



Setting Up Cisco Wireless IP Phones

This chapter describes how to install and configure the Cisco Wireless IP Phone 7920 on an IP telephony network:

- [Preparing to Install the Cisco Wireless IP Phone 7920, page 3-1](#)
- [Configuring IP Phones in Cisco CallManager, page 3-6](#)
- [Installing the Cisco Wireless IP Phone 7920, page 3-13](#)

Before You Begin

Before you install Cisco Wireless IP Phone 7920s, you must determine how you want to configure the phones in your wireless network. Then, you can install the phone and verify its functionality. For more information, see [Chapter 2, “An Overview of the Wireless Network.”](#)

The following sections provide network requirements and configuration tasks:

- [Preparing to Install the Cisco Wireless IP Phone 7920, page 3-1](#)
- [Configuring IP Phones in Cisco CallManager, page 3-6](#)

Preparing to Install the Cisco Wireless IP Phone 7920

To install and configure the Cisco Wireless IP Phone, you must configure network settings, set up Cisco CallManager, and make changes locally on the phone. Review the following requirements and task list to prepare for the installation.

Network Requirements

For the Cisco Wireless IP Phone 7920 to successfully operate as a Cisco IP Phone endpoint, your network must meet the following requirements:

- Working Voice-over-IP (VoIP) network
 - VoIP configured on your Cisco routers and gateways
 - Cisco CallManager Release 3.3(3) SR1 or later or Cisco CallManager Express 3.0 or later installed in your network and configured to handle call processing



Note

You can use the Cisco Wireless IP Phone 7920 with Cisco CallManager 3.2, but you must configure the phone as a Cisco IP Phone 7960 device type. See the [“Support for the Cisco 7920 Phone Type”](#) section on page 3-11.

- IP network that supports DHCP or manual assignment of IP address, gateway, and subnet mask
- Working wireless network
 - Voice over the WLAN configured on your Cisco Aironet Access Points
 - Security implemented for authenticating wireless voice devices and users

Phone Configuration Tasks

See [Table 3-1](#) for an overview of preparation tasks and installation procedures to configure Cisco Wireless IP Phone 7920s. For detailed information about these procedures, refer to the documentation that is listed in the table.

Table 3-1 Configuration Task List for the Cisco Wireless IP Phone

Required Task	Purpose	For More Information
<p>1. Gather the following information for use in Cisco CallManager Administration:</p> <ul style="list-style-type: none"> • Information for the device information fields, if applicable, such as the device pool and calling search space. • The Cisco CallManager user to associate with the phone. • The number of lines and associated directory numbers to assign to the phone • Features to configure for the phone. 	<p>Use this information when using the Phone Configuration page in Cisco CallManager Administration.</p> <p>Device Information fields on this page auto-populates if information is relevant and available. You can edit fields to override system settings on a per-device basis.</p>	<p>See the “Adding Phones to the Cisco CallManager Database” section on page 3-7.</p> <p>See the “Configuring Cisco Wireless IP Phones in Cisco CallManager” section on page 7-2.</p> <p>Refer to <i>Cisco CallManager System Guide</i>.</p> <p>Refer to <i>Cisco CallManager Administration Guide</i>.</p>
<p>2. Configure routers, gateways, and switches to handle voice communication.</p>	<p>Establishes the infrastructure for the IP telephony network.</p>	<p>See the “Components of the VoIP Wireless Network” section on page 2-5 and the documentation included with these devices.</p>
<p>3. Perform a site survey to determine where to place and install access points (APs) for wireless voice coverage.</p>	<p>Identifies areas where RF signal coverage is required. Locates high usage areas (conference rooms), areas with RF interference (labs, equipment rooms), and other necessary coverage areas for wireless phones (stairwells, elevators, breezeways).</p>	<p>Refer to the Cisco Wireless IP Phone 7920 Design and Deployment Guide.</p>

Table 3-1 Configuration Task List for the Cisco Wireless IP Phone (continued)

Required Task	Purpose	For More Information
4. Install and configure Cisco Aironet Access Points to provide optimal coverage for wireless phones.	Establishes the coverage, channels, signal strength, and authentication for the wireless voice network.	Refer to the Cisco Wireless IP Phone 7920 Design and Deployment Guide .
5. Use one of the following methods to add phones to the Cisco CallManager database: <ul style="list-style-type: none"> • With auto-registration • With Cisco CallManager Administration only • With the Bulk Administration Tool (BAT) only • With BAT and the Tool for Auto-Registered Phones Support (TAPS) 	The method that you use to add the phones to Cisco CallManager determines how the directory number is assigned and whether you must obtain a MAC address first.	See the “ Adding Phones to the Cisco CallManager Database ” section on page 3-7. Refer to <i>Cisco CallManager Administration Guide</i> . Refer to <i>Bulk Administration Tool User Guide for Cisco CallManager</i> .
6. Obtain the MAC address from the IP phone.	Only required when using Cisco CallManager Administration or BAT to add phones to the Cisco CallManager database.	See the “ Determining the MAC Address of a Cisco IP Phone ” section on page 3-10.
7. Configure network settings and wireless settings by using the Cisco 7920 Configuration Utility or on the Cisco Wireless IP Phone.	Sets system parameters such as IP settings (if not using DHCP in the network) and assigns a TFTP server. Sets SSID, authentication type, encryption method, transmission rate, and power for the phone.	See the “ Cisco 7920 Configuration Utility Overview ” section on page 4-4. See the “ Configuring Network Profile Settings ” section on page 5-3. See the “ Configuring Wireless Settings for the Profile ” section on page 5-10.

Table 3-1 Configuration Task List for the Cisco Wireless IP Phone (continued)

Required Task	Purpose	For More Information
8. Configure phone settings by using the Cisco 7920 Configuration Utility.	Sets phone settings such as ring tone, phone lock password, speed dials and phone book entries.	See the “ Phone Profile Window ” section on page 4-16 .
9. Modify softkey templates to customize phones.	Provides alternate set of Cisco CallManager softkeys to users who do not want default Cisco Wireless IP Phone softkeys.	See the “ Configuring Softkey Templates ” section on page 7-8 . Refer to <i>Cisco CallManager Administration Guide</i> .
10. Add phones and configure the phone features such as call waiting, call forward, call park, and call pickup.	Adds phones to Cisco CallManager database and provides enhanced telephony functionality.	See the “ Configuring Cisco Wireless IP Phones in Cisco CallManager ” section on page 7-2 . Refer to <i>Cisco CallManager Administration Guide</i> .
11. Add users to Cisco CallManager.	Associates a user with a phone, enabling access to the User Options web-based application where users set up features such as call forwarding and speed dial, and subscribe to services.	See the “ Adding Users to Cisco CallManager ” section on page 7-13 . Refer to <i>Cisco CallManager Administration Guide</i> .
12. Power on the Cisco Wireless IP Phone to test that it connects to the network.	Ensures that the phone communicates with the access point and Cisco CallManager.	See the Understanding the Phone Startup Process , page 2-21 .
13. Provide information to end users about how to use their phones and how to configure their phone options.	Ensures that users have adequate information to successfully use their Cisco IP Phones.	See the Appendix A, “Providing Information to Users By Using a Website.”

Related Topics

- [Understanding the Cisco Wireless IP Phone 7920](#), page 1-1
- [Configuring IP Phones in Cisco CallManager](#), page 3-6
- [Installing the Cisco Wireless IP Phone 7920](#), page 3-13

Configuring IP Phones in Cisco CallManager

The Cisco IP Phone requires Cisco CallManager to handle call processing. Refer to *Cisco CallManager Administration Guide* or context-sensitive help in the Cisco CallManager Administration application to ensure that Cisco CallManager is set up properly to manage the phone and to properly route and process calls.

[Table 3-2](#) explains and provides references for many of the configuration activities for which you use Cisco CallManager Administration.

Table 3-2 Cisco CallManager Configuration Tasks

Activity	Explanation	For More Information
Add phones to Cisco CallManager database.	You can add phones one at a time or in batches, or you can have phones automatically register with Cisco CallManager.	See the “Adding Phones to the Cisco CallManager Database” section on page 3-7.
Configure and assign telephony features	You must use Cisco CallManager Administration to configure and assign lines and telephony features to the Cisco IP Phones.	See the “Configuring Cisco Wireless IP Phones in Cisco CallManager” section on page 7-2.
Add and associate users	In Cisco CallManager Administration, you can add users to the database and associate them with specific phones. Users gain access to web pages that allow them to configure phone options such as call forwarding and speed dialing.	See the “Adding Users to Cisco CallManager” section on page 7-13.

Related Topics

- [Configuring Cisco Wireless IP Phones in Cisco CallManager, page 7-2](#)
- [Adding Phones to the Cisco CallManager Database, page 3-7](#)

Adding Phones to the Cisco CallManager Database

Before installing the Cisco Wireless IP Phone, you must choose a method for adding phones to the Cisco CallManager database. Some methods require entering the media access control (MAC) address of the phone. [Table 3-3](#) provides an overview of these methods.

Table 3-3 *Methods for Adding Phones to the Cisco CallManager Database*

Method	Requires MAC Address?	Notes
Using auto-registration	No	Results in automatic assignment of directory numbers
Using auto-registration with the Tool for Auto-Registered Phones Support (TAPS)	No	Requires auto-registration and BAT; updates information in the Cisco IP Phone and in Cisco CallManager Administration
Using Bulk Administration Tool (BAT)	Yes	Allows for simultaneous registration of multiple phones
Using the Cisco CallManager Administration only	Yes	Requires phones to be added individually

The following sections describe these methods:

- [Adding Phones with Auto-Registration, page 3-8](#)
- [Adding Phones with Auto-Registration and TAPS, page 3-9](#)
- [Adding Phones with BAT, page 3-10](#)
- [Adding Phones with Cisco CallManager Administration, page 3-11](#)

Adding Phones with Auto-Registration

You can use auto-registration to quickly enter phones into the Cisco CallManager database without first gathering MAC addresses from the phones.

When auto-registration is enabled, Cisco CallManager begins the automatic startup process to obtain a directory number. During auto-registration, Cisco CallManager automatically assigns the next available sequential directory number to new phones as they register with Cisco CallManager.

After registering phones with Cisco CallManager, you can modify any settings, such as the directory numbers, by using Cisco CallManager Administration. Additionally, you can move auto-registered phones to new locations and assign them to different device pools without affecting their directory numbers.

Auto-registration is disabled by default in Cisco CallManager. You must enable and properly configure auto-registration before connecting any Cisco IP Phone to the network. For information about enabling and configuring auto-registration, refer to *Cisco CallManager Administration Guide*.

Using Auto-Registration Prior to Release 3.3(3)SR1

If you use auto-registration to register the Cisco Wireless IP Phone 7920 with Cisco CallManager 3.3 released prior to 3.3(3) SR1, you must make the configuration files on the phone available to the Cisco CallManager so the phone can be registered with the Cisco 7960 phone type. If the configuration files are not available, the Cisco CallManager cannot auto-register the phone.

Use this procedure to enable the configuration files for Cisco CallManager releases prior to 3.3(3) SR1.

Procedure

- Step 1** Log in to the Cisco CallManager Administration application.
- Step 2** From the menu bar, choose **Service > Service Parameters**.
The Service Parameters Configuration page appears.
- Step 3** In the Service drop-down list box, choose **Cisco TFTP**.
- Step 4** Click the **Advanced** button.

- Step 5** Scroll down on the page to Clusterwide parameters (Parameters that apply to all servers), and set the Enable Caching of Configuration Files parameter to **False**.
- Step 6** Click the **Update** button.
-

Related Topics

- [Adding Phones with Auto-Registration and TAPS, page 3-9](#)
- [Adding Phones with Cisco CallManager Administration, page 3-11](#)
- [Adding Phones with BAT, page 3-10](#)

Adding Phones with Auto-Registration and TAPS

You can add a group of phones quickly by using auto-registration and TAPS. First, use the Bulk Administration Tool (BAT) to add phones to the Cisco CallManager database with dummy MAC addresses. Then use TAPS to update MAC addresses and download pre-defined configurations for the phones.

To implement TAPS, you or the end-users dial a TAPS directory number and follow voice prompts. When the process is complete, the phone has downloaded its directory number and other settings. The correct MAC address for the phone is updated in Cisco CallManager Administration.

You must make sure that auto-registration is enabled in Cisco CallManager Administration for TAPS to function.

Refer to *Bulk Administration Tool User Guide for Cisco CallManager* for detailed instructions about BAT and about TAPS.

Related Topics

- [Adding Phones with Auto-Registration, page 3-8](#)
- [Adding Phones with Cisco CallManager Administration, page 3-11](#)
- [Adding Phones with BAT, page 3-10](#)

Adding Phones with BAT

When you must add several phones at the same time to the Cisco CallManager database, you can use BAT. This plug-in application for Cisco CallManager enables you to perform batch operations, including registration, on multiple phones.

To add phones using BAT only (not in conjunction with TAPS), you first must obtain the appropriate MAC address for each phone.

Determining the MAC Address of a Cisco IP Phone

When adding phones to the Cisco CallManager database using Cisco CallManager Administration or using BAT, you must enter the media access control (MAC) address of the phone. [Table 3-4](#) describes how to determine the MAC address of the Cisco Wireless IP Phone.

Table 3-4 Determining the MAC Address of the Phone

Cisco IP Phone Model	Method	For More Information
7920	Choose Menu > Network Config > MAC Address and look at the MAC Address field	See Chapter 5, “Configuring Network Profile Settings”
7920	Remove the battery and look on the back of the phone.	See the “Installing or Removing the Phone Battery” section on page 3-17

For detailed instructions about using BAT, refer to *Cisco CallManager Administration Guide* and to *Bulk Administration Tool Guide for Cisco CallManager*.



Note

When using BAT to add Cisco Wireless IP Phones, use the default setting for the phone load. The phone load name includes symbols (-, _, .) and BAT does not permit symbols in an entry.

Related Topics

- [Support for the Cisco 7920 Phone Type, page 3-11](#)
- [Adding Phones with Auto-Registration, page 3-8](#)
- [Adding Phones with Auto-Registration and TAPS, page 3-9](#)
- [Adding Phones with Cisco CallManager Administration, page 3-11](#)

Adding Phones with Cisco CallManager Administration

You can add phones individually to the Cisco CallManager database using Cisco CallManager Administration. To do so, you first must obtain the MAC address for each phone. See the [“Adding Phones to the Cisco CallManager Database” section on page 3-7](#) for instructions.

After you have collected MAC addresses, choose **Device > Add a New Device** in Cisco CallManager Administration to begin.

For additional instructions and conceptual information about Cisco CallManager, refer to *Cisco CallManager Administration Guide* and to *Cisco CallManager System Guide*.

Related Topics

- [Support for the Cisco 7920 Phone Type, page 3-11](#)
- [Adding Phones with Auto-Registration, page 3-8](#)
- [Adding Phones with Auto-Registration and TAPS, page 3-9](#)
- [Adding Phones with BAT, page 3-10](#)

Support for the Cisco 7920 Phone Type

Cisco CallManager release 3.3(3) SR1 and later includes support for the Cisco 7920 phone type in the Cisco CallManager Administration application. (Previously, there was no phone type for this phone and you had to configure it as a Cisco IP Phone 7960.)

If you upgrade to Cisco CallManager release 3.3(3) SR1 and later, you can choose the Cisco 7920 phone type when adding the wireless phone. However, if you perform the upgrade and have Cisco wireless phones on your network that were

previously configured as Cisco IP Phone 7960s, you will must remove those entries from the Cisco CallManager database and assign the Cisco 7920 phone type to these phones. See the [“Re-registering the Phone Using the Cisco 7920 Phone Type” section on page 3-12](#) for details.

If you used auto-registration to register the Cisco Wireless IP Phone 7920 with Cisco CallManager 3.3 released prior to 3.3(3) SR1, you must make the configuration files on the phone available to the Cisco CallManager so the phone can be registered with the Cisco 7920 phone type. See the [“Using Auto-Registration Prior to Release 3.3\(3\)SR1” section on page 3-8](#) for details.

Re-registering the Phone Using the Cisco 7920 Phone Type

When you upgrade to Cisco CallManager version 3.3(3) SR1 and later, you might have Cisco Wireless IP Phone 7920s that were previously configured as Cisco IP Phone 7960s. If this is the case, you must remove those phones from the Cisco CallManager database and assign the Cisco 7920 phone type to the Cisco Wireless IP Phone 7920 as follows.

To perform this task, follow these steps:

Procedure

- Step 1** Log in to the Cisco CallManager Administration application.
- Step 2** From the menu bar, choose **System > Cisco CallManager**.
The Cisco CallManager Configuration window displays.
- Step 3** Choose **Device > Phones**.
- Step 4** Choose the records that match your Cisco Wireless IP Phone 7920s.
- Step 5** Click **Delete** to delete the records.
All Cisco Wireless IP Phone 7920s will be deleted from the Cisco CallManager database.
- Step 6** In the Cisco CallManager Configuration window, choose **Device > Add a New Device**.
The Add a New Device window displays.
- Step 7** Select **Phone** from the Device Type drop-down menu and click **Next**.
The Add a New Phone window displays.

- Step 8** Select the Cisco 7920 phone type from the drop-down menu and click **Next**.
The Phone Configuration window displays.
- Step 9** In the Phone Configuration window, enter information in the following fields:
- MAC Address
 - Domain Name associated with this MAC Address
- Step 10** Click **Insert**.
The Cisco CallManager Administration application asks if you want to assign a directory number.
- Step 11** Enter the required fields.
-

**Note**

If you are running a Cisco CallManager version that is earlier than release 3.3(3) SR1, you must assign the Cisco IP Phone 7960 phone type to the Cisco Wireless IP Phone 7920 when adding the phone through the Cisco CallManager Administration application.

Related Topics

- [Adding Phones with Auto-Registration, page 3-8](#)
- [Adding Phones with Auto-Registration and TAPS, page 3-9](#)
- [Adding Phones with Cisco CallManager Administration, page 3-11](#)
- [Adding Phones with BAT, page 3-10](#)

Installing the Cisco Wireless IP Phone 7920

After setting up the wireless network to support voice communications and configuring the Cisco Wireless IP Phones in Cisco CallManager, you are ready to install the phones. This section includes the following installation information.

- [Safety and Performance Information, page 3-14](#)
- [Providing Power to the Cisco IP Phone, page 3-17](#)
- [Powering On the Wireless IP Phone 7920, page 3-23](#)

Safety and Performance Information

Review the following warnings before installing the Cisco IP Phone. To see translations of these warnings, refer to the *Regulatory Compliance and Safety Information for the Cisco Wireless IP Phone 7920* document that accompanied this device.



Warning

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071



Warning

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



Warning

This equipment will not be able to access emergency services during a power outage because of reliance on utility power for normal operation. Alternative arrangements should be made for access to emergency services. Access to emergency services can be affected by any call-barring function of this equipment.



Warning

Do not use the Cisco Wireless IP Phone 7920 in hazardous environments such as areas where high levels of explosive gas may be present. Check with the site safety engineer before using any type of wireless device in such an environment.



Warning

The plug-socket combination for the battery charger must be accessible at all times, because it serves as the main disconnecting device. Statement 1019

**Warning**

The battery charger requires short-circuit (overcurrent) protection to be provided as part of the building installation. Install only in accordance with national and local wiring regulations. Statement 1045

**Warning**

The power supply must be placed indoors. Statement 331

**Warning**

Ultimate disposal of this product should be handled according to all national laws and regulations. Statement 1040

Battery Safety Notices

These battery safety notices apply to the batteries that are approved by the Cisco Wireless IP Phone 7920 manufacturer.

**Warning**

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Statement 1015

**Warning**

Do not dispose of the battery pack in fire or water. The battery may explode if placed in a fire.

**Caution**

The battery pack is intended for use only with this device.

**Caution**

Do not disassemble, crush, puncture, or incinerate the battery pack.

**Caution**

To avoid risk of fire, burns, or damage to your battery pack, do not allow a metal object to touch the battery contacts.

**Caution**

Handle a damaged or leaking battery with extreme care. If you come in contact with the electrolyte, wash the exposed area with soap and water. If the electrolyte has come in contact the eye, flush the eye with water for 15 minutes and seek medical attention.

**Caution**

Do not charge the battery pack if the ambient temperature exceeds 104 degrees Fahrenheit (40 degrees Celsius).

**Caution**

Do not expose the battery pack to high storage temperatures (above 140 degrees Fahrenheit, 60 degrees Celsius).

**Caution**

When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.

To obtain a replacement battery, contact your local dealer. Use only the batteries that have a Cisco part number.

Standard battery—CP-BATT-7920-STD

Extended battery—CP-BATT-7920-EXT

**Caution**

Use only the Cisco power supply that was provided with your phone. If you must replace your power supply, refer to the list of Cisco part numbers.

North America—CP-PWR-7920-NA

Central Europe—CP-PWR-7920-CE

United Kingdom—CP-PWR-7920-UK

China—CP-PWR-7920-CN

Japan—CP-PWR-7920-JP

To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information for the Cisco Wireless IP Phone 7920* document that accompanied this product.

Related Topics

- [Preparing to Install the Cisco Wireless IP Phone 7920, page 3-1](#)
- [Wireless Network and Access Point Configuration, page 2-19](#)

Providing Power to the Cisco IP Phone

The Cisco Wireless IP Phone 7920 uses a battery for power. [Table 3-5](#) describes the types of batteries available for the Cisco Wireless IP Phone and the maximum talk and standby times.

Table 3-5 Batteries Available for the Cisco Wireless IP Phone 7920

Type	Technology	Capacity	Talk Time	Standby Time
Standard	Lithium-ion	1440/1560 mAh	3.5 hr	21 hr
Extended	Lithium-ion	1960 mAh	4.25 hr	30 hr



Note Standard batteries might be either 1440 mAh or 1560 mAh capacity.

The following sections provide information about the battery:

- [Installing or Removing the Phone Battery, page 3-17](#)
- [Charging the Battery, page 3-19](#)
- [Using the Desktop Charger, page 3-21](#)

Installing or Removing the Phone Battery

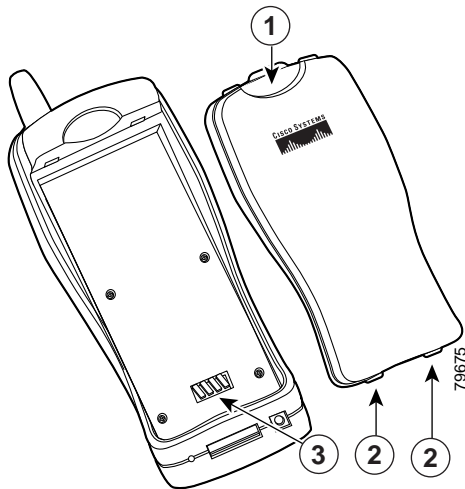
To install the battery in the Cisco Wireless IP Phone, follow these steps. See [Figure 3-1](#) for a graphical overview of these steps.

Procedure

- Step 1** To install the battery, insert the battery catches (as shown in [Figure 3-1](#)) in the corresponding slots at the bottom of the Cisco Wireless IP Phone 7920. Make sure that the metal contacts on the battery and the phone are facing each other.

- Step 2** Press the battery to the body of the phone until it locks into place.
- Step 3** To remove the battery, press down on the locking catch, then lift and remove the battery.

Figure 3-1 Cisco Wireless IP Phone 7920 Battery Installation



1	Locking catch—Press to release the battery
2	Battery catches—Insert these into the slots near the bottom of the phone at battery installation.
3	Metal contacts—Match the contacts on the battery to the contacts on the phone.



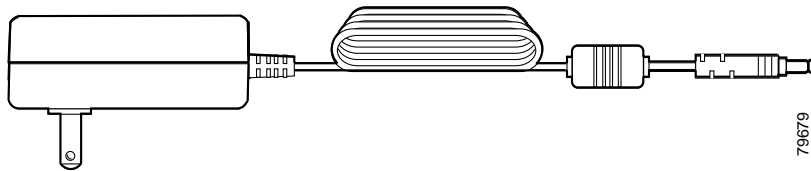
Note

The media access control (MAC) address for each Cisco Wireless IP Phone 7920 appears on a printed label on the back of the phone underneath the battery.

Charging the Battery

To charge your battery quickly, use the AC adapter shown in [Figure 3-2](#). Plug the AC adapter into a wall outlet, and insert the connector into the base of your Cisco Wireless IP Phone 7920 or to the back of the desktop charger. You can use the phone while the battery is being charged.

Figure 3-2 Power Supply



[Table 3-6](#) shows the charging time for the two types of batteries. Check the charging status on the phone display or on the front of the desktop charger. You can stop charging the battery when the battery is fully charged, and you can leave the batteries in the charger for extended time periods with no ill effects. Lithium ion batteries can be partially charged without shortening the battery life, because they have no memory. Batteries should handle up to 4000 recharges.

Table 3-6 Charging Time Information

Battery Type	Power Supply Connected to Phone	Power Supply Connected to Desktop Charger
Standard	3.5 hr	6 hr
Extended	4.5 hr	8.5 hr

To charge the Lithium ion battery, follow these steps:

Procedure

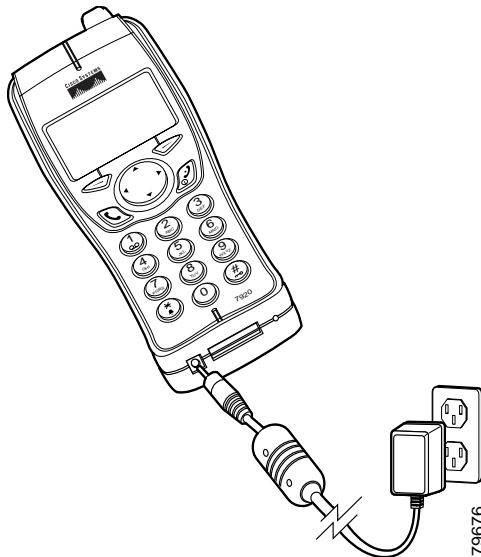
- Step 1** Connect the cable from the power supply to the outlet in the phone.
- Step 2** Connect the power supply to an AC wall outlet as shown in [Figure 3-3](#).

If the phone is turned off, the screen displays the message, “Battery Charging.” When the battery is charged, “Battery Full” displays.

If the phone is turned on, the battery indicator bar blinks, displaying the current power level. When the battery is charged, the indicator bar stops blinking, and “Charging Complete” displays.

- Step 3** When the battery is fully charged, you can disconnect the charger from the phone, and unplug the power cord from the AC wall outlet.
-

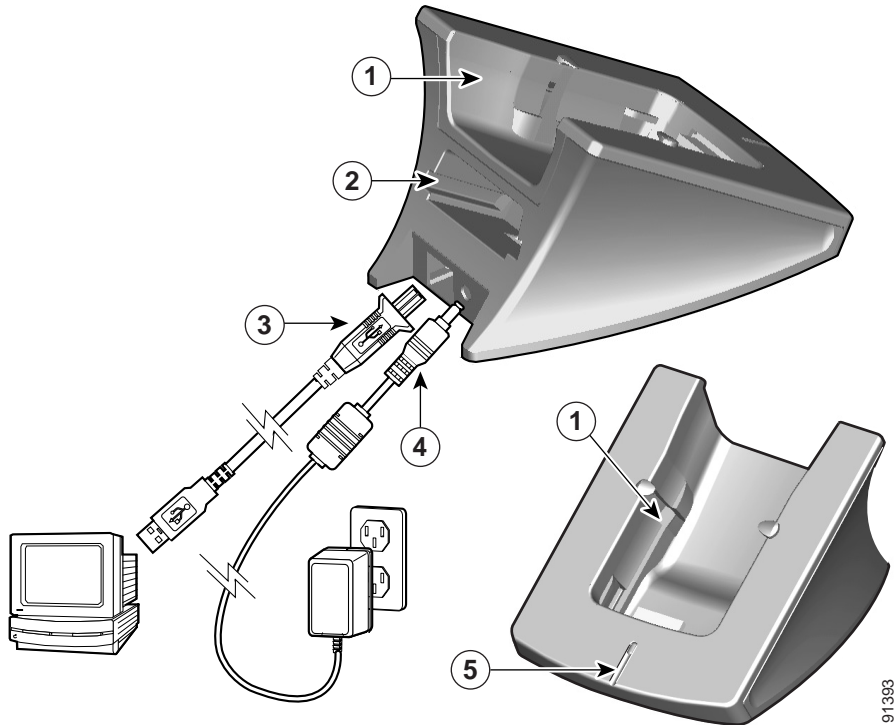
Figure 3-3 Charging the Phone Battery



Using the Desktop Charger

The desktop charger, shown in [Figure 3-4](#), can charge both the phone battery installed in the phone and an extra battery at the same time.

Figure 3-4 Desktop Charger



1	Upper compartment—For the phone	4	AC adapter—Plugs into wall outlet
2	Lower compartment—For the battery	5	LED indicator—Indicates battery charging status
3	USB A-type to B-type cable—Connects phone to the PC running Cisco 7920 Configuration Utility		



Note You can use the desktop charger to easily connect a phone to the Cisco 7920 Configuration Utility to import or export settings. Connect the desktop charger and your computer with the standard USB cable, as indicated by callout 3 in [Figure 3-4](#). You must enable the USB port on the Cisco Wireless IP Phone. For more information, see the [“Activating the USB Port on the Phone” section on page 4-5](#).

To use the desktop charger, see [Figure 3-4](#) and follow these steps:

Procedure

-
- Step 1** Plug the AC adapter into a wall outlet, and insert the connector (4) into the back of the desktop charger.
 - Step 2** Insert the Cisco Wireless IP Phone 7920 into the upper compartment (1) of the charger.
 - Step 3** Insert the spare battery into the lower compartment (2).



Note You can insert and charge the phone with a battery installed alone. Or you can insert and charge the spare battery alone. Or you can charge both the phone and the spare battery at the same time.

The LED indicator (5) turns red when the battery is charging. The indicator turns green when the battery charging is complete. Batteries will stop charging after they are fully charged. You can leave the phone or batteries in the charger for extended periods of time with no problems.

[Table 3-7](#) gives the battery charging time information. Check the LED indicator for the charging status. You can stop charging the battery when the battery is fully charged.

Table 3-7 Battery Charging Time and Charging Configuration

Battery Charging Configuration	Charging Time
Battery alone	6 hr
Battery installed in the phone	3.5 hr
Both battery installed in the phone and an extra battery	6 hr

Related Topics

- [Powering On the Wireless IP Phone 7920, page 3-23](#)
- [Installing or Removing the Phone Battery, page 3-17](#)
- [Charging the Battery, page 3-19](#)

Powering On the Wireless IP Phone 7920

After charging the battery and configuring the Cisco Wireless IP Phone, you are ready to power on the phone. Use the following sections for more information about starting up the phone.

- [Active and Standby Phone Modes, page 3-24](#)
- [Startup Settings for a Network Without DHCP, page 3-25](#)

To power on the Cisco Wireless IP Phone 7920, press and hold the Power On button until the phone begins its startup process by cycling through these steps:



Note In a Cisco Light Extensible Authentication Protocol (LEAP) environment, you might have to set the LEAP password.

1. The phone screen displays the Cisco Systems, Inc., copyright screen.
2. The phone screen displays these messages as the phone starts up:
 - Authenticating with AP
 - Configuring IP network
 - Downloading load ID
 - Downloading config file

- Connecting to CallManager
 - Registering to CallManager
3. The following information displays on the main phone screen:
- Current time and date
 - Primary directory number
 - Greeting message
 - Softkey labels

When the phone passes through these stages with no errors, the phone started up properly. Now the phone is in standby mode and is ready to place or receive calls.

The signal icon in the upper right corner shows the strength of the signal between the wireless access point and the phone. The phone must have an adequate signal to successfully place or receive calls. If the signal icon displays fewer than three bars, the weak signal will cause problems with phone performance.

**Note**

When the phone receives a weak signal, the phone displays this warning message, “Weak signal detected” and sends a warning tone as specified in the Personal profile. For information about changing warning tones, refer to the “Using and Changing Profiles” chapter in the *Cisco Wireless IP Phone 7920 Guide*.

If the phone does not complete these steps successfully, see the [“Resolving Startup and Connectivity Problems”](#) section on page 9-2.

Related Topics

- [Active and Standby Phone Modes, page 3-24](#)
- [Startup Settings for a Network Without DHCP, page 3-25](#)
- [Understanding the Phone Startup Process, page 2-21](#)

Active and Standby Phone Modes

When the Cisco Wireless IP Phone 7920 is powered on, it can be in one of these two modes:

- Active mode
- Standby mode

Active mode—The phone is in active mode when the phone is performing one of the following actions:

- Connected to an active call
- Scanning for channels
- Sending CDP packets
- Sending keep-alive messages
- Reregistering with Cisco CallManager

As long as there is an active RTP stream, the phone remains in active mode and consumes power. The standard battery provides up to 3 hours of talk time in active mode and the extended battery provides up to 4.25 hours of talk time.

Standby mode—The phone goes into standby mode two seconds after a scan is complete. The standard battery provides up to 21 hours of standby time and the extended battery provides up to 30 hours of standby time.

The phone will awake from standby mode in response to these events:

- Key pad activity
- Roaming
- Power cycling the phone
- Losing network connectivity
- Losing RF connectivity
- Transmitting scheduled CDP or keep-alive packets.

Related Topics

- [Startup Settings for a Network Without DHCP, page 3-25](#)
- [Resolving Startup and Connectivity Problems, page 9-2](#)

Startup Settings for a Network Without DHCP

If you are not using DHCP in your network, you must configure these network settings on the Cisco Wireless IP Phone 7920:

- IP address
- Subnet mask
- Primary TFTP server IP address

- Primary gateway IP address
- Primary DNS server IP address (optional)

Collect this information and follow the procedures defined in [Chapter 5](#), “Configuring Network Profile Settings.”

Related Topics

- [Understanding the Phone Startup Process](#), page 2-21
- [Resolving Startup and Connectivity Problems](#), page 9-2