Check your DVI cable, it may not be dual-link capable. Dual-link cable ends have all of the pins populated whereas single-link cables are missing 6 pins.

These pins carry the extra information to allow up to 2560 x 1600 resolution. Some monitors will display 2560x1600 but without the proper cable the image will look terrible because some of the data is missing.

DVI connector types.

- DVI-I Integrated (Digital and Analogue)
- DVI-D Digital only
- DVI-A Analogue only



There are scenarios where the second display will be blank when using a PCoIP Zero Client to connect to VMware View 5.0.

- Scenario 1: Using CTRL+ALT+Del and entering logon credentials causes second Display to blank or a resolution change
- Scenario 2: Second Display Blank when Waking from Power Savings Mode
- Scenario 3: Second display blank after VM Reboot

Scenario 1:

Impacts: Windows 7 VMs (dual monitors) with VMware View 5.0, 5.0.1 and 5.1 using both, zero clients and view clients

Setup:

- Zero Client Firmware 3.5.1
- View 5.1.0 Build
- ESXi 5.0 HW version 8
- Dual monitors
 - After entering your logon credentials to regain the Windows desktop, the 2nd screen does not reappear. The primary screen may loose its zero client configured resolution.
 - When entering CTRL ALT DEL, the Win login screen appears and the 2nd screen goes black (as expected if they have dim set) the Windows logon/lock screen, the 2nd screen does not reappear. The primary screen may loose its zero client configured resolution.
 - After entering CTRL ALT DEL to lock the VM desktop, immediately press Cancel (after the Windows login screen appears), wait 10 seconds and the primary monitor indicates the screen resolution is incorrect and the secondary monitor is lost (occurs 20% of the time).
 - When entering CTRL-ALT-DEL, after a few seconds the Windows login/lock screen appears and the secondary monitor is lost. The primary screen may loose its zero client

configured resolution.

• After entering credentials or cancelling out of the User Account Control (UAC) window, the 2nd screen does not reappear. The primary screen may loose its zero client configured resolution.

Customer example:

They will lock their Windows 7 VM, and go to lunch. Apon return the computer still appears to have 2 screens connected, and still shows the computer as locked (no screen saver set, the registry key has been checked and is not present).

When the user unlocks the VM, both screens will go blank and then only one will reappear at a different resolution to that which is set on the zero client.

This does not happen every time, but does occur multiple times per day.

Cause:

This can occur whenever there is a resolution change and the SVGADevTap driver can not recover.

How to Identify

From the pcoip server logs, you will first see a 'flip frame buffer' that the SVGADevTap driver resets, but in the end it resets getting only one monitor.

LVL:0 RC: 0 IMG_FRONTEND :flip_frame_buffer: Resolution change for display 0 [0, 1004] LVL:0 RC: 0 IMG_FRONTEND :close_displays: reset SVGADevTap. LVL:1 RC: 0 IMG_FRONTEND :reconfigure displays: 1 display(s) reported!

Resolution:

This is a known issue and will be resolved in a future version of View.

http://kb.vmware.com/selfservice/microsites/search.do? cmd=displayKC&docType=kc&externalId=2032657&sliceId=1&docTypeID=DT_KB_1_1&dialogID =407940307&stateId=1%200%20407948226

Note: For more information, please contact VMware Support.

Workaround:

Disconnecting the View PCoIP session and reconnecting temporarily resolves this issue.

Note: For more information, please contact VMware Support.

Scenario 2:

Second Display Blank when Waking from Power Savings Mode

- VMware View 5.0 virtual desktop
- Display power savings mode enabled on the user VM
- PCoIP Zero Client with dual display

The user VM goes into display power save mode during a session. When the user wakes the system (moving the mouse or keyboard key press) there will be a long delay up to 30 seconds and then only the primary monitor reappears.

How to identify in the pcoip_server logs

Determining the VM was in power save mode:

09/22/2011, 14:03:24.359> LVL:2 RC: 0 SERVER :WindowProc: Ignoring monitor power OFF notification!

How do I find the PCoIP event log files? (15134-4)

The VM will need to be logged off or rebooted by one of the following options:

- Access the VM through the vSphere Console and log off or reboot the VM, or
- Access the VM through RDP and log off or reboot the VM
- On the PCoIP Zero Client On-Screen-Display, click the Reset VM
 - On the PCoIP zero client OSD, click connect
 - Enter the user credentials (username, password, domain)
- From the desktop selection dialog click on the user's VM and click the Reset VM button (not the Connect button)

Next, disable display power save mode for these VMs. If you are not able to disable power save mode, then please open a ticket with Teradici and provide the pcoip_server logs.

Resolution:

This issue is fixed in View 5.0.1 or newer.

Scenario 3:

Second display blanks after a VM reboot. After a VM reboot only the primary display is visible, the secondary display is blank.

Resolution:

To resolve this issue ensure that the Windows 7 System Configuration settings for No GUI boot and Base Video are deselected in the path:

Control panel->System and Security->Administrative Tools->System Configuration->Boot Tab

For more details see: <u>http://kb.vmware.com/selfservice/microsites/search.do?</u> <u>cmd=displayKC&docType=kc&externalId=1027899&sliceId=1&docTypeID=DT_KB_1_1&dialo</u> <u>gID=234489164&stateId=0 0 234491564</u>

Workaround:

A temporary workaround is to disconnect and reconnect the session after a VM reboot.

Dual Link monitors need to be correctly connected with properly constructed cables to ensure the best experience possible. Tera2 devices support DisplayPort or Dual Link DVI monitors with resolutions up to 2560 x 1600. Each zero client DVI connector supplies DVI *single link data rates* capable of resolutions up to 1920x1200. In order to obtain resolutions of 2560x1600, two single link data channels are required to be teamed. PCoIP zero clients accomodate DVI labeled connectors 1-3 and 2-4 to be teamed. This article describes achieving 2560x1600 resolutions on DVI (quad, dual, mixed) and DisplayPort zero client environments.

Notes:

- Resolutions of 2560x1600 *cannot* be achieved teaming any other combination of zero client DVI connectors other than 1-3 and 2-4.
- Dual link DVI cables may have an identifying number of 1 and 2 on the connectors at the split end of the cable. The descriptions below refer to the numbering of the cable ends in the diagram

(PORT 1-4).

• DisplayPort connectors are capable of supplying resolutions of 2560x1600 on each individual connector.

Connecting a Tera2140 to Dual Link DVI monitors supporting resolutions of 2560 x 1600.

For Monitor 1 (team zero client ports 1 and 3):

- Plug the Dual Link DVI cable connector labeled PORT 1 into DVI port 1 on the zero client.
- Plug the Dual Link DVI cable connector labeled PORT 3 into DVI port 3 on the zero client.
- Plug the single connector end of the Dual Link DVI cable into the monitor's dual link DVI port. (the primary connector if more than one identical connector is available)

For Monitor 2 (team zero client ports 2 and 4):

- Plug the Dual Link DVI cable connector labeled PORT 2 into DVI port 2 on the zero client.
- Plug the Dual Link DVI cable connector labeled PORT 4 into DVI port 4 on the zero client.
- Plug the single connector end of the Dual Link DVI cable into the monitor's dual link DVI port. (the primary connector if more than one identical connector is available)

Diagram showing the Tera2140 connections for 2 monitors at a resolution of 2560 x 1600



Connecting a Tera2321 to Dual Link DVI monitors supporting resolutions of 2560 x 1600

Note: Tera2 zero clients with only 2 monitor ports (not shown) will be labelled 1 and 2, distinguishing which port is the primary port.

- Plug the DVI cable connector labeled PORT 1 into DVI port 1 on the zero client.
- Plug the DVI cable connector labeled PORT 3 into DVI port 2 on the zero client.
- Plug the single connector end of the Dual Link DVI cable into the monitor's primary dual link DVI port. (the primary connector if more than one identical connector is available)