

How to Use the Backup Image on Wireless LAN Controllers (WLCs)

Document ID: 107530

Introduction

Prerequisites

Requirements

Components Used

Conventions

Primary and Backup Images on WLCs

NetPro Discussion Forums – Featured Conversations

Related Information

Introduction

This document explains how to use the backup image on a Wireless LAN Controller (WLC).

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Knowledge of how to configure the WLC and Lightweight Access Point (LAP) for basic operation
- Basic knowledge of Lightweight Access Point Protocol (LWAPP)

Components Used

The information in this document is based on these software and hardware versions:

- Cisco 2000 / 2100 / 4400 Series WLC that runs firmware 5.0
- LWAPP-based access points, Series 1230, 1240, 1130, 1250, 1140 and 1500

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Primary and Backup Images on WLCs

The WLC, by default, maintains two images. These images are the primary image and the backup image. The primary image is the active image used by the WLC while the backup image is used as a backup for the active image.

The controller bootloader (ppcboot) stores a copy of the active primary image and the backup image. If the

primary image becomes corrupted, you can use the bootloader to boot with the backup image.

You can change the active image in two ways.

Assuming that the WLC has a valid backup image, reboot the controller. During the boot process on the WLC, press the **Esc** key in order to see the additional options.

This output shows an example:

```
Initializing memory. Please wait. 256 MB SDRAM detected
BIOS Version: SM 02.00
BIOS Build date: 09/17/02
System Now Booting ...

Booting from disk..., please wait.

Cisco Bootloader Loading stage2...

Cisco Bootloader (Version 3.2.116.21)

      .o88b. d8888888b .d8888. .o88b. .d88b.
d8P Y8 `88' 88' YP d8P Y8 .8P Y8.
8P      88 `8bo. 8P      88 88
8b      88 `Y8b. 8b      88 88
Y8b d8 .88. db 8D Y8b d8 `8b d8'
`Y88P' Y888888P `8888Y' `Y88P' `Y88P'

Booting Primary Image...
Press <ESC> now for additional boot options...

Boot Options

Please choose an option from below:

1. Run primary image (Version 3.2.116.21) (active)
2. Run backup image (Version 3.2.116.21)
3. Manually upgrade primary image
4. Change active boot image
5. Clear Configuration
```

Choose Option 4: **Change Active Boot Image** from the boot menu to set the backup image as the active boot image. Now, when the controller resets, it boots with the new active image.

You can also change the active booting image of the WLC manually with the **config boot** *<primary/backup>* command.

Syntax Description

config boot	Configure boot option.
{p rimary b ackup }	Set the primary image or backup image as active.

Each Cisco WLC can boot off the primary, last-loaded OS image or boot off the backup, earlier-loaded OS image. In order to change a Cisco WLC boot option, issue the **config boot** command. By default, the primary image on the controller will be chosen as the active image.

Examples

```
> config boot primary
> config boot backup
```

When you upgrade the WLC with a new image, the WLC automatically writes the new image as the primary image and the previously existing primary image is written over the backup image.

Note: The previously existing backup image will be lost.

In order to see the active image that your controller is currently running, click on **Monitor** from the WLC GUI and look at the Software Version field under Controller Summary on the controller GUI. From the CLI, you can issue the **show boot** command to view the primary and backup image present on the WLC. Here is an example:

```
(Cisco Controller) >show boot
Primary Boot Image..... 4.0.179.8
Backup Boot Image..... 4.0.206.0 (active)
```

In order to remove or overwrite an image on the WLC, boot up the WLC with the image that you want to keep and perform an upgrade. This way, the new image replaces the primary image.

NetPro Discussion Forums – Featured Conversations

Networking Professionals Connection is a forum for networking professionals to share questions, suggestions, and information about networking solutions, products, and technologies. The featured links are some of the most recent conversations available in this technology.

NetPro Discussion Forums – Featured Conversations for Wireless
Wireless – Mobility: WLAN Radio Standards
Wireless – Mobility: Security and Network Management
Wireless – Mobility: Getting Started with Wireless
Wireless – Mobility: General

Related Information

- [Password Recovery Procedure for the Wireless LAN Controller Module \(WLCM\) and Wireless Services Module \(WiSM\)](#)
- [Cisco Wireless LAN Controller Configuration Guide, Release 5.2](#)
- [Wireless LAN Controller and Lightweight Access Point Basic Configuration Example](#)
- [Wireless Support Page](#)
- [Technical Support & Documentation – Cisco Systems](#)

[Contacts & Feedback](#) | [Help](#) | [Site Map](#)

© 2008 – 2009 Cisco Systems, Inc. All rights reserved. [Terms & Conditions](#) | [Privacy Statement](#) | [Cookie Policy](#) | [Trademarks of Cisco Systems, Inc.](#)

Updated: Apr 29, 2009

Document ID: 107530
