

# Before Configuring a Red Hat Cluster

This chapter describes tasks to perform and considerations to make before installing and configuring a Red Hat Cluster, and consists of the following sections:

- [Section 2.1, “Compatible Hardware”](#)
- [Section 2.2, “Enabling IP Ports”](#)
- [Section 2.3, “Configuring ACPI For Use with Integrated Fence Devices”](#)
- [Section 2.5, “Configuring max\\_luns”](#)
- [Section 2.6, “Considerations for Using Quorum Disk”](#)
- [Section 2.7, “Multicast Addresses”](#)
- [Section 2.8, “Considerations for Using Conga”](#)
- [Section 2.9, “General Configuration Considerations”](#)

## 2.1. Compatible Hardware

Before configuring Red Hat Cluster software, make sure that your cluster uses appropriate hardware (for example, supported fence devices, storage devices, and Fibre Channel switches). Refer to the hardware configuration guidelines at [http://www.redhat.com/cluster\\_suite/hardware/](http://www.redhat.com/cluster_suite/hardware/) for the most current hardware compatibility information.

## 2.2. Enabling IP Ports

Before deploying a Red Hat Cluster, you must enable certain IP ports on the cluster nodes and on computers that run **lucci** (the **Conga** user interface server). The following sections identify the IP ports to be enabled:

- [Section 2.2.1, “Enabling IP Ports on Cluster Nodes”](#)
- [Section 2.2.2, “Enabling IP Ports on Computers That Run lucci”](#)

### 2.2.1. Enabling IP Ports on Cluster Nodes

To allow Red Hat Cluster nodes to communicate with each other, you must enable the IP ports assigned to certain Red Hat Cluster components. [Table 2.1, “Enabled IP Ports on Red Hat Cluster Nodes”](#) lists the IP port numbers, their respective protocols, and the components to which the port numbers are assigned. At each cluster node, enable IP ports according to [Table 2.1, “Enabled IP Ports on Red Hat Cluster Nodes”](#).

IP Port Number	Protocol	Component
5404, 5405	UDP	<b>cman</b> (Cluster Manager)
11111	TCP	<b>ricci</b> (part of <b>Conga</b> remote agent)
14567	TCP	<b>gnbd</b> (Global Network Block Device)
16851	TCP	<b>modclusterd</b> (part of <b>Conga</b> remote agent)


IP Port Number	Protocol	Component
21064	TCP	<b>d1m</b> (Distributed Lock Manager)
50006, 50008, 50009	TCP	<b>ccsd</b> (Cluster Configuration System daemon)
50007	UDP	<b>ccsd</b> (Cluster Configuration System daemon)

Table 2.1. Enabled IP Ports on Red Hat Cluster Nodes

 **Note**  
 Table 2.1, “Enabled IP Ports on Red Hat Cluster Nodes” shows no IP ports to enable for **rgmanager**. For RHEL 5.1 and later, **rgmanager** does not use TCP or UDP sockets.

### 2.2.2. Enabling IP Ports on Computers That Run **luci**

To allow client computers to communicate with a computer that runs **luci** (the **Conga** user interface server), and to allow a computer that runs **luci** to communicate with **ricci** in the cluster nodes, you must enable the IP ports assigned to **luci** and **ricci**. Table 2.2, “Enabled IP Ports on a Computer That Runs **luci**” lists the IP port numbers, their respective protocols, and the components to which the port numbers are assigned. At each computer that runs **luci**, enable IP ports according to Table 2.1, “Enabled IP Ports on Red Hat Cluster Nodes”.


 **Note**  
 If a cluster node is running **luci**, port 11111 should already have been enabled.

IP Port Number	Protocol	Component
8084	TCP	<b>luci</b> ( <b>Conga</b> user interface server)
11111	TCP	<b>ricci</b> ( <b>Conga</b> remote agent)

Table 2.2. Enabled IP Ports on a Computer That Runs **luci**

### 2.3. Configuring ACPI For Use with Integrated Fence Devices

If your cluster uses integrated fence devices, you must configure ACPI (Advanced Configuration and Power Interface) to ensure immediate and complete fencing.

 **Note**  
 For the most current information about integrated fence devices supported by Red Hat Cluster Suite, refer to [http://www.redhat.com/cluster\\_suite/hardware](http://www.redhat.com/cluster_suite/hardware)<sup>1</sup>.

If a cluster node is configured to be fenced by an integrated fence device, disable ACPI Soft-Off for that node. Disabling ACPI Soft-Off allows an integrated fence device to turn off a node immediately and completely rather than attempting a clean shutdown (for example, **shutdown -h now**). Otherwise, if ACPI Soft-Off is enabled, an integrated fence device can take four or more seconds to