

Dell Wyse TCX Suite

Version 7.3

Release Notes

Current Version: 7.3
Release Date: 2017-11
Previous Version: 7.2

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Contents

Release type and definition	3
Current Version	3
Previous version	3
Hardware and software information	3
Pre-Requisites for TCX features.....	3
Supported Server OS and TCX components Details	6
Supported Connections	7
Supported Browsers.....	7
Server Environment.....	7
USB Peripheral List	7
Fixed issues	9
System related issues	10
Server Installer related.....	10
Client installer support.....	11
Client installation (32-bit).....	11
Client installation (64-bit).....	11
USB related fixed issues	12
Limitations of multicast	21
Security Warnings	22
Licensing	28

Release type and definition

This release note provides details on Dell Wyse TCX v7.3 installer for Server and Client components respectively with a common folder structure.

Note: Dell recommends applying the Dell Wyse TCX v7.3 update to make your system software up-to-date with other system modules.

Current Version

Version 7.3

Previous version

Version 7.2

Hardware and software information

The following are the software and hardware configuration details in this release:

- Operating systems - WES7, WE8S, Windows 10 IoT Enterprise and ThinOS v8.4.
- Media size: 16 GB for WES7 and WES7P, 32 GB for WE8S and 64 GB for Windows 10 IoT Enterprise and 8 GB for ThinOS v8.4.

Operating System	Supported Thin Client Devices
Wyse Enhanced Microsoft Windows Embedded Standard 7	Wyse 5010 thin client (Build 7064) Wyse 5020 thin client (Build 7064) Wyse 7010 thin client (Build 7064)
Wyse Enhanced Microsoft Windows Embedded Standard 7P	Wyse 5010 thin client (Build 896)
Wyse Enhanced Microsoft Windows Embedded 8 Standard	Wyse 5010 thin client (Build 924)
Windows 10 IoT Enterprise	Wyse 5020 thin client (Build 0A38) Wyse 5060 thin client (Build 0A52) Wyse 3480 thin client (Build 0A49)
ThinOS v8.4	Wyse 3020 thin client (Build 8.4) Wyse 5010 thin client (Thin OS, PCOIP) (Build 8.4) Wyse 5060 thin client (Build 8.4)
Dell Workstation	Windows 7 Ent x64 bit Windows 8.1 x64 bit Windows 10 x64 bit

Pre-Requisites for TCX features

Flash Redirection

- Client should have NPAPI based flash player locally present to support Flash Redirection.

- Latest Dell Wyse thin clients has flash player installed locally on the client image. If the flash player is not available in the client image, then NPAPI based flash player must be downloaded and installed on the client
- Some of the advertisements in flash/YouTube web sites need OpenSSL libraries to be present in the client to work. If not present in the client image then the behavior is undefined. The latest Dell Wyse Windows 7 images have OpenSSL built in the image. In IE "TFRServerBHO Class" add-on should be enabled from IE->Tools->Manage Add-ons for FR to work.
- For Firefox Web Browser to Support Flash Redirection, an extension is available in build 7.3.0.43. This extension is installed by the Server installer. After installation, if you start Firefox Web browser, it displays a message whether you want to allow the TCX Flash redirection extension.
- You must allow the extension to use for redirection of flash over Firefox. If you had disabled it then some of the web pages might not work properly with Flash Redirection on Firefox. If by mistake you had not allowed the extension then later point also he can enable it by going in to the extension section of the Firefox browser and enabling the extension.

Flash Acceleration

The following are pre requisites for Flash Acceleration:

Required Settings to work Flash Acceleration in VMWare Environment

- In VMWARE environment, Flash Acceleration server uses default the port 9427.
- You should not change this port number in Flash Configuration dialog for Flash Acceleration. Otherwise all the browsers like Internet Explorer, Firefox will hang and it becomes unresponsive.

Required Settings to work Flash Acceleration in Xen Desktop Environment

- Flash Acceleration will not work for XenDesktop 5.5 with flash player version 11.6. It works fine for XenApp and RDP sessions.
- In order to make Flash Acceleration to work with XenDesktop, downgrade the flash player version from 11.6 to 10.2 or with latest flash player
- Follow the below steps:
- Navigate to the Flash Folder.
- Search the file mms.cfg and open the file using notepad.
- Add value ProtectedMode=0 to the end of the file and save it.
- Start Firefox Web browser, FA should work both for windowed and windowless Flashes
- TCX Flash has Browser Helper Object for IE browser "TFR Serve BHO Class" which has to enable as part of configuration. This can be done by launching IE browser->Tools->Manage Add-ons and enable **TFR Serve BHO Class**.
- TCX Flash has Firefox extension "Thin Client eXtension" for Mozilla Firefox browser. This extension has to be enabled in Firefox browser. To Enable **Thin Client eXtension** launch Firefox Browser->Add-ons->Extensions will list all the available extensions. Enable the **Thin Client eXtension** by clicking the enable button.
- IE Security settings need to be switched off to play video through FR in windows 2003, windows 2008 Servers and windows server 2012.
- We recommendation for Firefox: Install Firefox first and then install TCX Suite.
- Adobe flash plugins must be installed before TCX installation.

- When you start Firefox browser after installing TCXSuite server then a message is displayed whether to allow the TCX Flash Redirection Extension. You must allow the extension to use for Flash Redirection of flash over Firefox.

TCX USB virtualizer

The following are pre requisites for USB Virtualizer.

Required Settings for TCX USB Virtualizer Use with Wyse ThinOS

The following parameters need to be added for ThinOS client in the .ini parameters to get isochronous devices to work.

- desktopcolordepth=16 rgb565=yes (required for webcam to work when it requires minimum 16 bit color depth)
- Connect=rdp host=IP DisableSound=2 (required for headset to work, to leave sound at remote server side)
- Device=vusb ForceRedirect=0x0a81, 0x0205, 0x03, 0x01, 0x01 (required for the headset like Logitech, which is always be local as per design for Audio redirection support. This parameter will redirect the device for USB Virtualizer use).

How to force redirect the composite device from ThinOS client?

A secure U3 device plugged into the client will show the mass storage interface. When you start the secure application present in the U3 device then it switches to composite device where a HID class device and mass storage device interface will be present. Using USBView the vendor ID and Product ID of this composite device can be found.

In Windows Clients use the Vendor ID and Product ID of the Composite device to configure the device to as remote always. In case of ThinOS client the syntax to force redirect the device is as following:

- Device=VUSB ForceRedirect=VendorID,ProductID, ClassID,Sub Class, Protocol . You can input ClassID, SubClass, and Protocol as '0'.
- The statement to redirect a WACOM HID class of device is
- Device=vusb ForceRedirect= 0x056a,0x00a1,0x03,0x00,0x00.

For Example,

Buffalo U3 secure device with vendorID=0x411, productID=0xED (Only Mass Storage Interface) having productID = 0xEE (for Composite Interface) we have to add the following lines to wnos.ini to force redirect the device.

```
Device=VUSB ForceRedirect=0x411,0xED,0x0,0x0,0x0
```

```
Device=VUSB ForceRedirect=0x411,0xEE,0x0,0x0,0x0
```

Redirecting USB devices to OFF state Virtual Desktop (CIR 53202)

The Xen Off state VMs can be started using Xen desktop. These VMs in some cases receive client connection events out of order. To fix this we have a timeout value which will be used to wait for the amount to time, in case previous event is missed. The default value of this wait is 10 sec, and can be modified using regkey "HKLM\Software\Wyse\TCX\Server\USB Virtualizer\ICAOffstateWait" (DWORD). This value is the maximum value of time for which it should wait. It will keep checking for the event after every sec and if the previous event has happened, then we will not wait any longer.

Supported Server OS and TCX components Details

This section lists the minor features which indicates that the feature is applicable for customers for hotfix releases.

The following are the supported operating systems for server with respect to TCX components:

Server OS	TCX Flash	TCX Multi-display	TCX Multimedia	TCX Rich Sound	TCX USB Virtualizer
Windows 10 x86 LTSB 2016	Yes*	N/A	N/A	N/A	Yes
Windows 10 x64 LTSB 2016	Yes*	N/A	N/A	N/A	Yes
Windows 10 x86 RS2	Yes*	N/A	N/A	N/A	Yes
Windows 10 x64 RS2	Yes*	N/A	N/A	N/A	Yes
Windows Server 2016	Yes*	N/A	N/A	N/A	Yes
Windows Server 2008 R2 (64-bit)	Yes*	Yes**	Yes#	N/A	Yes
Windows Server 2012 R2 (64-bit)	Yes*	Yes**	Yes#	N/A	Yes
Windows 7 (32-bit) (Enterprise***, Professional)	Yes*	Yes**	Yes#	Yes ***	Yes
Windows 7 (64-bit) (Enterprise***, Professional)	Yes*	Yes**	Yes#	Yes ***	Yes
Windows 8.1 (32-bit) (Enterprise, Professional)	Yes*	Yes**	Yes#	N/A	Yes
Windows 8.1 (64-bit) (Enterprise, Professional)	Yes*	Yes**	Yes#	N/A	Yes

Legend

* Uses Native RDP/ICA Audio driver

** Need to install MDS through Custom Installation

***TCX RS supported only on windows7 Enterprise 32/64 bit

#TCX Multimedia is supported only if client is ThinOS client.

The following points must be considered during TCX v7.3 installation:

- H.264 media redirection is supported only on Teradici PCoIP.
- Windows Remote Desktop Connection must be enabled.
- Windows Terminal Services must be installed and enabled.
- Multimedia Redirection is not supported on 64-bit clients
- Flash Acceleration is not supported on 64-bit clients.
- Firefox is supported, but IE10 and IE11 is not supported for Flash Acceleration.
- Flash Redirection is only supported on 32 bit browsers
- Flash Redirection over secure gateway such as, NetScaler is supported only on Windows Clients but ThinOS and Linux clients are not supported.

- TCX Session Level Restriction with the supported USB class of devices includes HID Class, Scanner, Printer Class, COM port, disk drive, Smart readers, and WPD.

Supported Connections

The following are the valid connections for TCX v7.3:

- Remote Desktop Protocol
- ICA with XenDesktop v7.15
- ICA with XenApp v6.5 and v7.15
- VMWare View v7.2 (RDP and PCoIP)
- PCoIP Teradici Client v1.9 and Server v2.6.1

Supported Browsers

The following are the supported browsers for TCX 7.3:

- Internet Explorer 32 - bit v11.0.9600.18792
- Mozilla Firefox 32 – bit v55.0.3

Server Environment

Server Firmware: ESX Server v6.0.0 English

USB Peripheral List

The following are the valid device list:

SL No	Device List	Model (P/N)
Printers		
1	Dell B1160dn	DP/N 0HHH95
2	Dell B1260dn	DP/N 0C7X7K
3	Dell B2375dnf	DP/N 060GDP
4	Dell B5465dnf	DP/N 0164W2
5	Dell B5460dn	DP/N 0XY7XJ
6	Dell Color MFP E525W Printer	0KWX7N
7	Dell E515dn Printer	0M8R02
8	Dell S5840cdn Printer	07Y47Y
9	Brother H2-5450dn	E70177K5N270020
10	HP LaserJet 2015	WY-BLR-00060
11	HP deskJet Ink Advantage 6525	C227680017
12	HP LaserJet Pro 435nw	58515453 Rev A
13	HP LaserJet P1102w	VND3Q31611
14	Canon MG3670	QU1-8394-DB01-01
15	Canon 2900B	L111Z1E
16	Canon MG2170	QC3-6224-BB01-01
Scanners		
17	Fujitsu Fi-6110	PA03607-BOO5
18	Fujitsu Fi-6130Z	PA03630-B055
19	Fujitsu Fi-6140	PA03540-B005
20	Fujitsu Fi-6240Z	PA03630-B505

21	Fujitsu Fi-7160	PA03670-B051
22	Fujitsu Fi-7260	PA03670-B551
23	Dell Color MFP E525W Scanner	0KWX7N
24	Dell E515dn Scanner	0M8R02
Wacom Devices		
25	STU-520A/K	3GZQ001550
26	STU-500B	2AZT000410
27	STU-530/G	4AZQ000667
28	STU-430/G	3KZQ007044
29	STU-300/K	0EF002740
USB Secure device		
30	Datashur USB 2.0/3.0	S/N 50130542
31	Ironkey Imation	2025468
32	Corsair	14339000
33	Integral Crypto 4GB	FIPS 197
34	Kingston DataTraveler vault privacy 3.0	DTVP30/4GB
USB Pen Drives		
35	SANDISK ULTRA USB 3.0	BL131124746B
36	SANDISK Extreme USB 3.0	BM141224687B
37	Transcend 3.0 (16GB)	NA
38	Scandisk Cruzer Blade (16GB) 2.0	NA
39	Scandisk Cruzer enterprise (2GB)	NA
40	Scandisk Cruzer enterprise (1GB)	NA
41	Scandisk Cruzer Blade (32GB)	NA
42	Scandisk Cruzer Blade (64GB)	NA
43	Kingston DT 101 G2 USB 2.0 (4GB)	NA
44	DataTraveler G4 16GB	NA
45	DataTraveler G4 32GB	NA
46	Strontium 32GB	NA
WEBCAMS		
47	Logitech 920	M/N V-U028
48	Logitech 9000	M/N V-U0009
49	Logitech C310	M/N V-U0015
50	Microsoft LifeCam	P/N X 07044-003
CD-ROM / CD-RW Drives		
51	Dell External USB DVD RW Drive	GP60N
52	Dell External USB Ultra Slim DVD	DP/N 02YKY3-36866-524-0220-A01
53	External USB DVDRW Drive	CN-OCTYDR-48321-4BB-00LR-A02
Other Devices		
54	DELL- 2TB 3.0	NZ055530
55	DELL- 1TB 3.0	NZ055KDS
56	Seagate - 500GB 3.0	9ZF2A8-500
57	ADATA Classic CH11	1C2820148140
58	ADATA HDD 1 TB	MSIP-REM-A99-AHD710

59	WD Mypassport Ultra -2TB 3.0	WDBMWW0020BBK-05
60	Credit card Swiping Machine (USB-to-COM port devices)	Ingenico i3070
61	Credit card Swiping Machine (USB-to-COM port devices)	iPP320
62	USB to Serial Converter cables	USB-Serial Cable
63	MSR 777-1 Scanner	P/N 9019134R
Smart Card Device		
64	OmniKey Cardman 3121	OmniKey AG Cardman 3121
65	Gemalto PC USB-TR	P/N HW P117685 E
66	Gemalto PC USB-SW Reader	P/N HW P114112 B
67	Active card reader v2.0	P/N ZFG-9800-AD
68	Xiring ppd 001	PPD001
Smart Cards		
69	Gemalto .Net V2+	N/A
70	Gemalto .net v1	N/A
71	Alladin eToken Pro	N/A
72	Active Card Version 3.0	N/A

Fixed issues

Dell Wyse TCX v7.3 is maintenance release and the following CIRs are addressed:

CIR Detail	Description
CIR91225/CIR90581	Z90DE7P: Unable to get Honeywell HID MIM device to work over RDP
CIR92316	Several Microsoft hotfixes fail to install when TCX v7.2 is installed
CIR93169	Installing TCX v7.2 slows Windows startup.
CIR91421	TCX v7.1 Session Level Restriction: Printer\Scanner is recognized by all users.

- Support for Windows 10 LTSB 2016 and windows 10 RS2 (Client and Server) and Windows Server 2016.
- Support for Latitude 3480 Mobile Thin Client and Latitude 5280 Mobile Thin Client.

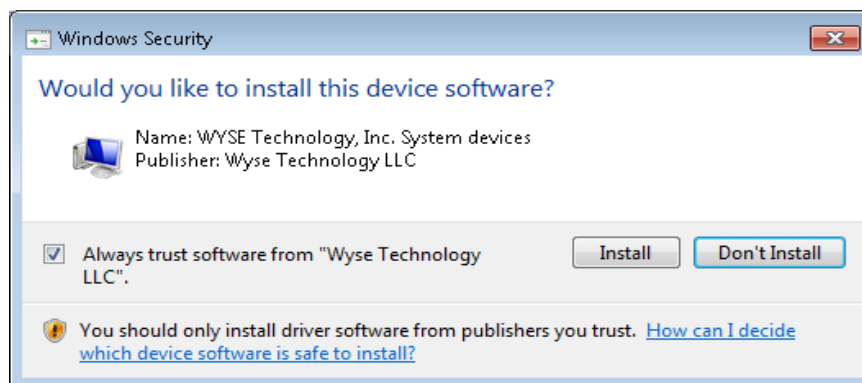
System related issues

The following are the fixed system issues in TCX v7.3:

Issue	Description
Flash acceleration	In case of 24 - bit connection with XenApp and XenDesktop Publication, the odd size of session Window Flash Acceleration will not be stored. Flash Redirection and Flash Acceleration is only supported for 32 – bit.
Multi Display	When you connect to remote desktop, go to Taskbar > Properties > and check/uncheck the option keep the taskbar on top of other windows . The problem with the secondary monitor is observed. The screen gets corrupted and if we try to restart and maximize the application in the secondary monitor, the application and the window coordinates do not match. The taskbar is split to half its size. In XenDesktop, the taskbar is half the size of the primary monitor. This causes problem with desk top resolution.

Server Installer related

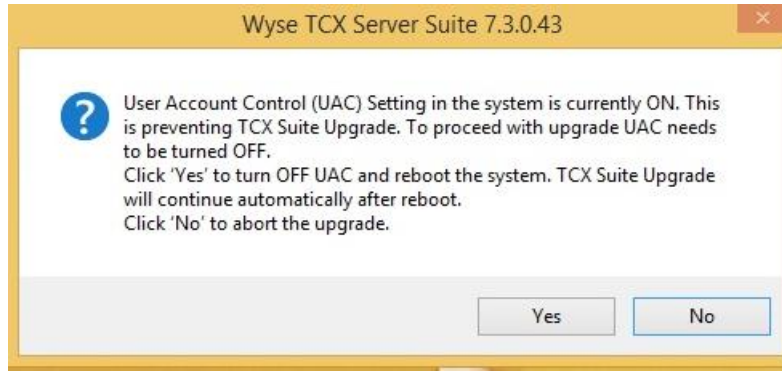
1. During installation, the following windows is displayed:



Select the **Always trust software from “Wyse Technology LLC”** check box, and click Install. You may have to click Install more than once as and when the dialog box is displayed during installation.

Note: During Installation, Uninstallation and Modifying process, UAC message is displayed on a new window.

2. During upgrade, UAC is handled by the installer and the following message is displayed.



3. Click **Yes** to continue the process.
4. After uninstalling Dell Wyse TCX, the Wyse > TCX folder is created. You can delete this folder manually.

Note: Silent upgradation process for server and client build are not supported. The upgrade process is supported for version 7.1.0.44 and version 7.2.0.115 to 7.3.0.43 and Upgrade is not supported for evaluation versions of the installer.

Client installer support

The following matrix provides details on what components are installed on different classes of clients.

Client installation (32-bit)

Client Operating System	TCX Flash Acceleration	TCX Flash Redirection	TCX USB Virtualizer	TCX Rich Sound	TCX Multi-Display	TCX Multimedia Redirection
WES7 32-bit	Yes	Yes	Yes	Yes	Yes	Yes
ThinOS	In Built	Yes	In Built	In Built	In Built	In Built

Client installation (64-bit)

Operating System	TCX Flash Acceleration	TCX Flash Redirection	TCX USB Virtualizer	TCX Rich Sound	TCX Multi-Display	TCX Multimedia Redirection
WES7P 64-bit/WES8 64-bit / WIE10 64-bit	Not Supported as MMR component is not Install	Yes	Yes	Not Supported	Not Supported	Not Supported

Note:

The 64-bit TCX client installer will install both 32-bit and 64-bit binaries on 64-bit clients. For example, you can use the TCX features on Citrix or VMWare View clients by installing the 32-bit binaries on a 64-bit operating system.

Teradici PCoIP USB redirection, Quest USB redirection, VMWare view arbitrator service and TCX USB redirection are mutually exclusive. If you plan to use TCX USB redirection, then

uninstall the Quest add-on or stop the Quest USB HUB Client service. Similarly stop the Teradici PCoIP USB client service and VMWare view arbitrator service.

For installing TCX v7.3 client and server components, see Dell Wyse TCX Suite Version v7.3 — Installation Guide

USB related fixed issues

The following are the USB related fixed issues:

- BSOD occurs in TCX Server whenever user changes redirected HP DeskJet 6525 state from none configured state to always work as local.
- **Limitation:** HP Printer driver do not claim support for Windows 10 RS2
- Fail to show mass storage entry in Explorer window
- **Workaround:** For Teradici protocol in Windows Server 2016, kindly disable SLR for all the USB devices
- Server BSOD is observed when SanDisk U3 Smart device is redirected to windows 8.1 XD7.14
- **Limitation:** This issue is only with ThinOS clients
- Sometime duplicate entries show in TCX Client USB UI
- **Workaround:** Once the duplicate entries shows in TCX UI, User needs to restart the client
- Sometime TCX Client USB UI is not refreshing.
- **Workaround:** Restart the client
- Fail to set to default policy settings after selecting "Not Configured" for Session Level Restriction based on the device class.
- **Limitation:** The group-policy (MMC) UI is created by the Windows. Although we set the default values to be used, during non-configured state, the same is not reflecting.
- Device redirection not working in win2k16 server over teradici
- **Workaround:** Set 'Turn off the display' & 'Put computer to sleep' to "Never", in the *Virtual-machine/remote-session*
- Unable to uninstall ActiveClient 7.0.2 application after installing TCX Suite
- **Workaround:** Renaming SLRHook fixes the issue.
- Devices are not getting redirected intermediately to the user or admin
- **Limitation:** this issue is faced due to one particular Dell HDD device
- USB Parent & child devices not showing correctly in TCX USB UI
- **Limitation:** As per the current design - to show the parent child relations properly for the composite device, the UI/proxy expects the parent device to come first (as part of USB device arrival notification). Because Windows never guarantees this & it usually comes out-of-order, every interfaces are shown as individual devices & not shown in UI properly.
- Devices are not redirecting to session after user disconnects and reconnects the device multiple times
- **Limitation:** This is a backward compatibility issue
- Sometime fail to recognize usb device connected to TCX Client.
- **Limitation:** This issue is specific to timbers platform

- iPhone 6S is not visible in the iTunes after redirecting to the remote session in Windows server OS.
- **Limitation:** iTunes are supported only on desktop OS editions and they are not supported on Windows Server editions.
- When keyboard and mouse are connected through KVM switch, it does not work when device is woken up from sleep mode.
- **Workaround:** Connect the keyboard and the mouse directly to the client's USB ports.
- Windows 2008R2 server session hangs when devices are redirected to multiple session from different client terminals by different users.
- **Workaround:** Any drive mapping solution from any protocol cannot co-exist with TCX USB redirection, disable drive mapping from the native remote session protocol.
- TCX client UI Intermittently shows unknown entry when USB 2.0 removable storage devices are redirected to the remote server session.
- **Workaround:** Unplug and re-plug the device.
- Client side BSOD occurs with error name IRQL_NOT_LESS_OR_EQUAL when you disconnect and reconnect an USB device.
- **Workaround:** Check Quest vWorkspace USB service at the client machine, if it is running STOP the service or uninstall the AMD USB Filter driver from WES7_x86 client.
- USB devices does not get redirected to the remote Teradici session from Teradici PCoIP Client version i.e 1.10.0.
- **Workaround:** Teradici USB service needs to be uninstalled from Teradici USB Uninstaller in C:\Program Files(x86)\Teradici\PCoIP Client\bin\USB in case of x64 architecture and C:\Program Files\Teradici\PCoIP Client\bin\ in case of x86 architecture for the client to work with TCX USB redirection.
- User is not able to scan using twain drivers over ICA session.
- **Workaround:** Modify the registry for Citrix Twain hook by setting flag to 0 as below HKLM\Software\WOW6432node\citrix\CtxHook\Applnit_Dlls\TwainHook\Flags=0.
- iPhone 6S does not get redirected when connected to USB 2.0 port.
- **Workaround:** Connect the iPhone through active USB Hub.
- Duplicates entries displayed in Client USB UI when user tries to make device "Always work local" to "Always work Remote" or vice versa.
- **Workaround:** Enable the Quick Removal option at disk properties from device manager.
- Mass Storage device does not get redirected on launching remote session after logging off and logging in to the remote session.
- **Workaround:** Unplug the mass storage device and plug in the device again.
- Intermittently mstsc crash observed at the client D90D7_x86.
- **Workaround:** Download Update for Microsoft Lync 2013 (KB2956174) and install at the client.
- Win2k8r2 server session hangs when we connect multiple devices (USB 3.0 and 2.0) and devices not showing in explorer
- **Limitation:** By design, either Citrix Drive mapping or any drive mapping solution from any Protocol cannot co-exist with TCX WAN Disk (Disk redirection).
- Auto-redirect will not work for composite device which have HID + non-Vendor specific interface devices, for example, Ironkey secure mass storage device which as HID interface.
- Sometime TCX USB Agent crashes in server
- B: Need to restart the TCX USB service at the Server.

- Some of the USB Devices are redirected but does not work on server.
- **Workaround:** If the Server is Windows Terminal Server operating system then check device driver support in Windows Server catalog.
- Intermittently Server IP is not getting displayed on Client UI on windows client
- **Workaround:** Restart the USB service at the client.
- External HDD is not visible in explorer after disconnect and reconnect the device in Win2k12r2 server session over vWorkspace
Since the HDD is removed abruptly, the FS cache is not flushed. Hence on next device insertion, the scan-now pop-up comes (at the client). Sometimes until the device is scanned for errors, the volume arrival is not notified.
- Scanner Device is redirected but does not work on Terminal Server.
- **Workaround:** You must enable the **Desktop Experience** feature in Server Role. After the installation is completed, restart the server, and then redirect the scanner.
- Human Interface Devices (HID) that are connected are not redirected by default. In Windows client, you must right-click the HID Device Entry, and select the always Work as Remote option.
- USB Devices Not Displayed: USB devices that are connected prior to installation on the client are not displayed in the client GUI immediately after installation.
- **Workaround:** Reboot your client device or unplug and replug the USB devices.
- Client Proxy Service Intermittently Stops: Intermittent issue where client proxy service stops.
- **Workaround:** Restart the client machine or restart the USB Proxy service.
- Session Level Restriction (SLR) for printers and scanners will not work, if devices are not supported for a particular OS.
- **Workaround:** The supported vendor drivers must be installed for that particular device to work.
- Some applications do not detect the Terminal Services, and it will not list any TWAIN devices.
- **Workaround:** To make the application detect the session, use the following links:
- <http://support.citrix.com/article/CTX107411>
- <http://support.microsoft.com/default.aspx?scid=kb:en-us:186499>
- On XenApp server sessions, IrfanView is not able to enumerate the list of TWAIN and WIA interfaces. Workaround is to create the key “i_view32 ” under the following registry location in XenApp server:
- HKEY_LOCAL_MACHINE\SOFTWARE Wow6432Node\Microsoft\Windows NT\CurrentVersion\Terminal Server\Compatibility\Applications\i_view32.
- Create a REG_DWORD entry “Flags” and set a value of 0x408(1032).
- Mass storage interface in a Composite device is not WAN accelerated.
- Admin users will not be able to format the disk partition from disk management when SLR is enabled across the terminal server operating system
- Workaround: Disable the SLR for the mass storage device.
- Redirected CDROM drives will not be valid in Windows Server 2012 and Windows Server 2012 R2. This is an issue in cdrom.sys supplied by Microsoft. For Windows Server 2012 use this hotfix:
<https://support.microsoft.com/en-us/kb/2934106>

- WPD /Unknown device listed in USB bus enumerator in device manager
- **Workaround:** WPD (Windows Portable Device) class is enabled only in Windows Server 2008 R2, when **Desktop Experience feature** is installed. Because, disk SLR restricts WPD and its associated stack to load, and a yellow mark is seen
- USB mass storage devices does not get ejected, when eject option is selected.
- **Workaround:** Set the **Optimize for quick removal** option in removal policy.
- On redirecting USB printer, **Save As** dialog box is displayed in WE8S thin clients and the remote session is not valid. This is an issue in the printer driver
- **Workaround:** For more information see, <https://support.microsoft.com/en-us/kb/2567869> (only workaround is suggested - no hotfix/QFE available). Another workaround for this problem is to clear the **Printers** from the RDP client **Local Devices and resources** option
- In AD User Policy, **Deny USB redirection based on class** does not work for composite devices: This is a known limitation.
- **Workaround:** The way to stop a composite device is set class/sub-class/protocol in deny list to 0/0/0.
- Session Level Restriction is not working when we redirect the USB device for the very first time: Workaround: After the device driver installation, just replug the device.
- "Dell Portable SCSI disk device" Icon showing in the USER session "Devices and Printers" window when Dell HDD connected to the Admin session: Only scanners & printers are hidden from the control panel in Win2008R2. Other devices will be visible but the functionality will be disabled for other users.
- After plugging and unplugging startech.com HDD none of the usb devices will get redirected in WE8S thin clients: Startech is a UASP hard disk and uaspstor.sys driver is not installed in WE8S clients by default. Contact Dell technical support for this issue.
- During session login, the scanner devices connected to USB 3.0 port in WE8S clients are not redirected.
- **Workaround:** Connect the scanner device to USB 2.0 ports to use seamlessly or reconnect the scanner device on session-login, if connected to a USB 3.0 port
- Interface Level Redirection is disabled by default.
- **Workaround:** To enable ILR, go to HKLM\System\CurrentControlSet\Services\wusbload
Name: DisableILR
Type: REG_DWORD
Value: 0 (Enables ILR)
1 (Disables ILR – DEFAULT)
- This settings will take effect only after reboot. In thin-clients, kindly disable write-filter before making this change.
- Mass storage devices will not be redirected which has exceeded the 26 drives at the client.
- WAN accelerated mass storage devices will be visible in the explorer of thin clients.
- In TCX client UI of WE8S clients, few devices are shown as **Unknown device**.
- Devices connected prior to the TCX installation are not listed in TCX client UI until client is rebooted or replug the devices.
- Intermittently devices are not listed in TCX Client UI; restart the TCXUSB service on client side.
- RDP session fail to logoff while playing the Flash video and initiate the session logoff.
- **Workaround:** User needs to upgrade the TCX client build to TCX 7.2 version.
- Session disconnects while browsing flash video web page in IE/Firefox.

- **Workaround:** To use VMWare View PCoIP with TCX, user has to upgrade both client and server to TCX 7.2 version.
- USB devices and Flash video will not be listed in TCX Monitor even after redirection through TCX.
- **Workaround:** Ensure the Winmgmt service is running at the server side.

Smart Card fixed issues

The following are the smart card related fixed issues:

- Sometime TCX Client USB UI shows blank when user tries to redirect eToken device.
- **Limitation:** Issue is with timbers client
- Fail to install Gemalto/ActiveClient driver after session launch.
- **Limitation:** Timber's platform (specifically USB HC) specific issue.
- Smart Card feature cannot be used for Windows login when device is in "Remote mode" at the client. In this situation, it can be used only within the session. This is due to TCX architecture.
- In Terminal Server, Smart card devices are not shown in Device Manager when SLR is enabled. When you disable the SLR, device manager should be able to list the devices,
- Session level restriction is supported only from Win2k8R2 and above OS.
- Smart Card device redirection is supported only from Window 7 and later.
- With ThinOS Clients smartcard SignOn should not be used to sign on to ThinOS when smartcards are force redirected to the remote session.
- Session Level Restriction doesn't work on the applications which installs the virtual smart cards.
- User is not able to login using smart card after disconnect and logoff the session from ThinOS client.
- **Workaround:** Unplug and replug the smart card device.
- On disconnecting/logging off the existing view RDP session and connecting to a different view RDP session smartcard redirection does not work.
- **Workaround:** Close (exit) the view workspace and then relaunch the view workspace again for TCX USB redirection to work.
- ThinOS client freezes on locking the client, when the smartcard is already redirected.

Note

- If smartcard is used for local sign-on then do not use USB redirection.
- Use username and password for local sign-on and then force redirect the smartcard to the published server (sign in to Citrix broker also should be username and password)

Flash redirection/acceleration fixed issues

The following are the smart card related fixed issues:

- FRLauncher crashes whenever user tries to play flash video with client logged in User as user without admin privilege
- **Limitation:** this issue specific to teradici 1.10 client
- Flash video displays on top of the locked session window.

- "OpenGL ES error" appears, when FR videos are played in windows 8.1x64 XD7.14
- **Limitation:** Intel Driver specific issue
- Sometime FR video fail to play with TCXFR when user does logoff and logon the Teradici session.
- **Limitation:** Teradici client issue
- When web page is zoom out to the maximum, only half (some part) of the video is visible.
- FR video pops-up when you open the application.
- supported video becomes blank when we press the window key
- In dual monitor, when we drag browser from one display to other, observed white patch on the first browser window.
- When trying to play flash videos in 2012 R2, Firefox is getting hanged and unable to play any flash videos
- When apps (calc, paint, cmd prompt) moved on flash videos, observed video artifacts.
- When mouse over on the browser icon in taskbar while TCX FR supported videos are playing, videos which are playing is not visible.
- While playing flash videos, by disconnecting and reconnecting to the session, sometimes session gets hanged (inconsistent).
- When Zoom out and zoom in web page, observed video artifacts while playing flash videos.
- VMViewRDP session disconnects when user tries to play flash video.
- Flash video displays as black window when user play flash video using TCX FR.
- White patch observed in espn.com while playing flash video
- **Limitation:** This issue is specific to espn.com
- Flash video fails to play after disconnecting and reconnecting the session.
- **Workaround:** We need to refresh or relaunch the browser in order to play the flash video in IE and Firefox but for embedded flash application, we need to close and re-launch the application.
- We need to run below mentioned command in command prompt to install Shockwave Flash player in Windows 2016 Datacenter server & reboot the server.
- **Workaround:** Shockwave plugin shows you try to play flash file using adobe flash player
- Link for the same: https://blogs.technet.microsoft.com/bernhard_frank/2016/11/24/add-flash-player-to-server-2016/
- Background video fail to display in full screen mode, when user tries to play flash video in full mode when session window set to Window mode.
- **Workaround:** Disable hardware acceleration
- Flash video to play with FR, user need to close and relaunch VMware View 6.1 console window before reconnecting to the disconnected session.
- **Workaround:** This issue doesn't exist with VMware View 6.2 server.
- White window displays for 2 to 3 seconds when user switches video from full screen mode to window mode.
- Videos overlapping is observed when user play two videos in two different tab in Firefox browser.
- **Workaround:** switch back the tab again.
- Flash video overlaps on scripted menu/search bar of the website while scroll down the browser scroll or Fails to display flash file control option in embedded flash file (Play/Pause, Seek bar.)

- Some videos are not clipped properly in TCX Flash Redirection for Firefox and Launch Firefox browser.
Click on **Tools** option, select **Add-On** from pop up menu.
Select **Extensions, Thin Client extension 7.3.0.43** entry will be there. Click on the **Enable** button if it's disabled and restart the Firefox.
- TCX Flash Redirection will not clip webpage elements like images, java script menus that are over lapping on the flash windows.
- Pre ThinOS build 8.4 and Linux thin client does not support Flash Redirection.
- Single Flash Player Support: Only one flash player can be accelerated at any given point of time if there are more than one flash objects on the same page, then an internal algorithm selects one video to redirect via TCX Flash Acceleration. The algorithm is based upon the frame rate of the video. There are cases where the TCX Flash Acceleration switches between flash objects, and if that happens, then the acceleration will take a few seconds to restore to proper functioning
- TCX Flash Acceleration Black Patch Issue with Web Site www.adobe.com, www.animalplanet.com and www.discovery.com
- Flash acceleration is not supported for flash videos with frame rate of less than four.
- IE11 is a plugin free browser and it does not load any adobe plugins to play a flash content. It plays through HTML5.
For Example, when you play any video in www.youtube.com it will play though HTML5 video. If you wants to load Adobe Flash and experience Flash Redirection, you must have to add that particular website into a Tools→Compatibility View Settings
- On Citrix ICA sessions native protocol flash redirections will happen from IE browser. TCX flash Redirection / Acceleration will happen only for Firefox browser.
- If you see a black and white screen, and the video is not getting rendered while playing FR, then verify whether the client is able to connect to the outside network directly or not. If not connected, you must open the **TCX Client Suite Configuration** application from Windows Start Menu, click the **FR** tab, and then enter the appropriate proxy settings.
- FR is not supported from latest Google Chrome Web browser version 45 and later.
- In Windows x64 bit TCX server, you must clear the **Enable Protected Mode** option (**requires restarting Internet Explorer**) in Internet Explorer. Go to **settings** icon -> Internet options -> Security to view all listed icons. You can select a zone to view or change security settings.
- Flash video shifts up or shifts down when you resize the session or browser
- Flash video control bar is displayed behind the Windows taskbar, when you play flash video in full screen mode.
- **Workaround:** Click on the video area.
- Sometimes Unresponsive error message is displayed, when you play multiple videos in a web page using TCX FA
- **Workaround:** You must click the continue button in the displayed message.
- Fail to display session lock window after clicking on "Ctrl+Alt+Delete" option in Desktop Viewer window during flash video playback in full screen mode

TCX monitor related fixed issues

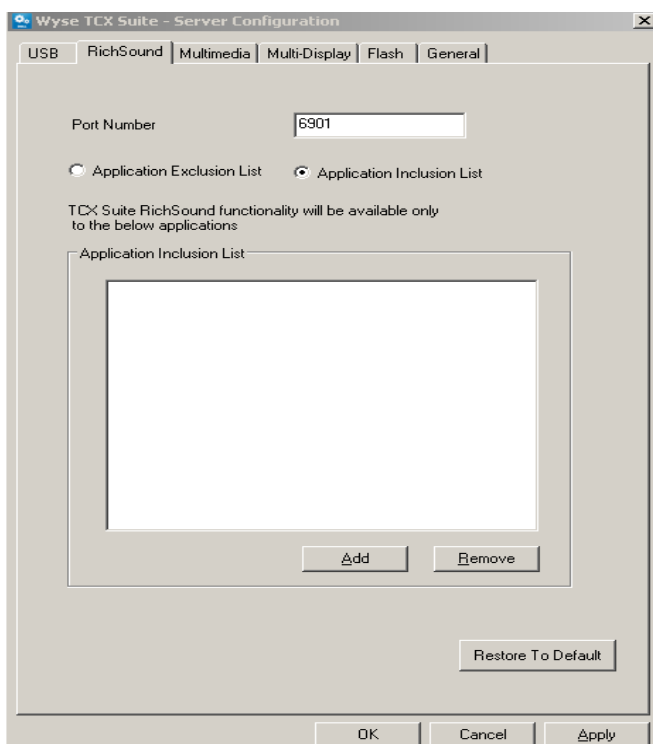
MAT Tool shows the stale entry.

Rich sound related fixed issues

- If only RS server is installed and endpoint doesn't have RS client component then audio will not be heard when flash redirection is happening from any of the supported browsers.
- **Workaround:** Uninstall the TCX RS from the server
- Unable to capture the audio in window sound recorder on server and it displays “**An audio recording device cannot be found**” message, and fails to detect input device connected. Workaround: In case of Windows client, disconnect Microsoft RDP connection, Go to Microsoft RDP **Option**, click on **Local Resource** tab, **Go to Remote Audio setting**.

In **Remote Audio Recording** section, Click the **record from this computer** and then click **OK**. Reconnect to Server. In case of ThinOS Client, Go to connection Properties -> Options, In RDP Audio Recording Section, and select **Record from local**, and click **OK**.

- RS does not work in Microsoft Windows 7 professional.
- **Workaround:** This is a limitation in Microsoft Windows 7 professional. For more information, go to, <http://support.microsoft.com/kb/2020918>
- RS UI is updated to have Exclusion list and Inclusion list with the following options:
 - Select **Exclusion List** and add an application into an Exclusion list. RS will not pitch into this application But RS will pitch in for rest of the applications running in the system. This is a default behavior.
 - **Inclusion List** is a reverse of **Exclusion List**. Select **Inclusion List** and add an application into an Inclusion list. RS will pitch into this application But RS will not pitch in for rest of the applications running in the system.



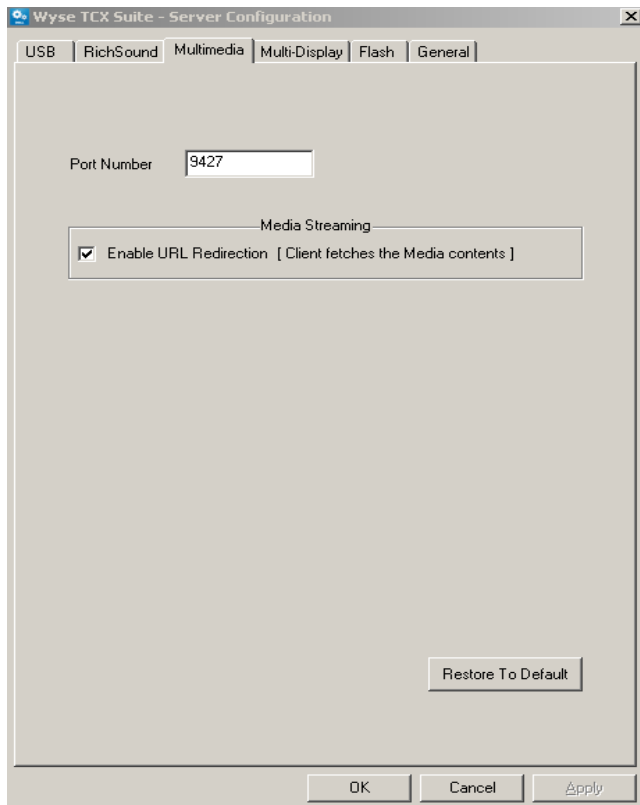
- After installation you must logoff and login for RS to work.

Multimedia redirection related fixed issues

- While playing any media files in Windows 8 as a server, by default it plays with the Zune Video Media Player which is a Metro Application. By default, it does not work with Windows Media Player (WMP).

Note: In this scenario, TCX MMR does not work.

- To play the media files in WMP with TCX MMR, you need to take one of the following approaches:
- **Approach 1:** Right click on the Media file, select the option Open With->Windows Media Player. It will launch the WMP and TCX MMR will pitch in. You can also select the option Open With->Choose default Program and then Windows media Player. It will set WMP as a default Media Player.
- **Approach 2:** You can set the Default program to WMP. Go to Control Panel\Programs\Default Programs\Set Default Programs Option and set the default program as Windows Media Player. After this setting WMP will become default media player.
- **Approach 3:** You can associate the file type under Control Panel\Programs\Default Programs\ (Associate a file type or protocol with a program) Set Associations. For example, you can select for file type .wmv and .as it should play with Windows Media Player.
- WYSE MMR is not compatible with Citrix HDX technology with respect to Media Foundation.
- For ThinOS TCX will not work in “Tunnel Mode” for VMware View.
- Multimedia Redirection is not supported on WES7 and WE8S 64-bit clients.
- Multimedia Redirection is not working
Workaround: Go to windows Task Manager on server. Select **Process** Tab and check only one instance of **TCXMedia.exe** is running. If there is multiple instance of TCXMedia.exe is running, then kill all instance of **TCXMedia.exe** Logoff and login the Server Session
- Codec must be installed on server for MMR to work for H.264 media files from ThinOS client and codec must also be installed on Windows clients
- Seek bar starts from beginning when we perform Pause\play operation while video playing with TCX MMR
- In TCX Server UI, by default **Enable URL Redirection** is selected. This selection enables the media player to redirect the URL to client and client will play the URL. If you unselect **Enable URL Redirection**, server will fetch the data and it will passed to client for decoding and rendering.



- When you check the URL Redirection in UI, and then modify the URL in a usual way for Multicast URL redirection over an IE.

Limitations of multicast

- MMR is not supported on WES 7 and WES 8 32/64-bit clients.
- Above UI changes are supported only for standalone WMP and it is not supported for Embedded WMP in IE.

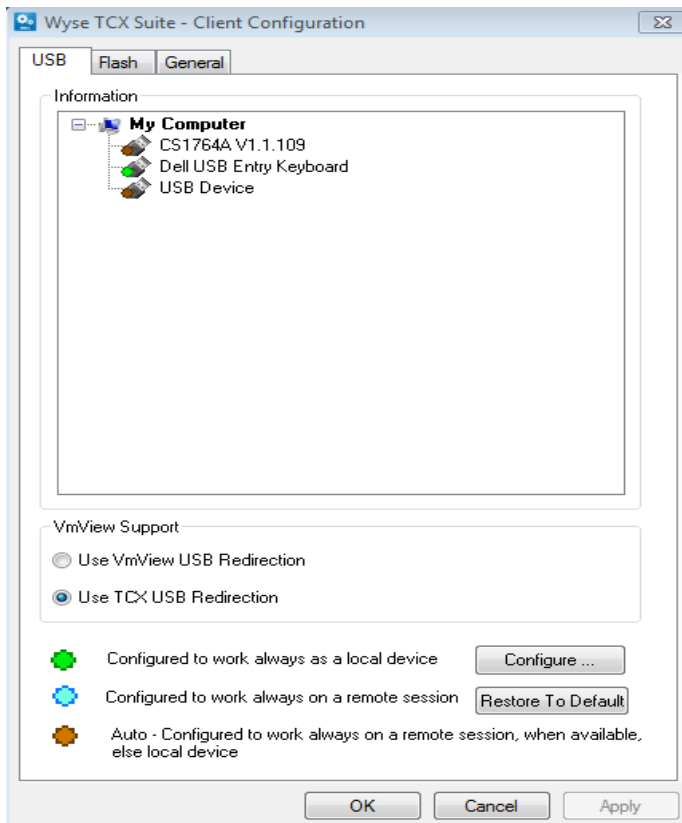
MDS related fixed issues

- Intermittently, the system stops responding during login when MhaHK64.dll error is displayed.
- Intermittently, the system stops responding after trying to move the taskbar from secondary monitor (vertical) to primary (Horizontal) when explorer.exe error is displayed.
- When you click Administrator or any icon on Start screen in Windows Server 2012, it flickers and you will not have any option to change.
- **Workaround:** Add Explorer.exe into the excluded application list with check box enabled.

UI related fixed issues

UI for USB to select View USB redirection and TCX USB Redirection at client.

UI entries for Keyboard will not appear in TCX client configuration until the device is rebooted after installation.



- View USB Redirection and TCX USB Redirection are mutual exclusive. By default, TCX USB Redirection is selected and it will work with RDP/ICA/VMVIEW RDP. If Admin is interested in VMVIEW USB Redirection, Admin has to select VMware View USB Redirection for VMVIEW RDP and PCoIP. Machine has to be rebooted for these changes to take effect.

Security Warnings

In Earlier releases, Security Pop up was appearing for all the devices in a terminal server environment. In the current release this is enhanced and it will popup only for the devices where Session Level Restriction is not supported or if you uncheck the SLR for a particular class of device in UI.

This will not work for composite devices and most of the scanners. That is, you will see the security popup if the device does not publish its class, subclass and protocol.

ThinOS client build details

The following condition need to be checked first to use TCX USB in ThinOS:

- To redirect USB devices through TCX USB Go to Global Connection Settings -> Select RDP tab -> Select USB Device Redirection Type TCX USB option (after fresh image "RDP USB" is selected).
- The above configuration can also be done using **.ini** parameters. For that include the following `SessionConfig=RDP USBRedirection=TCX`.
- There're 4 new **exclude** option introduced in 8.1. When checked, each option keeps devices of a USB Class from being redirected (so work locally).
- Under **USB device redirection** the following options are added:
 - Exclude disk devices – by default this option is Unchecked.

- Exclude printer devices - by default this option is Checked.
 - Exclude audio devices - by default this option is Checked.
 - Exclude video devices - by default this option is **Checked**.
- Local support for USB audio/video device is also now implemented, which means the device can be accessed in 2 ways – redirected device or local device (through a specific channel). So there is need for a visual option to configure how the devices work.
 - Take USB video for example. If the ‘exclude video device’ is checked, the device work as a local webcam and can be accessed through “Citrix Theora channel”. If the ‘exclude video device’ option is unchecked, the device can be used through HDX/RDP/TCX USB redirection (work as a server side webcam).
 - Also note that a composite device contain both audio and video part are NOT considered as an audio device.
- For USB audio, there're 3 routes for the audio stream in a RDP session.
 - The sound data go through RDP sound channel to RDP client and then go to the client local audio device.
 - The sound data go through Multi Media Redirection (MMR/RS/Rave/TSMM, etc.) to MMR client and then go to the client local audio device.
 - The sound data go to one of the sound peripherals on server. (when enable RDP option ‘play at remote computer’)
 - #1 & #2 are using client local audio device, while #3 is using server audio device. The analog sound is ALWAYS a local audio device. The USB audio device is a server audio device when redirected, and is a local audio device when not redirected.
 - Base on above, when using #1/#2 scenario with USB handset, the ‘exclude audio device’ option must be checked.

Required Settings for TCX USB Virtualizer Use with Windows Clients

- **TCX USB Client setup on Windows Clients**

In TCX Client the connected USB devices can either be a **Pre-configured device** or **Auto Configured device**. Administrator of the client can modify the configuration of the USB devices that are attached physically to the client by launching the TCX Client UI > USB tab.

Pre-configured devices: A USB device can be pre-configured to work always as local device in client.

- a) Plugged in USB device can be configured to work always as local device by launching the TCX Client UI > USB tab and right clicking on the USB device that has to be pre-configured and selecting **Always Work as a local Device**
- b) Once a device is preconfigured it will be in pre-configured state until its configuration is modified.
- c) A USB device can be pre-configured to work always on remote device.
 - 1) Plugged in USB device can be configured to work always on remote session by launching the TCX Client UI > USB tab and right clicking on the USB device that has to be pre-configured and selecting the option **Always Work on the remote session**.
 - 2) Once a device is preconfigured it will be in pre-configured state until its configuration is modified.

Note: HID class of USB devices will be pre-configured to work as local device by default. If administrator wants him/her can force redirect the HID class of USB device by marking as “Always Work on the remote session”.

- **Auto Configured Devices.**
 - USB devices that are not pre-configured will be Auto Configured device.

- Auto configured device will be redirected by default to the first available remote session.
 - In two sessions scenario when the first available session is disconnected then the device automatically redirected to the second session.
 - AUTO Configured devices and Devices that are marked as **Always Work on the remote session** can drag and drop from one session to another session.
- **Sever Setup.**
 - 1) TCX USB SLR is applicable only when the USB device is redirected using TCX client.
 - 2) USB Session Restriction (SLR) will apply restriction on TCX redirected USB devices on server session for the following USB class of devices.
 - DiskDrive like USB Mass storage devices
 - HIDClass of Devices like WACOM signature pad
 - Image class of Devices like Scanner and so on.
 - Ports like USB to COM/Serial ports
 - Printer class of device
 - SmartCardReader like USB SmartCard Readers
 - 3) WPD like Windows portable Devices (Mobiles phones, Digital Cameras and portable media players).
 - 4) Launch Server Configuration UI from the start menu and select USB tab.
 - Port Number: The TCP port number on which the TCX USB client will connect to the TCX USB server. Default value is 17185. Administrator of the system can change this value.
 - Show Security Warning Check Box: When a USB device is redirected to Windows Server Operating systems a pop up message will appear to inform the USB device is redirected to the current session user. This message can be avoided if the administrator of the system uncheck the check box.
 - Allow these Devices: Will list the devices that are allowed in the server for USB redirection. Administrator can configure to allow a particular device or deny particular device for USB redirection.
 - Configuring Session Level Restriction
 - d) Click the Session level Restriction button at the bottom of TCX Server UI→USB Tab.
 - e) It will launch another window that lists the USB device class that is restricted to a session.
 - f) Default supported device class are
 - DiskDrive
 - HIDClass
 - Image
 - Ports
 - Printer
 - SmartCardReader
 - WPD
 - g) If the above mentioned class of devices are not selected, the device will not be accessible from all the sessions in the system.
 - h) After making any changes in the Session level restriction UI, all the sessions should be logged off for the changes to take effect.

Build Details

This section contains the build related information for TCX v7.3.

Server Build: 32-bit Installer (Evaluation Build)

Build File Name	Wyse TCX Server Suite_eval32.msi
Build Version	7.3.0.43
Size(bytes)	116604416 bytes

The Server .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Server/>

Server Build: 64 bit Installer (Evaluation Build)

Build File Name	Wyse TCX Server Suite_eval64.msi
Build Version	7.3.0.43
Size(Bytes)	117008896 bytes

The Server .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Server/>

Server Build: 32-bit Installer (Production Build)

Build File Name	Wyse TCX Server Suite_prod32.msi
Build Version	7.3.0.43
Size(Bytes)	116604416 bytes

The Server .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Server/>

Server Build: 64-bit Installer (Production Build)

Build File Name	Wyse TCX Server Suite_prod64.msi
Build Version	7.3.0.43
Size(Bytes)	117008896 bytes

The Server .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Server/>

Client Build: 32-bit Client Installer (.msi):

Build File Name	Wyse TCX Client Suite.msi
Build Version	7.3.0.43
Size(Bytes)	133037056 bytes

The 32-bit Client .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Client/>

Client Build: 64-bit Client Installer (.msi):

Build File Name	Wyse TCX Client Suite_64.msi
Build Version	7.3.0.43
Size(Bytes)	175593984 bytes

The 64-bit Client .msi is available at:

<ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Client/>

Note: **Wyse_TCX_Client_Suite.msi** is a 64-bit client installer that installs 32-bit TCX v7.3 client binaries on a 64-bit operating system. In order to run 32-bit remote sessions (ICA and VMware View) on a 64-bit client operating system, 32-bit client installer should be used.

Configuration of the COM Port Assignment

The Serial (COM) port devices are exposed to the user application by Port-Name, for example, COM1. The port-name is assigned exclusively to a serial port device and it cannot be used by other serial port devices (even in absence of the owning serial port device) that is, no two serial port devices shall request for the same preferred port number. It allows you to add the information of COM Port devices. You must enter the following details.

Name, Port Number, Vendor ID, Product ID

When the SLR for Serial (COM) port devices are enabled, the TCX USB tries to assign the device's preferred port-name, if available.

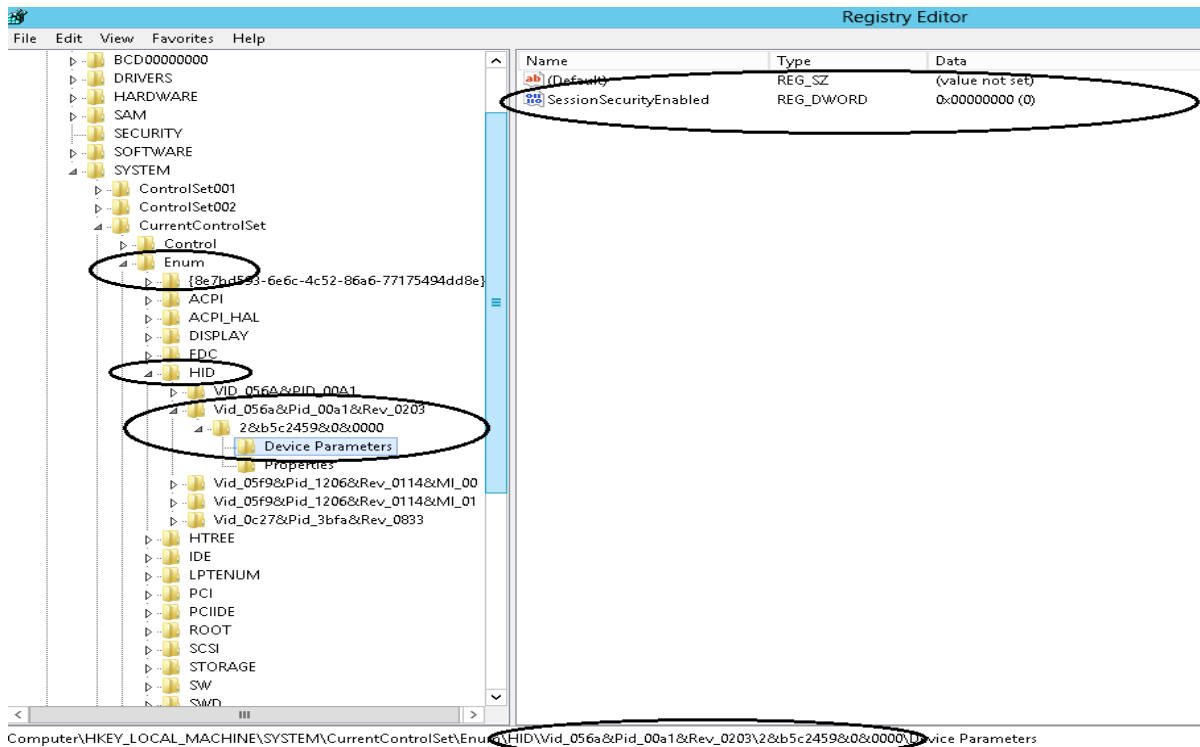
Required Settings for WACOM signature pad the inputs are not captured in Windows 8 & Windows 8.1.

For HID devices (specifically devices like signature pads) to operate properly in RDP environment, the following key should be created.

SessionSecurityEnabled REG_DWORD Value: 0

It should be created under

"HKLM\SYSTEM\CurrentControlSet\Enum\<HID_Device_instance_path>\Device Parameters".



The HID device instance path can be found using the device manager.

Click Device Manager > Right click on WACOM device (It will be shown as HID-Complaint device)> Property >Details > Device Instance Path in drop down list box. The device instance path MUST start from "HID\....". The sample WACOM device instance path is, HID\Vid_056a&Pid_00a1&Rev_0203\2&b5c2459&0&0000.

Notes:

- 1) After making changes in the registry, unplug all the WACOM devices and re-plug. If it doesn't help reboot the machine.
- 2) The device instance parameter is unique for every device. i.e., if there are 2 WACOM devices connected/redirected to the server, then there will be 2 unique entries in the registry. And in both the places this SessionSecurityEnabled key must be set.
- 3) If you do-not see any entries in simple.exe (in Win8 & 8.1), then the only reason could be absence of this entry.
- 4) This is applicable only to Windows 8 & Windows 8.1. For other Windows OS versions, TCX Server Suite will take care of creating this registry key.

Prerequisites for Smart Card Redirection

Smartcard reader driver and smartcard driver should be installed on the Target Remote Server for smartcard redirection to work. From windows client, for single sign-on to work, the client machine should have drivers installed for both the smartcard reader as well as for the smartcard.

- Smart Card tested Protocols:
- Microsoft RDP.
- Citrix ICA (XenApp and XenDesktop).
- VMware View RDP.

Note: TCX smart Card Redirection does not support over Teradici PCoIP and VMware View PCoIP since it has native protocol support.

This feature cannot be used for Windows login when device is in “Remote mode” at the client. In this situation, it can be used only within the session. This is due to TCX design limitations.

In Terminal Server, Smart card devices are not shown in Device Manager when SLR is enabled. When you disable the SLR, device manager should be able to list the devices.

SLR is supported only from Win2k8R2 and further.

Smartcard redirection is supported only from Window 7 and above

Session level restriction doesn't work on the applications which installs the virtual smart cards.

Software Information

The TCX Server Suite will include the following components:

- Multimedia (Server build version 7.3.0.43)
- Multi-Display (Server build version 7.3.0.43)
- Flash (Server build version 7.3.0.43)
- Rich Sound (Server build version 7.3.0.43)
- USB (Server build version 7.3.0.43)

The TCX Client Suite will include the following components:

- Multimedia (Client build version 7.3.0.43)
- Multi-Display (Client build version 7.3.0.43)
- Flash (Client build version 7.3.0.43)
- Rich Sound (Client build version 7.3.0.43)
- USB (Client build version 7.3.0.43)

RSP package information

This section provides information on the **WDM.rsp** packages.

WDM.rsp Packages for Client installer are available at the following location:

[ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Client/WDM%20RSP Package/](ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Client/WDM%20RSP%20Package/)

Utility for Silent Installation (Client and Server Suite) is available at the following location:

[ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Utility%20for%20Silent%20Installation%20\(Client%20&%20Server%20Suite\)/](ftp://sjc-vw-prdimg01.wyse.com/binVDX/TCX%20Suite/TCX%20Suite%207.3%20Build%207.3.0.43/Utility%20for%20Silent%20Installation%20(Client%20&%20Server%20Suite)/)

Licensing

TCX Suite v7.3 contains a single License key for Desktop servers and Terminal Servers/Remote Desktop servers. This single license key is valid for both x86 and x64 bit.

Individual TCX component need a single License Key. The check for the license key is done on the “server”.

Note: Licensing mechanism is not removed from the ThinOS Client. This supports previous versions of the TCX server component, where a client side license is required. To work with TCX suite v7.3, you do not need a client side license.

For Windows Embedded Standard 7, Windows Embedded Standard 8 and Windows 10 IoT Enterprise Client or for FAT client, the license key is checked on the “server”.

