you use space-efficient virtual disks and you have more than 200 linked-clone virtual machines per ESXi host. For example:
`Error: Heap seSparse could not be grown by 12288 bytes for allocation of 12288 bytes`

Workaround: Reduce the number of linked-clone virtual machines that use space-efficient virtual disks to less than 200 per ESXi host.

View Composer

- When Horizon Administrator provisions a linked-clone pool with thousands of desktops, a few machines (one or two per thousand) might fail with a "Customization timed out" error. If automatic recovery is enabled (the recommended setting for production environments), machines in error are automatically recreated and provisioned. No workaround is required. **Workaround:** If automatic recovery is disabled, manually delete the machines in error in Horizon Administrator. Horizon Administrator will provision new machines as part of normal pool management.

- When deleting a large desktop pool, a number of folders containing a `.hlog` file and an empty subfolder named `.sdd.sf` might remain undeleted. **Workaround:** Manually delete the folders that are left behind after a deletion operation. For instructions, see the Solution in VMware Knowledge Base (KB) article 2108928, [Rebalance operation leaves VM folders in previous datastores](#).

- If you upgrade a virtual machine with an IDE controller from Windows XP to Windows 7, take a snapshot of the virtual machine, and create a linked-clone pool, the linked clones cannot be customized, and pool creation fails.

Workaround: Add a SCSI controller and a disk to the virtual machine. Next, launch VMware Tools and install a VMware SCSI controller driver on the virtual machine. Next, take a snapshot and create the linked-clone pool.

- When you provision linked-clone desktops that are customized by Sysprep, some desktops might fail to customize.

Workaround: Refresh the desktops. If a small number of desktops still fail to customize, refresh them again.

- Do not change the log on account for the VMware View Composer Guest Agent Server service in a parent virtual machine. By default, this is the Local System account. If you change this account, the linked clones created from the parent do not start.

- Desktop pool provisioning fails with the error message `Polling progress failure: Unable to connect to View Composer server <https://machine-name:18443>: java.net.ConnectException: Connection refused: connect.`

Workaround: Restart the VMware vCenter Server service and then reprovision the desktop pool.

Windows 10 Support

- Windows Media Player is not active and cannot be made visible when the Windows 10 remote desktop display is resized to one monitor and Windows Media Player is open on another monitor. This problem occurs regardless of whether the video is playing or not and whether MMR is enabled or not.

Workaround: Close and reopen Windows Media Player or resize the remote desktop to multi-monitor display.

- Creating or recomposing desktop pools fails after you upgrade the parent virtual machine from build 1511 to build 1607 of the Windows 10 operating system. Build 1607 is the Windows 10 Anniversary Update operating system.

Workaround:

- Option 1. Perform a fresh installation of Windows 10 Build 1607 on the parent virtual machine.
- Option 2. Do not select "Redirect disposable files" in the desktop pool creation wizard.
- If you install the Horizon Agent on a Windows 10 or Windows Server 2016 operating system, and the scaling is not set to 100%, you cannot drag and drop applications from the primary monitor in a multi-monitor setup to another monitor. This issue can occur because of incorrect cursor input.

Workaround: Set the Horizon Agent DPI setting to 100% scaling.

- After a recompose, refresh, or rebalance operation with a persistent disk, Windows 10 desktops might fail to start, or become untiled from the Start menu. Windows applications can include applications such as Windows Store, native applications, Edge Browser, and Cortana Search. This issue affects multiple version of Windows 10 intermittently, depending on applications used. This problem affects the following desktop types:
 - Linked-clone dedicated desktops with a persistent disk where the persistent disk is used to store app settings.
 - Linked-clone floating desktops with Persona Management enabled that use a persistent disk as a local disk and the Persona Management setting **Roam Local Settings Folders** enabled.
 - This issue is not seen with floating or dedicated linked-clone desktop pools where the user profile is redirected to network share with or without Persona Management enabled. If Persona Management is enabled, the user profile is set to roam with VMware Persona GPO settings.
 - This issue is not seen when persistent disk and/or Persona Management are used to persist only My Documents and Exchange 365 .pst/ost files.
- After logoff, Horizon Agent cannot reconnect to the virtual desktop. Horizon Client displays the following message: Horizon Agent reports that this desktop is currently logging off a previous session. Please try again later. Horizon Administrator displays the desktop status as disconnected. This problem occurs when Windows 10 is installed with Horizon Agent 7.0.3 and only Windows 10 is upgraded to Windows 10 version 1607.

Workaround: Use Horizon Administrator to reset Horizon Agent and connect to the virtual desktop.

- Windows 10 32-bit Horizon Agent installation throws "the arguments are invalid" exception and the installation continues after you click OK. This error occurs because the print spooler service is disabled.

Workaround: Enable the print spooler service for the installation to work as expected.

- Client drive redirection does not work with Horizon Agent installed on a 32-bit Windows 10 operating system.

Workaround: None. This is a Microsoft Windows Server issue.

Windows 8.x Support

- On some occasions, when you reconnect to a Windows 8.x desktop session, you might not see the desktop display immediately. A black screen might be displayed for up to 20 seconds.

Workaround: None

- When a space reclamation operation is run for Windows 8.x linked clone virtual machines, the size of the system disposable disk and user persistent disk might increase to its maximum capacity. This space increase only happens the first time space reclamation is done. For the OS disk, space reclamation works as expected and reclaims the unused space. This issue does not affect View Composer desktops that do not use system disposable disks or user persistent disks.

Workaround: When you configure View Composer desktops on Windows 8 or 8.1 virtual machines and enable space reclamation, do not configure system disposable disks or user persistent disks.

- Adobe Flash optimization settings that use high quality and aggressive throttling are not fully enabled when end users use Internet Explorer 10 or Internet Explorer 11 on Windows 8 or Windows 8.1 desktops.

Workaround: None.

- On a Windows 8 desktop, if you enable the Persona Management setting, `Remove local persona at logoff`, and a user creates a PDF file, logs off of the desktop, and logs back in again, the user cannot open the offline PDF file. The Windows 8 Reader cannot download the offline PDF content.

Workaround: Manually download the file by right-clicking the file and selecting **Properties** or selecting **Open with... Adobe Reader**.

- When using Internet Explorer 10 or 11 on a Windows 8 or later computer, if you set the browser locale to Traditional Chinese, and you log in to Horizon Administrator, the navigation panel might be displayed in Simplified Chinese.

Workaround: Use an alternate browser to log in to Horizon Administrator.

- If a user of a Windows 8 View desktop logs in using Kerberos authentication, and the desktop is locked, the user account for unlocking the desktop that Windows 8 shows the user by default is the related Windows Active Directory account, not the original account from the Kerberos domain. The user does not see the account he or she logged in with.

This is a Windows 8 issue, not directly a Horizon 7 issue. This issue could, but does not usually, occur in Windows 7.

Workaround: The user must unlock the desktop by selecting "Other user." Windows then shows the correct Kerberos domain and the user can log in using the Kerberos identity.

- When provisioning 64- or 32-bit Windows 8 desktops in a vSphere 5.1 environment, the Sysprep customization can fail. The desktops end up in an ERROR state with a `Customization timed out` error message. This issue occurs when anti-virus software is installed in the parent virtual machine or template. The issue applies to full clone and linked clone desktops. It does not apply to linked clone desktops customized with QuickPrep.

Workaround: Uninstall the anti-virus software on the parent virtual machine or template and recreate the pool.

- When recomposing Windows 8.1 desktops, the Sysprep customization can fail with a `Customization operation timed out` error message. This problem is caused by a Windows 8.1 scheduled maintenance task that recovers disk space by removing unused features.

Workaround: Use the following command to disable the maintenance task immediately after completing Setup: `Schtasks.exe /change /disable /tn`

`"\Microsoft\Windows\AppxDeploymentClient\Pre-staged app cleanup"`

Windows Server for Desktop Use

- You cannot connect to a Windows Server 2008 R2 SP1 desktop, or you encounter a black screen the first time that you use Horizon Client, even though the desktop that you are connecting to is in the Available state.

Workaround: Shut down and power on the Windows Server 2008 R2 SP1 virtual machine.

When the desktop is in the Available state, try to connect again. Note: Resetting or restarting the virtual machine does not solve this problem. You must shut down the virtual machine first and then power it back on.

VMware Identity Manager (formerly VMware Workspace Portal) Integration

- If you change the default HTTPS port, 443, on a Connection Server instance or security server, and Horizon users try to start their desktops from the Horizon User Portal, the desktops fail to launch. This issue occurs when users attempt to access their desktops via Horizon Workspace with either Horizon Client or HTML Access.

Workaround: Keep the default HTTPS port 443.

- When you add a SAML Authenticator in Horizon Administrator, an "Invalid certificate detected" window might be displayed, even when the Metadata URL points to a trusted certificate in the Trusted Root Certificate Authorities folder in the Windows certificate store. This issue can occur when an existing SAML Authenticator with a self-signed certificate was using the same Metadata URL when the trusted certificate was added to the Windows certificate store.

Workaround:

1. Remove any trusted certificates for the Metadata URL from the Trusted Root Certificate Authorities folder in the Windows certificate store.
2. Remove the SAML Authenticator with the self-signed certificate.
3. Add the trusted certificate for the Metadata URL to the Trusted Root Certificate Authorities folder in the Windows certificate store.
4. Add the SAML Authenticator again.

Virtual SAN and Virtual Volumes

- In a hybrid vSAN environment, about three percent of the virtual machines might not use View Storage Accelerator. These machines will take few seconds longer to start up.
Workaround: Delete and recreate the virtual machines that failed to use View Storage Accelerator.
- In this release, View Storage Accelerator is not supported on Virtual Volume datastores.
Workaround: None
- Provisioning View Composer linked clones fails on some Virtual Volumes storage arrays. The following message is displayed: "Error creating disk Error creating VVol Object. This may be due to insufficient available space on the datastore or the datastore's inability to support the selected provisioning type." View Composer creates a small internal disk in thick-provisioned format, although all other linked clone disks use thin provisioning. This issue occurs if the 3rd-party Virtual Volumes storage array does not support thick-provisioned disks by default.
Workaround: Enable thick provisioning on the storage array to allow Virtual Volumes to create thick-provisioned disks.
- When you attach or recreate a View Composer persistent disk stored on a Virtual SAN datastore, the virtual disk's storage policy in vCenter Server is shown as "Out of date." The original storage profile is not preserved.
Workaround: In vSphere Web Client, reapply the storage policy to the virtual disks.
- Virtual SAN datastores are only accessible from hosts that belong to the Virtual SAN cluster, and not from hosts that belong to a different cluster. Therefore, rebalance of pools from one Virtual SAN datastore to another Virtual SAN datastore in a different cluster is not supported.
- In an environment where a large VDI desktop pool (for example, 2,000 desktops) is created on Virtual Volumes datastores that reside on a NetApp storage system running ONTAP 8.2.x or earlier, a recompose operation may fail for a small number of desktops with the error message "The VVol target encountered a vendor specific error."
Workaround: Upgrade the NetApp storage system to ONTAP 8.3 or later.

Cloud Pod Architecture

- Cloud Pod Architecture configuration changes made by another Horizon administrator while you are logged in to Horizon Administrator are not visible in your current Horizon Administrator session.
Workaround: Log out of Horizon Administrator and log in again to see the changes.
- If you created a global entitlement with an instant clone pool and disabled the **Allow users to reset** setting in Horizon 7 version 7.0.3, the setting is not editable after you upgrade to Horizon 7 version 7.1.
Workaround: Create a new global entitlement with the **Allow users to reset/restart** setting enabled and add the instant clone pool to that entitlement.

Miscellaneous

- The ViewDbChk utility can display an "Archiving persistent disks..." message while removing machines from an automated linked-clone pool with floating assignment or an automated farm.
Workaround: None.
- For virtual machines that have hardware version 8, the maximum allowed video RAM is 128MB. For virtual machines that have hardware version 9 and later, the maximum allowed

video RAM is 512MB. If you configure a value from Horizon Administrator that exceeds the video RAM limit for a virtual machine's hardware version, errors appear in the vSphere Client Recent Tasks pane and the configuration operation keeps repeating. This problem occurs only if you configure the video memory value through Horizon Administrator (Pool Settings page) and not through vSphere Client.

Workaround: Either upgrade the hardware version of the virtual machines in vSphere Client, or use Horizon Administrator to set the proper value for video memory based on the current virtual machine hardware version.

- When you try to add a SAML authenticator in Horizon Administrator, the **Add** button is disabled on the Manage SAML Authenticators page.

Workaround: Log in to Horizon Administrator as a user who has the Administrators or Local Administrators role.