

1









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**CHAPTER 4****Configuring the Router 4-1**

Powering up the Router 4-1

Checklist for Power Up 4-1

Power Up Procedure 4-2

Verifying the Front Panel LED Indications 4-4





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# Organization























CHAPTER































# Labels on Cisco 2911

Figure 1-16





























*Figure 1-21 Cisco 2921 and Cisco 2951 Router Airflow*

*Figure 1-22 Cisco 3900 Series (Non NEBS) Router Airflow*

## Real-Time Clock

Upon system power up, the internal real-time clock with battery backup provides the system software



























Immunity compliance

CISPR24 ITE-Immunity characteristics, Limits and methods of

With DC power supply  
(without modules) NA





Immunity compliance

CISPR24 ITE-Immunity characteristics, Limits and methods of measurement

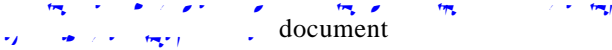
EN 55024 ITE-Immunity characteristics, Limits and methods of measurement

EN 50082-1 Electromagnetic compatibility - Generic immunity standard - Part 1

EN 300-386 Electromagnetic compatibility for TNE SD/EMI

EN 61000-6-1

For detailed compliance information, see the



document

EMC compliance

EN 55022, class A

CISPR22, class A















































Warning **Blank faceplates and cover panels serve three important functions: they prevent**





# Before you Begin

Before installing and connecting a







*Figure 3-6 Bracket Installation for Back Mounting*

*Figure 3-7 Bracket Installation for Center-Back Mounting*

## Attaching Rack-Mount Brackets to Cisco 3900 Series Routers

Attach the mounting brackets to the router chassis as shown in [Figure 3-8](#) through [Figure 3-11](#), using the screws provided.













## Mounting a Cisco 2901 or 2911 Router on a Wall

Figure 3-14 and Figure 3-15 show typical wall-mounted installations.

*Figure 3-14 Mounting the 2901 Chassis on the Wall*

*Figure 3-15 Mounting the 2911 Chassis on the Wall*

After the router is installed, you must connect the chassis to a reliable earth ground. For the chassis ground connection procedures, see the

*Figure 3-16 Chassis Ground Connection Us*



# Connecting Power

This section explains how to connect AC or DC power to Cisco 2900 series routers. It covers the following topics:

- [Connecting to AC Power, page 3-18](#)
- [Connecting to DC Power, page 3-19](#)
- [Connecting to Backup Power, page 3-30](#)

▲

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**Warning** Read the installation instructions before connecting the system to the power source. Statement 1004

---

▲

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**Warning** This unit might have more than one power supply connection. All connections must be removed to de-energize the unit. Statement 1028

---

▲

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**Warning** Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

---



























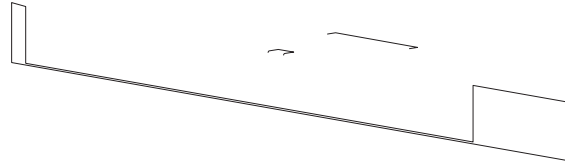




*Figure 3-31 Connecting the USB Console Cable to the Cisco 2901 Router*

- 1 USB 5-pin mini USB Type-B console port
- 2 USB 5-pin mini USB Type-B to USB Type-A console cable

**Figure 3-32** Connecting the USB Console Cable to the Cisco 2911 Router



1	USB 5-pin mini USB Type-B console port	2	USB 5-pin mini USB Type-B to USB Type-A console cable
3	USB Type-A		













*Figure 3-34 Connecting a Modem to the Cisco 2901 Router*

1	RJ-45 AUX port	3	RJ-45 to DB-9
2	DB-9 to DB-25 adapter	4	Modem









## Ports and Cabling

- o C [Table 3-5](#) summarizes typical WAN, LAN, and voice connections for Cisco 2900 and Cisco 3900 series



















## Using Cisco Configuration Professional Express

Use Cisco Configuration Professional Express web-based application to configure the initial router



## Configuring the Enable and Enable Secret Passwords

To provide an additional layer of security, particularly for passwords that cross the network or are stored on a TFTP server, you can use either the

## DETAILED STEPS

### Configuring the Console Idle Privileged EXEC Timeout

This section describes how to configure the console line's idle privileged EXEC timeout. By default, the









## Specifying a Default Route or Gateway of Last Resort

This section describes how to specify











# Verifying Network Connectivity















# Accessing Internal Modules

See the following sections for instructions about accessing the internal modules on the router.

- Cisco 2900 series routers—



# Removing and Replacing the Services Performance Engine









*Figure 5-5 Module Locations in Cisco 2921 and Cisco 2951 Router*

1



**Figure 5-7**      *Module Locations on Cisco 3925E and 3945E*

1  
2  
3  
4  
5

1	PVDM-3 0	2	PVDM-3 1
3	PVDM-3 2	4	DIMM 0 socket
5	DIMM 1 socket		



## Removing a DRAM DIMM

Follow these steps to remove a DRAM DIMM:

- 
- Step 1** Read the [“Safety Warnings” section on page 5-2](#) section and disconnect the power supply before you perform any module replacement.
  - Step 2** Remove the chassis cover. For Cisco 2900 series ISRs, see the [“Removing and Replacing the Chassis Cover” section on p.ving and Replacing the Chassis](#)













# Verifying ISM Installation









*Figure 5-18 PVDM Adapter Components*

To install a PVDM2 into the PVDM3 slot, perform the following steps:

- 
- Step 1 Read the [“Safety Warnings” section on page 5-2](#) section and disconnect the power supply before you perform any module replacement.
  - Step 2 Ensure that [retainer clips](#) are open (the UP position). (See [Figure 5-19](#),











*Figure 5-24 Cisco 2901 Power Supply Components*

**Step 5** Remove the screw that fastens the main power supply to the chassis.







## Removing the 2911 DC Power Supply



- Step 5** Install the power switch blank cap by slowly pushing it into the power supply opening on the bezel side of the chassis. Make sure that the “THIS SIDE UP” label is on top when installing the blank cap. You will feel it snap into place when it is fully seated. See [Figure 5-28](#)
- Step 6** Replace the bezel assembly by lining up the holes in chassis with the connectors on the bezel. Slowly push the bezel assembly into place until it is fully seated.
- Step 7** Install the power supply blank panel into the power





















**Figure 5-33** *Cisco 2911 Fan Tray Replacement*

**Step 3** Loosen the two captive screws on the fan tray.

**Step 4**







*Figure 5-36 Removing the Cisco 3900 Series Router Bezel*

- Step 3** Loosen the four captive screws on the fan tray.
- Step 4** Pull out the fan tray.
- Step 5** Insert the replacement fan tr





































# CHAPTER 6

## Getting Software Licenses for the Router

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The Integrated Services Router Generation 2 (ISR G2) platforms offer a new Universal Cisco Internet Operating System (IOS) software image. The Universal image and its licensing provisions provide greater flexibility to deploy new features while also improving visibility and management of existing licenses on routers in the network.

When you order a new ISR G2, it is shipped with the software image and the corresponding permanent licenses for the packages and features that you specified, preinstalled. The software does not need to be activated or registered prior to use.

Use the Cisco management application such as Cisco License Manager (CLM), or use the Cisco IOS **show license command** to determine the licenses activated on your system. CLM is a free software application available at <http://www.cisco.com/go/clm>.

The router comes with an evaluation license, also known as a temporary license, for most packages and







APPENDIX **A**

# Online Insertion Removal and Hot-Swapping

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