

# AOS-W 3.1

## Quick Start Guide

This document describes the initial setup of an Alcatel OmniAccess system that consists of a WLAN Switch and Alcatel Access Points (APs). The installation consists of the following steps:

1. Run the Java-based RF Plan tool, version 2.0 or higher, to determine the number of APs required for your site. Alcatel's RF Plan is an application that allows you to determine AP placement based on your specified coverage and capacity requirements without impacting the live network. When you receive your APs, enter the serial number for each AP into the RF Plan tool.

Download the RF Plan tool and *RF Plan Installation and User Guide* from the Alcatel website at <http://eservice.ind.alcatel.com>.

2. Run the Initial Setup on the WLAN Switch to configure the IP address of the WLAN Switch and other basic system information. You can do this in one of the following ways:
  - through a connection to the serial port on the WLAN Switch
  - through a Web browser connection to any line port on the WLAN Switch

For more information, see ["Run the Initial Setup" on page 2](#).

3. Connect the WLAN Switch to the wired network.

For more information, see ["Connect the Switch to the Wired Network" on page 6](#).

4. Ensure that the APs, when installed and powered on, will be able to locate and connect to the WLAN Switch.

For more information, see ["Ensure APs Can Connect to the Switch" on page 7](#).

5. Connect your APs to the network.

See ["Install the APs" on page 9](#).

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## Before You Begin

1. Review the contents of your WLAN Switch shipment to ensure that you have received the following:
  - Alcatel WLAN Switch with appropriate power cord and accessories
  - *Alcatel Quick Start Guide* (this document)
  - *AOS-W End User License Agreement*
2. Read the *AOS-W End User License Agreement*.

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## Run the Initial Setup

The Initial Setup configures the IP address of the WLAN Switch, the role (master or local) of the WLAN Switch, and passwords for administrator and configuration access.

You perform the Initial Setup the first time you connect to and log into the WLAN Switch or whenever the WLAN Switch is reset to its factory default configuration. After you complete the Initial Setup, the WLAN Switch reboots using the new configuration information you entered.

**NOTE:** Do not connect the WLAN Switch to your network before you run the Initial Setup. The WLAN Switch boots up with a default IP address which could interfere with your network. In addition, the DHCP server on the WLAN Switch is enabled during the Initial Setup. Completing the Initial Setup disables the DHCP server. If you connect the WLAN Switch to your network before completing the Initial Setup, the DHCP server is active on your network.

Once you have completed the Initial Setup, or if the Initial Setup has already been performed on your WLAN Switch, you can use either the CLI or WebUI for further configuration.

## Prerequisite Information

You need the information in [Table 1](#) for the Initial Setup:

**TABLE 1** Required Information for Initial Setup

Option	Description
System Name	A user-defined name by which the WLAN Switch will be referenced. You can specify a name of up to 64 characters.
VLAN 1 IP Address and Subnetwork Mask	The IP address that the WLAN Switch will use to communicate with other WLAN Switches and with Alcatel Access Points.
Default Gateway	Default gateway on the subnetwork to which the WLAN Switch will be connected. (This is usually the IP address of the interface on the upstream switch or router to which you will connect the WLAN Switch.) The default gateway and the VLAN 1 IP address need to be in the same network.
Switch Role	<p>One of the following:</p> <ul style="list-style-type: none"> <li>■ Master: if this is the only Alcatel WLAN Switch on the network.</li> <li>■ Local: if this WLAN Switch is one of many on the network and will be managed by a master switch. (You need to provide the IP address of the master switch.)</li> </ul>
Country Code	<p>Two-letter code for the country in which the WLAN Switch will operate. The country code determines the 802.11 wireless transmission spectrum.</p> <p><b>NOTE:</b> You cannot change the country code for WLAN Switches designated for certain countries, such as the U.S. Improper country code assignment can disrupt wireless transmissions. Most countries impose penalties and sanctions for operators of wireless networks with devices set to improper country codes.</p>
Master Switch IP	(If the Switch Role is Local) IP address of the WLAN Switch that will act as master for this local switch.

**TABLE 1** Required Information for Initial Setup (Continued)

Option	Description
admin User Password	Password of up to 32 characters for the <b>admin</b> user to log in to the WLAN Switch.
Enable Mode Password	Password of up to 15 characters for the <b>admin</b> user to access the Enable mode in the CLI.
Date and Time	Time, date, and time zone.

You can run the Initial Setup in one of the following ways:

- Through a Web browser connection to a line port on the WLAN Switch
- Through a connection to the serial port on the WLAN Switch

## Web Browser Connection

The default IP address of the WLAN Switch is 172.16.0.254. When you connect a PC or workstation to a line port on the WLAN Switch, you can connect to this IP address through a Web browser to run the Initial Setup.

You can use any PC or workstation on which you can run a Web browser. The system must either be configured to obtain its IP address via DHCP or configured to have a static IP address on the 172.16.0.0/24 subnetwork.

To run the Initial Setup from a Web browser:

1. Make sure that the WLAN Switch is not connected to any device on your network.
2. Boot up the Alcatel WLAN Switch.
3. Connect your PC or workstation to a line port on the WLAN Switch.
4. On your PC or workstation, open a Web browser and connect to <http://172.16.0.254>.

You should see a screen similar to the following:

**FIGURE 1** Initial Setup for Web Browser Connection

5. Enter the information described in [Table 1](#).
6. Click **Save & Reboot** when you are done.

The WLAN Switch reboots.

Proceed to [“Connect the Switch to the Wired Network”](#) on page 6.

## Serial Port Connection

The serial port is located on the front panel of the WLAN Switch. When you connect a terminal or PC/workstation running a terminal emulation program to the serial port on the WLAN Switch, you can run the Initial Setup.

To run the Initial Setup from a serial connection:

1. Configure your terminal or terminal emulation program to use the following communication settings:

Baud Rate	Data Bits	Parity	Stop Bits	Flow Control
9600	8	None	1	None

2. Connect your terminal or PC/workstation to the serial port on the WLAN Switch using an RS-232 serial cable.

All accessory kits shipped with Alcatel WLAN Switches contain an RJ-45 cable and DB-9 to RJ-45 adapter for this purpose. You may need to provide a USB adapter to connect the serial cable to your PC.

3. Boot up the Alcatel WLAN Switch.

After the WLAN Switch has booted up, you should see a screen similar to the following:

```
***** Welcome to the OAW-4302 setup dialog *****
This dialog will help you to set the basic configuration for the switch.
These settings, except for the Country Code, can later be changed from the
Command Line Interface or Graphical User Interface.

Commands: <Enter> Submit input or use [default value], <ctrl-I> Help
<ctrl-B> Back, <ctrl-F> Forward, <ctrl-A> Line begin, <ctrl-E> Line end
<ctrl-D> Delete, <BackSpace> Delete back, <ctrl-K> Delete to end of line
<ctrl-P> Previous question <ctrl-X> Restart beginning

Enter System name [OAW-4302]:
```

**FIGURE 2** Initial Setup for Serial Port Connection

4. Enter the information described in [Table 1](#).
5. At the end of the Initial Setup, you are asked to review and confirm your configuration changes. Enter **y** to accept the changes.

The WLAN Switch reboots.

Proceed to [“Connect the Switch to the Wired Network”](#).

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## Connect the Switch to the Wired Network

Connect a port on the WLAN Switch to the appropriately-configured port on a Layer-2 switch or router. Make sure that you have the correct cables and that the port LEDs indicate proper connections. Refer to the *Installation Guide* for your Alcatel WLAN Switch for port LED and cable descriptions.

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## Ensure APs Can Connect to the Switch

Before you install APs in a network environment, you must ensure that the APs will be able to locate and connect to the WLAN Switch when powered on. Specifically, you need to ensure the following:

- When connected to the network, each AP is assigned a valid IP address
- APs are able to locate the WLAN Switch

### IP Addresses for APs

Each Alcatel AP requires a unique IP address on a subnetwork that has connectivity to a WLAN Switch. Alcatel recommends using the Dynamic Host Configuration Protocol (DHCP) to provide IP addresses for APs; the DHCP server can be an existing network server or an Alcatel WLAN Switch configured as a DHCP server.

If an AP is on the same subnetwork as the master WLAN Switch, you can configure the WLAN Switch as a DHCP server to assign an IP address to the AP. The WLAN Switch must be the only DHCP server for this subnetwork.

### Using the WebUI to Enable DHCP Server Capability on the Switch

1. To use the WebUI, enter the IP address of the WLAN Switch in the URL of a browser window.

**NOTE:** The WebUI requires Internet Explorer 6.0. Other browsers may work but with limited functionality and are therefore not supported.

2. At the WebUI login page, enter the **admin** user name and the password you entered during the Initial Setup.
3. Navigate to the **Configuration > Network > IP > DHCP Server** page.
4. Select the **Enable DHCP Server** checkbox.
5. In the Pool Configuration section, click **Add**.
6. Enter information about the subnetwork for which IP addresses are to be assigned. Click **Done**.
7. If there are addresses that should not be assigned in the subnetwork:
  - A. Click **Add** in the Excluded Address Range section.
  - B. Enter the address range in the Add Excluded Address section.
  - C. Click **Done**.
8. Click **Save Configuration** at the top of the page to save this configuration to the WLAN Switch's flash memory.

## WLAN Switch Discovery

An Alcatel AP can discover the IP address of the WLAN Switch in one of several ways. The Alcatel Discovery Protocol (ADP) is enabled by default on all Alcatel APs and WLAN Switches. To use ADP, all Alcatel APs and WLAN Switches must be connected to the same Layer-2 network.

**NOTE:** If the devices are on different networks, a Layer-3 compatible discovery mechanism, such as DNS, DHCP, or IGMP forwarding, must be used instead. See “Deploying a Basic OmniAccess System” in the *AOS-W User Guide* for information.

With ADP, APs send out periodic multicast and broadcast queries to locate the master WLAN Switch. If the APs are in the same broadcast domain as the master WLAN Switch, the switch automatically responds to the APs’ queries with its IP address. If the APs are not in the same broadcast domain as the master WLAN Switch, you need to enable multicast on the network — see “Deploying a Basic OmniAccess System” in the *AOS-W User Guide* for information.

## Install the APs

Use the AP placement map generated by RF Plan to install APs. You can either connect the AP directly to a port on the WLAN Switch, or connect the AP to another switch or router that has Layer-2 or Layer-3 connectivity to the WLAN Switch.

If the Ethernet port on the WLAN Switch is an 802.3af Power over Ethernet (PoE) port, the AP automatically uses it to power up. If a PoE port is not available, you need to obtain an AC adapter for the AP from Alcatel. For more information, see the *Installation Guide* for the specific AP.

Once an AP is connected to the network and powered up, it attempts to locate the WLAN Switch using ADP.

On the WLAN Switch, you can view the APs that have connected to the WLAN Switch in the WebUI. Navigate to the **Configuration > Wireless > AP Installation** page. [Figure 3](#) shows an example of this page.

The screenshot shows the 'Wireless > AP Installation > Provisioning' page in the Alcatel WebUI. The page features a search bar and a table with the following data:

AP Name	AP Group	AP IP	AP Type	AP MAC Address	AP Serial Number	Status
00:0b:86:c0:d:d8	default	192.168.10.254	65	00:0b:86:c0:d:d8	A90008272	Up 3h:33m:18s

The table also includes a search icon, a 'Provision' button, and pagination information: '1 | 1-1 of 1 | 10'.

**FIGURE 3** APs Connected to WLAN Switch

After you have installed a basic Alcatel OmniAccess system, the Alcatel AP advertises the default **alcatel-ap** SSID. Wireless users can connect to this SSID but because you have not yet configured authentication, policies, or user roles, they will not have access to the network.

Volume 3, “Configuring APs” in the *AOS-W User Guide* describes how to configure APs. The other volumes in the *AOS-W User Guide* provide more information about configuring and using features of the Alcatel OmniAccess system.

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## Contacting Alcatel

### Contact Center Online

- Main Site <http://www.alcatel.com/enterprise>
- Support Site <http://eservice.ind.alcatel.com>
- Email [support@ind.alcatel.com](mailto:support@ind.alcatel.com)

### Sales & Support Contact Center Telephone

- North America 1-800-995-2696
  - Latin America 1-877-919-9526
  - Europe +33 (0) 38 85 56 92 9
  - Asia Pacific +65 6586 1555
  - Worldwide 1-818-880-3500
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