

#### sysfs-bus-pci..txt

What: /sys/bus/pci/drivers/.../bind  
Date: December 2003  
Contact: linux-pci@vger.kernel.org  
Description:

Writing a device location to this file will cause the driver to attempt to bind to the device found at this location. This is useful for overriding default bindings. The format for the location is: DDDD:BB:DD.F. That is Domain:Bus:Device.Function and is the same as found in /sys/bus/pci/devices/. For example:  
# echo 0000:00:19.0 > /sys/bus/pci/drivers/foo/bind  
(Note: kernels before 2.6.28 may require echo -n).

What: /sys/bus/pci/drivers/.../unbind  
Date: December 2003  
Contact: linux-pci@vger.kernel.org  
Description:

Writing a device location to this file will cause the driver to attempt to unbind from the device found at this location. This may be useful when overriding default bindings. The format for the location is: DDDD:BB:DD.F. That is Domain:Bus:Device.Function and is the same as found in /sys/bus/pci/devices/. For example:  
# echo 0000:00:19.0 > /sys/bus/pci/drivers/foo/unbind  
(Note: kernels before 2.6.28 may require echo -n).

What: /sys/bus/pci/drivers/.../new\_id  
Date: December 2003  
Contact: linux-pci@vger.kernel.org  
Description:

Writing a device ID to this file will attempt to dynamically add a new device ID to a PCI device driver. This may allow the driver to support more hardware than was included in the driver's static device ID support table at compile time. The format for the device ID is: VVVV DDDD SVVV SDDD CCCC MMMM PPPP. That is Vendor ID, Device ID, Subsystem Vendor ID, Subsystem Device ID, Class, Class Mask, and Private Driver Data. The Vendor ID and Device ID fields are required, the rest are optional. Upon successfully adding an ID, the driver will probe for the device and attempt to bind to it. For example:  
# echo "8086 10f5" > /sys/bus/pci/drivers/foo/new\_id

What: /sys/bus/pci/drivers/.../remove\_id  
Date: February 2009  
Contact: Chris Wright <chrisw@sous-sol.org>  
Description:

Writing a device ID to this file will remove an ID that was dynamically added via the new\_id sysfs entry. The format for the device ID is: VVVV DDDD SVVV SDDD CCCC MMMM. That is Vendor ID, Device ID, Subsystem Vendor ID, Subsystem Device ID, Class, and Class Mask. The Vendor ID and Device ID fields are required, the rest are optional. After successfully removing an ID, the driver will no longer support the device. This is useful to ensure auto probing won't

#### sysfs-bus-pci..txt

match the driver to the device. For example:  
# echo "8086 10f5" > /sys/bus/pci/drivers/foo/remove\_id

What: /sys/bus/pci/rescan  
Date: January 2009  
Contact: Linux PCI developers <linux-pci@vger.kernel.org>  
Description: Writing a non-zero value to this attribute will force a rescan of all PCI buses in the system, and re-discover previously removed devices. Depends on CONFIG\_HOTPLUG.

What: /sys/bus/pci/devices/.../remove  
Date: January 2009  
Contact: Linux PCI developers <linux-pci@vger.kernel.org>  
Description: Writing a non-zero value to this attribute will hot-remove the PCI device and any of its children. Depends on CONFIG\_HOTPLUG.

What: /sys/bus/pci/devices/.../rescan  
Date: January 2009  
Contact: Linux PCI developers <linux-pci@vger.kernel.org>  
Description: Writing a non-zero value to this attribute will force a rescan of the device's parent bus and all child buses, and re-discover devices removed earlier from this part of the device tree. Depends on CONFIG\_HOTPLUG.

What: /sys/bus/pci/devices/.../reset  
Date: July 2009  
Contact: Michael S. Tsirkin <mst@redhat.com>  
Description: Some devices allow an individual function to be reset without affecting other functions in the same device. For devices that have this support, a file named reset will be present in sysfs. Writing 1 to this file will perform reset.

What: /sys/bus/pci/devices/.../vpd  
Date: February 2008  
Contact: Ben Hutchings <bhutchings@solarflare.com>  
Description: A file named vpd in a device directory will be a binary file containing the Vital Product Data for the device. It should follow the VPD format defined in PCI Specification 2.1 or 2.2, but users should consider that some devices may have malformed data. If the underlying VPD has a writable section then the corresponding section of this file will be writable.

What: /sys/bus/pci/devices/.../virtfnN  
Date: March 2009  
Contact: Yu Zhao <yu.zhao@intel.com>  
Description:

#### sysfs-bus-pci..txt

This symbolic link appears when hardware supports the SR-IOV capability and the Physical Function driver has enabled it. The symbolic link points to the PCI device sysfs entry of the Virtual Function whose index is N (0...MaxVFs-1).

What: /sys/bus/pci/devices/.../dep\_link  
Date: March 2009  
Contact: Yu Zhao <yu.zhao@intel.com>  
Description:

This symbolic link appears when hardware supports the SR-IOV capability and the Physical Function driver has enabled it, and this device has vendor specific dependencies with others. The symbolic link points to the PCI device sysfs entry of Physical Function this device depends on.

What: /sys/bus/pci/devices/.../physfn  
Date: March 2009  
Contact: Yu Zhao <yu.zhao@intel.com>  
Description:

This symbolic link appears when a device is a Virtual Function. The symbolic link points to the PCI device sysfs entry of the Physical Function this device associates with.

What: /sys/bus/pci/slots/.../module  
Date: June 2009  
Contact: linux-pci@vger.kernel.org  
Description:

This symbolic link points to the PCI hotplug controller driver module that manages the hotplug slot.