

## Application Note

081

### Bridging USB devices on a PCoIP zero client

This application note describes how to bridge USB human interface devices (also called *HIDs* or *HID devices*) to the PCoIP host. This is necessary if a USB device currently connected to a zero client requires a specific driver in order to make all of its features available to the end-user. For example, a multimedia keyboard may need a specific driver to make the multimedia keys operational.

**Note:** The drivers required by these USB human interface devices are installed on the remote workstations hosting the PCoIP host card or on the virtual desktops in a VMware View environment.

### Background

By default, when you connect a USB human interface device to a zero client, the zero client *locally terminates* the device when it (*the zero client*) connects to a:

- VMware View virtual desktop, or
- PCoIP host card on a remote workstation where the Host Software is installed *and* the **Local Cursor and Keyboard** feature has been enabled.

However, some USB devices require the use of specific drivers to make all their features operational. With these drivers installed on the virtual desktop or remote workstation, the zero client must *bridge* the USB device to the remote PCoIP host instead of locally terminating the device. Bridged devices use the drivers loaded on the associated workstation or virtual desktop. You can manually bridge up to 10 devices.

#### Notes

- Bridging a USB device is only effective while a PCoIP session is active.
- Bridging is only supported in PCoIP firmware 3.3.0 or later.
- Bridging a device to a virtual desktop (soft host) is only in VMware View 4.6 or later.
- Further details about bridged devices are in the Teradici *PCoIP Zero Client and Host Administrator Guide*, available to registered users from the Teradici Support Center.

## How to bridge a USB device

You set up device bridging in the zero client's web interface. Here, the **Bridged Devices** settings affect PCoIP sessions between the zero client and a VMware View virtual desktop or PCoIP host card. You can bridge up to 10 individual USB devices.

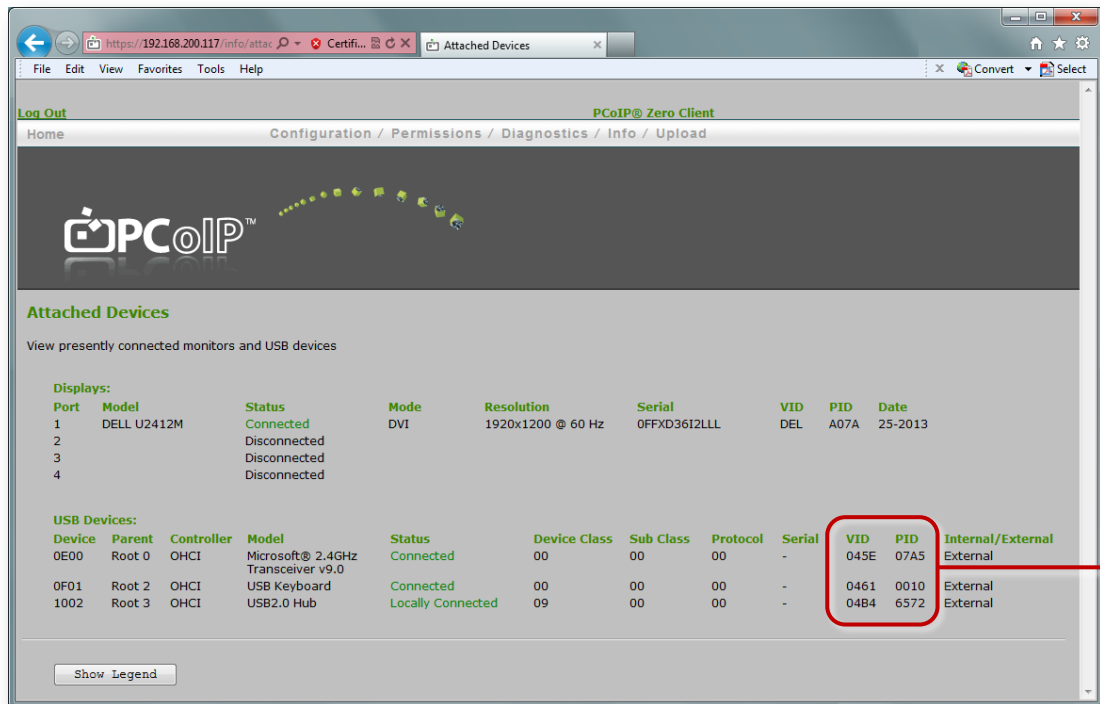
1. Log on to the Teradici *PCoIP® Zero Client* web interface. (To access the web interface, browse to the zero client's IP address and enter the password. The default password is **ahkdante**.)

**Note:** This web interface – also called the Administrative Web Interface (AWI) – enables you to remotely configure individual PCoIP zero clients and hosts using a web browser.

2. From the Home page, choose Info > Attached Devices.

This page lists the USB devices currently attached to the zero client. Devices may be listed as:

- **Locally Connected:** These devices are not bridged. They are locally terminated in a PCoIP session.
- **Connected:** These devices are bridged in a PCoIP session. (Note that non-HID USB devices are bridged to the host automatically.)



The screenshot shows the 'Attached Devices' page in the PCoIP Zero Client AWI. The page displays a table of connected devices. A red box highlights the VID and PID values for a USB device, with a red arrow pointing to the number '1'.

Displays:									
Port	Model	Status	Mode	Resolution	Serial	VID	PID	Date	
1	DELL U2412M	Connected	DVI	1920x1200 @ 60 Hz	0FFXD3612LLL	DEL	A07A	25-2013	
2		Disconnected							
3		Disconnected							
4		Disconnected							

USB Devices:											
Device	Parent	Controller	Model	Status	Device Class	Sub Class	Protocol	Serial	VID	PID	Internal/External
0E00	Root 0	OHCI	Microsoft® 2.4GHz Transceiver v9.0	Connected	00	00	00	-	045E	07A5	External
0F01	Root 2	OHCI	USB Keyboard	Connected	00	00	00	-	0461	0010	External
1002	Root 3	OHCI	USB2.0 Hub	Locally Connected	09	00	00	-	04B4	6572	External

*Zero Client AWI: Attached Devices page. 1 Device VID and PID values.*

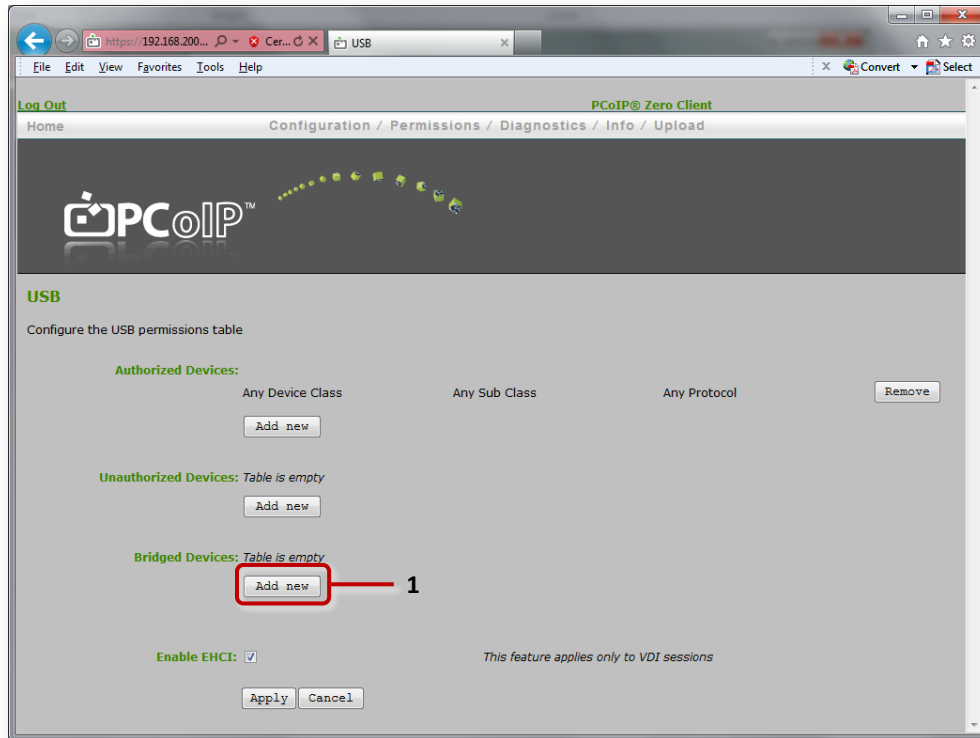
3. Find the device you want to bridge to the host. The current status for this device will be 'Locally Connected'.

Write down the device's vendor ID (VID) and product ID (PID). These IDs are hexadecimal codes. You must enter these IDs in the USB page in [step 6](#).

- Return to the Home page and choose Permissions > USB.

The USB page allows you to specify how the zero client handles attached USB devices. For example, you can permit or block specific devices. In particular, you can force the zero client to bridge specific devices so that they use the drivers on the virtual desktop or remote workstation.

- On the USB page, go to the **Bridged Devices** section and click **Add new**.



Zero Client AWI: USB page. 1 Bridged Devices section, Add new button.

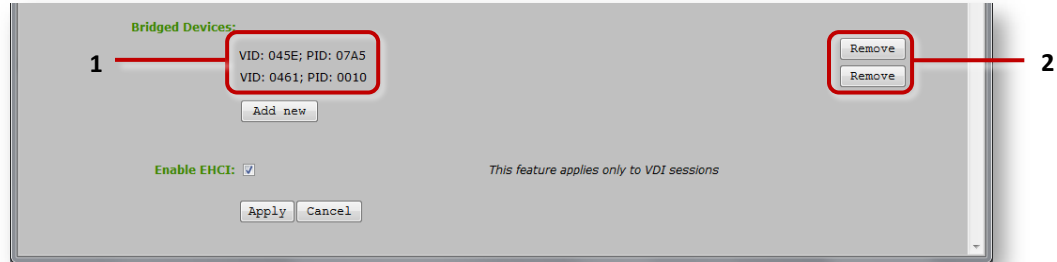
- Two new Bridged Devices fields now display: **Vendor ID** and **Product ID**. Enter the VID and PID codes that you noted in [step 3](#) into these fields. Then click Add.



Zero Client AWI: USB page, expanded Bridged Devices section. 1 Vendor ID, Product ID and Add button.

- The newly bridged device is now listed in the Bridged Devices section, identified by its vendor ID and product ID.

(To stop bridging a USB device, click the associated Remove button to remove it from this list.)



*Zero Client AWI: USB page, Bridged Devices section. 1 Vendor ID and Product ID. 2 Remove buttons.*

- Click Apply to bridge the specified device.