Wyse Thin OS/Xenith & Citrix HDX Flash Optimizations

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Summary

This note describes the recommended configuration for getting the best user experience in playing flash videos in a HDX environment with Wyse Thin OS based clients.

Audience

Administrators and System Engineers

Related Products

Wyse Thin OS based clients Citrix XenApp 5 or higher Citrix XenDesktop 5 or higher

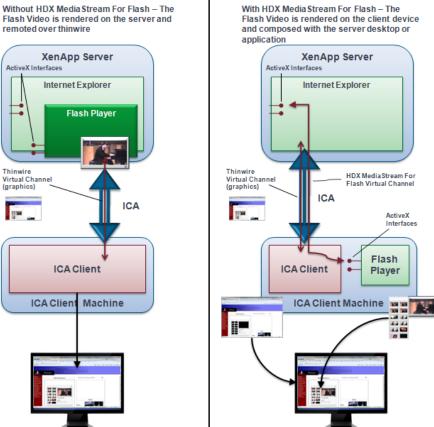
Which HDX functions are implemented in Wyse Thin OS/Xenith?

| HDX Ready client ICA 12 Compatible | UDP Audio Improved media flow control HDX Plug-n-Play Flash (server rendered) Progressive Display HDX IntellCache Session Reliability Access Gateway Support (direct LD) | |
|---------------------------------------|---|--|
| | Support for L-shaped desidop (and Granular control on HDX US8 redin | |

Which HDX functions are not implemented in Wyse Thin OS/Xenith?

- Citrix HDX 3D Pro
- Citrix HDX MediaStream for Flash Client Rendering

With this extension, Citrix uses the Adobe Flash Player on the client system to playback the flash content. Wyse Thin OS/Xenith does not currently support this as there is no local flash player available. Therefore this extension cannot be used. As an alternative you can use Citrix HDX MediaStream for Flash Server Rendering



Server Rendering

Client Rendering

With HDX Media Stream For Flash - The Flash Video is rendered on the client device and composed with the server desktop or

HDX Media Stream For Flash Virtual Channel

Flash

Player

ActiveX Interfaces

4.4.

Important for HDX MediaStream for Flash Server Rendering

HDX MediaStream for Flash Server Rendering does not support full screen playback of flash content. If the user is selecting full screen, the display will not be accelerated at all.

To avoid unnecessary frustration from the user, we recommend disabling the full screen functionality in the Adobe flash player settings:

• Create a file called mms.cfg and add this line:

FullScreenDisable = 1

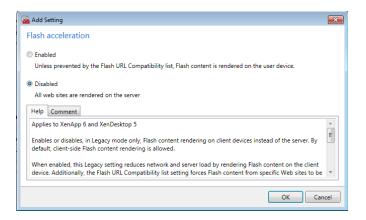
 Place this file either in C:\Windows\System32\Macromed\Flash (or C:\Windows\SysWOW64\Macromed\Flash on a Windows x64 installation).

Access to full screen playback will then be blocked for all users.

How to optimize Citrix HDX MediaStream for Flash

Recent versions of Citrix XenApp or XenDesktop switch automatically to the server site rendering method if client site rendering is not available.

If necessary, an administrator may choose to use only the method Rendering Server by setting the Citrix server policy "Flash Acceleration":



When server site rendering is used, you can adjust the parameter « Progressive compression level » so that Progressive Display is used. This turns out to be very effective in improving fluent displaying of server rendered multimedia and this also saves a good amount of bandwidth. The recommended value for a LAN environment is Medium. For a WAN environment it depends on the available bandwidth and latency.

| 🖀 Edit Setting | × |
|--|-----|
| Progressive compression level | |
| Value: Medium | |
| Use default value | |
| Help Comment | |
| Applies to XenApp 6.0 or later and XenDesktop 5.0 or later | * |
| Provides a less detailed but faster initial display than lossy compression. | Ξ |
| The more detailed image (defined by the Lossy compression level setting) appears when it becomes available. Use very high or ultra high compression for improved viewing. | |
| | * |
| OK Car | cel |

In XenDesktop 5.5 and XenApp 6.5 Citrix has made enhancements to Progressive Display, which is called now Adaptive Display. For XenDesktop 5.5 Adaptive Display is enabled by default and can only be altered through the Citrix policies. For XenApp 6.5 you will need to add a Citrix hotfix to enable Adaptive Display. On XenApp 6.5 Adaptive Display is NOT enabled by default and the settings can only be altered through MS Group Policies (so not through the Citrix Policies). The patch that needs to be installed on XenApp 6.5 can be found at http://support.citrix.com/article/CTX130971

These settings below gave us the best results.

| ups and Settings | |
|---|---------|
| Display | |
| Allow: Checks that the user is STGH\ Domain Users | |
| Setting | Value |
| Moving Image Compression | Enabled |
| Target Minimum Frame Rate | 10 |
| Minimum Image Quality | Nomal |
| Progressive compression level | None |
| Max Frames Per Second | 15 |

In addition to this hotfix, Citrix has released a second one that improves Flash performance significantly. You can download it here http://support.citrix.com/article/CTX134426

Make sure, in case you install CTX134426 that you also edit the, in the HF description mentioned registry key, if you want to use Internet Explorer 9 or 10. •For a 32-bit operating system:

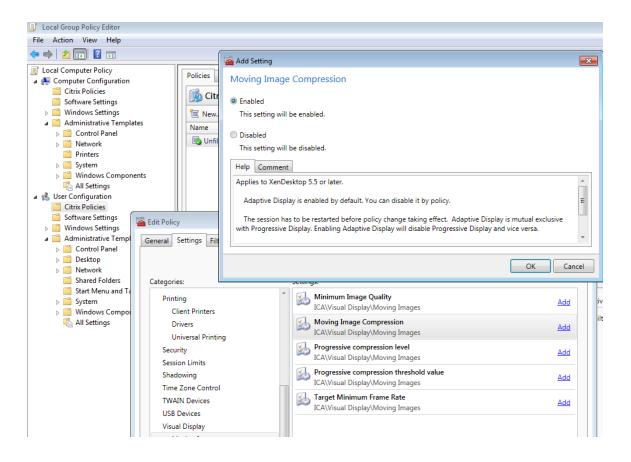
HKEY_LOCAL_MACHINE\SOFTWARE\Citrix\HdxMediaStreamForFlash\Server\Pse udoServer Add the entry named IEBrowserMaximumMajorVersion with a DWORD value =

00000009, if you are using IE9. For IE 10 use value = 00000010.

•For a 64-bit operating system

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Citrix\HdxMediaStreamForFl ash\Server\PseudoServer Add the entry named IEBrowserMaximumMajorVersion with a DWORD value = 00000009, if you are using IE9. For IE 10 use value = 00000010.

NOTE: Internal and customer testing have shown that server-rendered Flash content gives a much better user experience when using Internet Explorer 10 on the XenApp server instead of version 8 or 9.



Other settings that are also very helpful are:

| add Setting | × |
|---|-----|
| Max Frames Per Second | |
| Value (fps): 16 | |
| Use default value | |
| Help Comment | |
| Applies to XenApp 6.0 or later and XenDesktop 5.0 or later | * |
| Sets the maximum number of frames per second that the virtual desktop will send to the client. | = |
| If you want to improve the user experience you can increase the maximum FPS to 30. This will consume more resources and bandwidth, but will provide a better user experience. | |
| | * |
| OK | cel |

| Add Setting | × |
|---|-----|
| Flash quality adjustment | |
| Value: Optimize Adobe Flash animation options for all connections 💌 | |
| Use default value | |
| Help Comment | |
| Applies to XenApp 6.0 or later | |
| Adjusts quality of Flash content rendered on session hosts to improve performance. By default, this setting is allowed. | |
| | |
| OK | rel |
| UK Cark | |

Parameters for the WNOS.INI for Citrix HDX

By default, certain extensions are disabled in Citrix HDX WTOS/Xenith.

To use these extensions, you must include the appropriate settings in the file wnos.ini.

HDX MediaStream

SessionConfig=ICA ProgressiveDisplay=yes

EnableRAVE=yes

NOTE : Video content redirection only works with a DirectShow compatible video player, Windows Media Player is most commonly used.