How to Dynamically Add and Remove SCSI Devices on Linux (文档 ID 603868.1)

**3.1 System reboot**

Adding and removing devices whilst a system is shutdown is considered the simplest and safest method. Clean filesystem unmount and ordered shutdown of all of components/layers/drivers involved in the I/O path avoids the potential risks associated with online (dynamic) device removal. On boot, ordered driver load allows newly added/removed devices to be correctly discovered and identified. This method, obviously, necessitates total system unavailability.

**3.2 Reload hostadapter driver**

The installation (loading) of common host bus adapter (HBA) driver modules initiates a scan (or rescan) of the associated device, resulting in the (re)discovery of any newly added/removed devices. Whilst performed with the system online, to be able to reload the hostadapter module, it must first be unloaded. This, therefore, means that any (all) filesystem, volume or array on devices associated with the driver must first be offlined (in the case of arrays or logical volumes) and/or unmounted. In fact, depending on the complexity of the I/O stack involved, this method is likely to also require the shutdown of related storage services and the unloading of other related or dependent modules e.g. multipathing.

**3.4 sysfs /sys/class/scsi\_host/ (2.6 kernel)**

The 2.6 kernel provides the /sys (sysfs) interface for interacting and managing system devices. In the case of SCSI devices, the /sys/class/scsi\_host/ interface can be used to dynamically rescan a hostadapter, as well as add or remove specific devices.  
  
 To rescan a hostadapter:

# echo '- - -' > /sys/class/scsi\_host/host<H>/scan

where <H> refers to the hostadapter or instance of hostadapter where multiple adapters of the same type exist on the system

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之前在证劵遇到过这样一个问题，要向rac中添加新的ASM磁盘，存储工程师划分好新的LUN，并指向到rac两节点服务器，一般理解linux需要重启服务器才能认到新加磁盘，而不是像AIX小机那样插盘即认。

存储工程师不然，

存储工程师执行如下操作： host0 也可能是host1  根据实际情况定

echo "- - -" > /sys/class/scsi\_host/host0/scan

其中“- - -”说明：三个短横线之间均有空格，即："-空格-空格-"

就可以看到新加的LUN了。