

# OmniVista 3600 Air Manager 7.7

## Installation Guide

### Overview

This document is designed as a reference for installing OmniVista 3600 Air Manager 7.7 using the CentOS software bundled with the .iso disc image.

### Installing on a VMware Server

Be sure to consider the following if you are installing OV3600 7.7 on a VMware server:

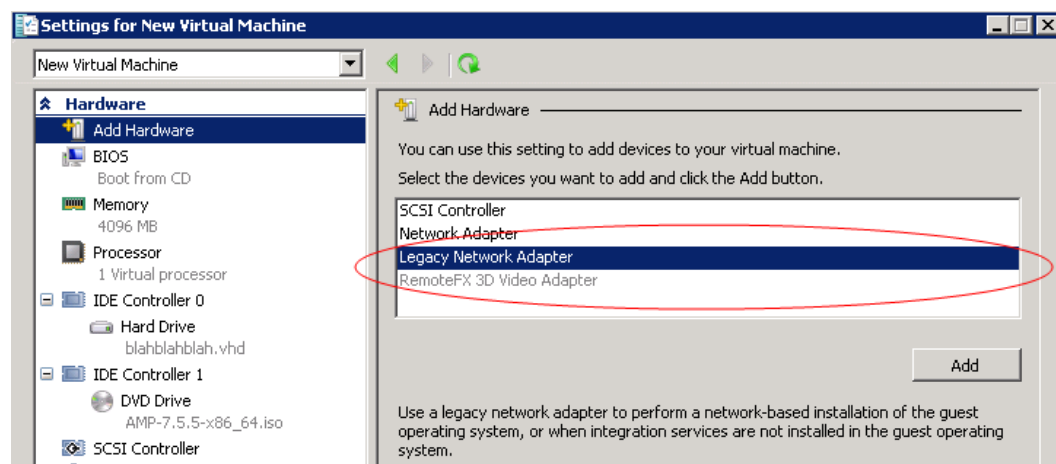
- Always install VMware Tools prior to installing OV3600.
- Consult the hardware sizing guide to be sure that enough resources are allocated to the VM.

### Installing in a Hyper-V Virtual Environment

A legacy network adapter must be configured in order to install in a Hyper-V virtual environment. Follow the steps below before installing OV3600.

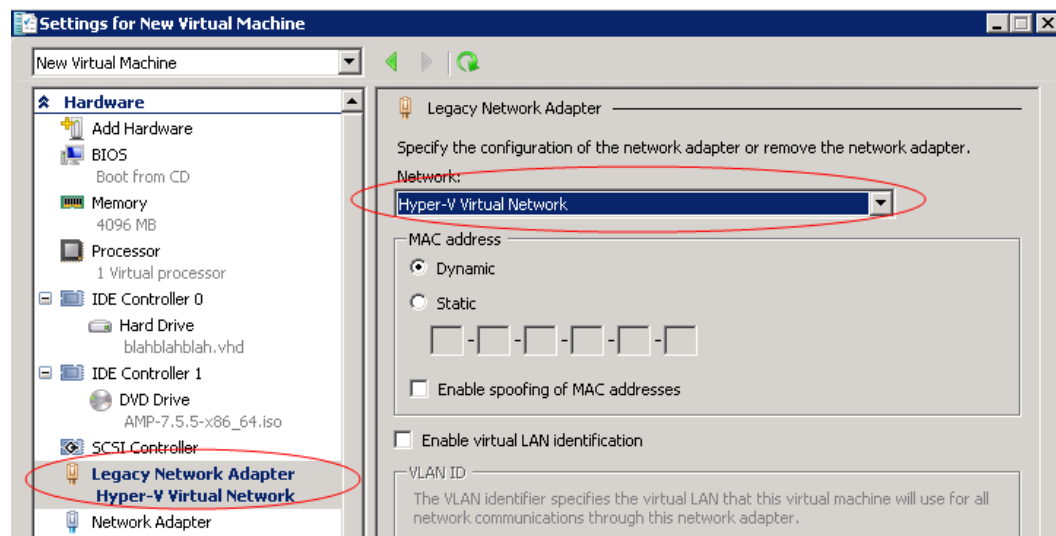
1. During the initial setup of the virtual machine, specify to add a new Legacy Network Adaptor in the Add Hardware section. The image is similar to below.

**Figure 1** Add a Legacy Network Adapter



2. Click Add. In the left pane, select the legacy network adapter, and configure its settings in the right pane.

**Figure 2** Add a Legacy Network Adapter



## Installing on a Red Hat Enterprise Linux Server

If you are installing OV3600 on a Red Hat Enterprise Linux server, contact Alcatel-Lucent support.



OV3600 does not support downgrading to older versions. Significant data could be lost or compromised in such a downgrade. In unusual circumstances requiring that you return to an earlier version of OV3600, we recommend you perform a fresh installation of the earlier OV3600 version, and then restore data from a pre-upgrade backup.

## Pre-Installation Checklist

Use this check list to ensure installation goes smoothly.

**Table 1:** Pre-Installation Checklist

Checklist	
Have available the OV3600 license key sent to you in an email sent from Alcatel-Lucent	
Obtain dedicated server meeting Alcatel-Lucent sizing specifications	
Determine the static IP address for each OV3600 server	
Firewall provisioning enabling proper ports/protocols	
Determine WLAN infrastructure properties (type, quantity, and location)	
Determine WLAN infrastructure access credentials (SNMP, telnet, SSH, etc)	
Determine WLAN security policy specifications	
Set router and switches to monitoring (optional)	
Configure upstream NMS applications (optional)	
Determine wireless client authentication servers (optional)	

## Checklist

Determine OV3600 administrative authentication servers like TACACS+, LDAP, or RADIUS (optional)

If upgrading, ensure that your current version is not more than two versions behind. For example, when upgrading to OV3600 7.7, you must already be using OV3600 7.5 or newer. Contact technical support for assistance with upgrading if you are upgrading from greater than two versions.

## Minimum Supported Browsers

Windows®

- Internet Explorer® 9
- Firefox® 3.x
- Google Chrome™ 9.x (stable)

Mac OS X® (10.5, 10.6, 10.7)

- Safari® 5.x
- Firefox® 3.x
- Google Chrome™ 9.x

## Hardware Requirements and Installation Media

The OV3600 installation DVD includes all software (including the Linux OS) required to complete the installation of OV3600. OV3600 supports any hardware that is Red Hat Enterprise Linux 6.2 certified. By default, all installs are based on a 64-bit operating system.

OV3600 hardware requirements vary by version. As additional features are added to OV3600, increased hardware resources become necessary. For the most recent hardware requirements, refer to the *OmniVista 3600 Air Manager 7.7 Server Sizing Guide*.

OV3600 is intended to operate as a soft appliance. Other applications should not run on the same installation. Additionally, local shell users can access data on OV3600, so it is important to restrict access to the shell only to authorized users.

You can create pseudo users in place of root for companies that don't allow root logins. Customers who disallow root access can give pseudo privileges to other user accounts.

## Creating the OV3600 Installation DVD from the .iso Disc Image

A variety of software tool can be used to create an installation DVD from the OV3600 Installation DVD .iso disc image. You can use a free tool called *burnatonce*.



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The DVD burning software included with Windows XP does not currently support the ability to create a DVD from an .iso disc image.

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1. Download and save the OmniVista 3600 Air Manager 7.7 Installation DVD .iso disc image.
2. Download and install *burnatonce* from <http://www.burnatonce.net/downloads/>. Windows 95/ME users will need to download and install an additional ASPI layer.
3. Insert a blank DVD-R into the DVD-R drive.
4. Right-click on the OV3600 Installation DVD .iso disc image file and select **burnatonce**.

5. When the burnatonce program opens, click the **Write** button. If *burnatonce* has not automatically associated to the .iso disc image, run burnatonce manually and select the OV3600 install image from the **Load** menu.

For help with DVD burning software other than burnatonce, please refer to the user guide for that product and reference the option to create a DVD from .iso disc image. With Nero, for instance, this option may be found under **File > Burn Image or Recorder > Burn Image**.

## Server Requirements

OV3600 runs on a dedicated system and is compatible with most standard PC or rack-mount server hardware. The Installation DVD will format the hard disk, install the CentOS operating system, and install the OV3600 software.

For minimum hardware requirements, refer to the *OmniVista 3600 Air Manager 7.7 Sizing Guide*, or contact Alcatel-Lucent support. The hardware must support Red Hat Enterprise 5.0.

## Installing Linux CentOS 6.2 (Phase 1)

Perform the following steps to install the Linux CentOS 6.2 operating system. The Linux installation is a prerequisite to installing OV3600 on the network management system.



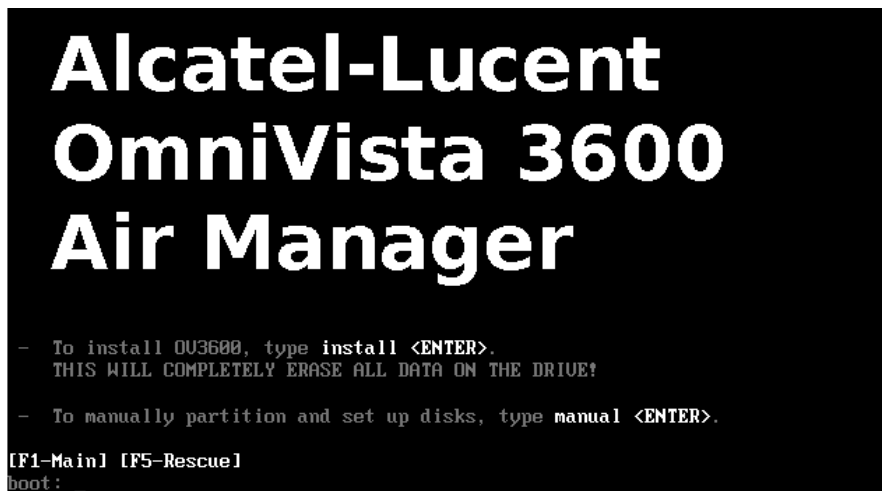
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This procedure erases the hard drive(s) on the server.

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1. Insert the OV3600 installation DVD into the drive and boot the server.
2. Type `install` and press **Enter**.  
To configure the partitions manually, type `manual` and press **Enter**.

**Figure 3** *OV3600 Installation*



3. Allow the installation process to continue. Installing the CentOS software (Phase I) takes 10 to 20 minutes to complete. This process formats the hard drive and launches Anaconda to install all necessary packages. Anaconda gauges the progress of the installation.  
Upon completion, the system will prompt you to eject the installation DVD and reboot the system. The GRUB screen will appear upon reboot.
4. Remove the DVD from the drive and store it in a safe location.

# Installing the OV3600 Software (Phase 2)

## Getting Started

Perform the following steps when the GRUB screen appears.

1. Press **Enter** or wait six seconds. The system automatically loads the kernel.
2. When the kernel is loaded, log into the server using the following credentials:
  - login = **root**
  - password = **admin**
3. Start the OV3600 software installation script by executing the `./ov3600-install` command.  
Type `./ov3600-install` at the command prompt and press **Enter** to execute the script.

## Step 1: Configuring Date and Time

The following message appears. This step ensures the proper date and time are set on the server.

```
----- Date and Time Configuration -----  
Current Time: Fri May 24 09:18:12 PST 2013  
1) Change Date and Time  
2) Change Time Zone  
0) Finish
```

Ensure that you enter the accurate date and time during this process. Errors will arise later in the installation if the specified date varies significantly from the actual date, especially if the specified date is in the future and it is fixed later. Best practices is to configure NTPD to gradually adjust your clock to the correct time.

1. Select **1** to set the date and select **2** to set the time zone. Press **Enter** after each configuration to return to the message menu above.



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Changing these settings after the installation can cause data loss, especially for time-series data such as Client and Usage graphs. Avoid delayed configuration.

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2. Press **0** to complete the configuration of date and time information and to continue to the next step.

## Step 2: Checking for Prior Installations

The following message appears after the date and time are set:

```
Welcome to OV3600 Installer Phase 2  
STEP 2: Checking for previous OV3600 installations
```

If a previous version of OV3600 software is not discovered, the installation program automatically proceeds to Step 3. If a previous version of the software is discovered, the following message appears on the screen.

```
The installation program discovered a previous version of the software. Would you like to re  
install OV3600? This will erase OV3600's database. Reinstall (y/n)?
```

Type **y** and then press **Enter** to proceed.



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This action erases the current database, including all historical information. To ensure that the OV3600 database is backed up prior to reinstallation, answer ``n`` at the prompt above and contact your Value Added Reseller or directly contact Alcatel-Lucent support.

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## Step 3: Installing OV3600 Software

The following message appears while the OV3600 software is transferred and compiled.

```
STEP 3: Installing OV3600 software  
This will take a few minutes.  
Press Alt-F9 to see detailed messages.
```

Press Alt-F1 return to this screen.

This step requires no user input, but you can follow the instructions to monitor its progress and switch back to the installation screen.

#### Step 4: Checking the OV3600 Installation

After the OV3600 software installation is complete, the following message appears:

```
STEP 4:  Checking OV3600 installation
         Database is up.
         OV3600 is running version: (version number)
```

This step requires no user input. Proceed to the next step when prompted to do so.

#### Step 5: Assigning an IP Address to the OV3600 System

While the OV3600 primary network interface accepts a DHCP address initially during installation, OV3600 does not function when launched unless a static IP is assigned. Complete these tasks to assign the static IP address. The following message appears:

```
STEP 5: Assigning OV3600's address
         OV3600 must be configured with a static IP.
```

```
----- Primary Network Interface Configuration -----
1)  IP Address   : xxx.xxx.xxx.xxx
2)  Netmask     : xxx.xxx.xxx.xxx
3)  Gateway     : xxx.xxx.xxx.xxx
4)  Primary DNS : xxx.xxx.xxx.xxx
5)  Secondary DNS: xxx.xxx.xxx.xxx

9)  Commit Changes
0)  Exit (discard changes)
```

If you want to configure a second network interface, please use OV3600's web interface, OV3600 Setup --> Network Tab

1. Enter the network information.



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The Secondary DNS setting is an optional field.

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2. To commit the changes, type **9** and then press **Enter**. To discard the changes, type **0** and then press **Enter**.

#### Step 6: Naming the OV3600 Network Administration System

Upon completion of the previous step, the following message appears:

```
STEP 6:  Naming OV3600
         OV3600 is currently set to: New OV3600
         Please enter a name for your OV3600:
```

At the prompt, enter a name for your OV3600 server and press **Enter**.

#### Step 7: Generating OV3600's SSL Certificate

Upon completion of the previous step, the following message appears on the screen:

```
STEP 7:  Generating OV3600's SSL Certificate
         Does OV3600 have a valid DNS name on your network (y/n)?
```

1. If OV3600 does not have a valid host name on the network, type **n** at the prompt. The following appears:

```
Generating SSL certificate for < IP Address >
```

2. If OV3600 has a valid host name on the network, type **y** at the prompt. The following appears:  
Enter OV3600's fully qualified domain name:
3. Type the OV3600 DNS name and press **Enter**. The following message appears:  
Generating SSL certificate for < IP Address >  
Proceed to the next step when the system prompts you.

## Step 8: Changing the Default Root Password

Upon completion of the prior step, the following message appears:

```
STEP 8: Changing default root password.  
It is strongly recommended that you change the default 'root' password.  
Please use a password that you consider to be safe, secure, and memorable.
```

```
Changing password for user root.  
New Password:
```

Enter the new root password and press **Enter**. The Linux root password is similar to a Windows administrator password. The root user is a super user who has full access to all commands and directories on the computer.

This password should be kept as secure as possible because it allows full access to the machine. This password is not often needed on a day-to-day basis but is required to perform OV3600 upgrades and advanced troubleshooting. If you lose this password, contact Alcatel-Lucent support for resetting instructions.

## Completing the Installation

Upon completion of all previous steps, the following message appears.

```
CONGRATULATIONS! OV3600 is configured properly.  
To access the OV3600 web console, browse to https://<IP Address>  
Login with the following credentials:  
Username: admin  
Password: admin
```

- To view the Phase 1 installation log file, type **cat /root/install.log**.
- To view the Phase 2 installation log file, type **cat /root/ov3600-install.log**.
- To access the OV3600 GUI, enter the OV3600 IP address in the address bar of any browser. The OV3600 GUI then prompts for your license key. If you are entering a dedicated Master Console or OV3600 Failover license, refer to "Supporting OmniVista 3600 Air Manager Servers with the Master Console" in the *OmniVista 3600 Air Manager 7.7 User Guide* for additional information.

## Upgrade Instructions

To upgrade OV3600:

1. Log in to the OV3600 server as the root user.
2. Run the following command (where x.x.x is equal to the latest OV3600 version)  

```
# start_ov3600_upgrade -v x.x.x
```



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The OV3600 upgrade process may change. Please contact support and consult the latest OV3600 release announcement for detailed instructions and changes.

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## Upgrading Without Internet Access

If your OV3600 cannot get to the Internet:

1. Download the latest OV3600 version from the download page at: <http://service.esd.alcatel-lucent.com>

2. Copy the file to the OV3600 /root directory using WinSCP.

3. Run the following command on OV3600:

```
# start_ov3600_upgrade -v x.x.x
```

The `start_ov3600_upgrade` script will check the /root directory for the latest update. If the update is not found, the script will attempt to download it from the Alcatel-Lucent support page. The script will then extract the version specific upgrade script. The version specific script will deploy all needed files, update the database, perform any data migrations and restart the OV3600 services.

## Accessing the OV3600 Web Interface

Enter the IP address assigned to the OV3600 server into the URL box of your web browser. Use these default credentials to log in to the system:

- Username: **admin**
- Password: **admin**

The first page to appear after you log in is the **Home > License** page. Paste the OV3600 license key you received into the license field on this page, then click **Save** to display the OV3600 licensing agreement.

Click **I Accept** to agree to the terms of the license agreement and apply the license key.

## Changing Login Credentials

Alcatel-Lucent strongly recommends that you change the system default credentials

- The password for the default web interface user may be changed using the web interface itself, from the **OV3600 Setup > Users** page. Click the pencil icon to edit the admin user.
- The password for the root user can be changed by entering the command **passwd** on the server command line prompt.

## Configuring and Mapping Port Usage for OV3600

The following table itemizes the communication protocols and ports necessary for OV3600 to communicate with wireless LAN infrastructure devices, including access points (APs), controllers, routers, switches, and RADIUS servers. Assign or adjust port usage on the network administration system as required to support these components.

**Table 2:** *OV3600 Protocol and Port Chart*

Port	Type	Protocol	Description		Device Type
21	TCP	FTP	Firmware distribution	>	APs or switches
22	TCP	SSH	Configure devices	>	APs or switches
22	TCP	SSH	Configure OV3600 from the CLI	<	Laptop or workstation
22	TCP	VTUN	Support connection (optional)	>	Alcatel-Lucent supports home office
22	TCP	SCP	Transfer configuration files or FW	<	APs or switches
23	TCP	Telnet	Configure devices	>	APs or switches



Port	Type	Protocol	Description		Device Type
23	TCP	VTUN	Support connection (Optional)	>	Alcatel-Lucent supports home office
25	TCP	SMTP	Support email (optional)	>	Alcatel-Lucent supports email server
49	UDP	TACACS	OV3600 Administrative Authentication	>	Cisco TACACS+
53	UDP	DNS	DNS lookup from OV3600	>	DNS Server
69	UDP	TFTP	Transfer configuration files or FW	<	APs or switches
80	TCP	HTTP	Configure devices	>	Legacy APs
80	TCP	VTUN	Support connection (optional)	>	Alcatel-Lucent supports home office
161	UDP	SNMP	Get and Set operations	>	APs or switches
162	UDP	SNMP	Traps from devices	<	APs or switches
162	UDP	SNMP	Traps from OV3600	>	NMS
443	TCP	HTTPS	Web management	<	Laptop or workstation
443	TCP	HTTPS	WLSE polling	>	WLSE
443	TCP	VTUN	Support connection (optional)	>	Alcatel-Lucent supports home office
1701	TCP	HTTPS	AP and rogue discovery	>	WLSE
1741	TCP	HTTP	WLSE polling	>	WLSE
1812	UDP	RADIUS Auth	Authenticate & authorize OV3600 administrative users on a RADIUS server.	>	RADIUS auth server
1813	UDP	RADIUS accounting	Retrieve usernames for authenticated WLAN clients from NAS (captive portal, switch, autonomous AP). Only used when usernames are not available in the SNMP MIB of a switch or autonomous AP.	<	RADIUS accounting client
2002	TCP	HTTPS	Retrieve client authentication info	>	ACS
5050	UDP	RTLS	Real Time Location Feed	<	Alcatel-Lucent thin APs
8211	UDP	PAPI	Real Time Feed (AMON)	<>	WLAN switches
		ICMP	Ping Probe	>	APs or switches

# OV3600 Navigation Basics

Every OV3600 page contains the following three basic sections:

- "Status Section" on page 10
- "Navigation Section" on page 11
- "Activity Section" on page 14

In addition, throughout OV3600, you will come across common buttons/icons and a series of customizable tables. Refer to the following sections for more information.

- "Common List Settings" on page 14
- "Buttons and Icons" on page 15

The OV3600 pages also contain **Help** links that open the *OmniVista 3600 Air Manager 7.7 User Guide*.



On most pages in OV3600, the help link is available in the upper-right portion of the page. On some of the newer pages (for example, Home > Firewall or Home > Network Deviations), the help link is a "?" beside the page title.

## Status Section

The **Status** section is a snapshot view of overall WLAN performance and provides direct links for immediate access to key system components. You can customize the contents of the Status section on the **Home > User Info** page. Refer to the [Configuring Your Own User Information with the Home > User Info Page](#) section in the *OmniVista 3600 Air Manager 7.7 User Guide*.

**Figure 4** Status section of the Home > Overview Page



The table below describes these elements in further detail.

**Table 3:** Status Section/Top Header Components of the OV3600 GUI

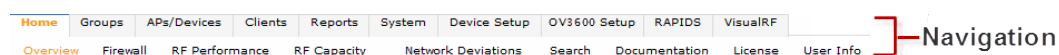
Field	Description
New Devices	The number of wireless APs or wireless LAN controllers that have been discovered by OV3600 but not yet managed by network administrators. When selected, OV3600 directs you to a page that displays a detailed list of devices awaiting authorization.
Up (Wired & Wireless)	The number of managed authorized devices that are currently responding to OV3600 requests. When selected, OV3600 shows a detailed list of all Up devices.
Up (Wired)	The number of managed authorized, wired devices that are currently responding to OV3600 requests. When selected, OV3600 shows a detailed list of all Up devices.
Up (Wireless)	The number of managed authorized, wireless devices that are currently responding to OV3600 requests. When selected, OV3600 shows a detailed list of all Up devices.
Down (Wired & Wireless)	The number of managed, authorized devices that are not currently responding to OV3600 SNMP requests. When selected, OV3600 shows a detailed list of all Down devices.
Down (Wired)	The number of managed authorized, wired devices that are not currently responding to OV3600 requests. When selected, OV3600 shows a detailed list of all Up devices.
Down (Wireless)	The number of managed authorized, wireless devices that are not currently responding to OV3600 requests. When selected, OV3600 shows a detailed list of all Up devices.

Field	Description
Mismatched	The total number of Mismatched devices. A device is considered mismatched when the desired configuration in OV3600 does not match the actual device configuration read from the device.
Rogue	The number of devices that have been classified by the RAPIDS rules engine above the threshold defined on the <b>Home &gt; User Info</b> page. If, for example, the threshold is defined as Suspected Rogue, then the Rogue count will include Suspected Rogues as well as classifications above Suspected, which include Rogue and Contained Rogue.
Clients	The number of wireless users currently associated to the wireless network via all the APs managed by OV3600 . When selected, OV3600 shows a list of users that are associated. Prior to version 7.4, this was called Users.
VPN Sessions	Displays the number of active VPN sessions. When selected, OV3600 shows a list of active sessions on the <b>Clients &gt; VPN Sessions</b> page. Note that if this page is empty, then there are no active VPN sessions to view. You can navigate to the <b>APs/Devices &gt; List</b> page and verify in the table that there are no active VPN sessions.
Alerts	Displays the number of non-acknowledged OV3600 alerts generated by user-configured triggers. When selected OV3600 shows a detailed list of active alerts.
Include Device Types in Header Stats	<p>You can support statistics for any combination of the following device types:</p> <ul style="list-style-type: none"> <li>● Fat APs</li> <li>● Thin APs</li> <li>● Controllers</li> <li>● Routers/Switches</li> <li>● Others</li> </ul> <p>Refer to the <a href="#">Configuring Your Own User Information with the Home &gt; User Info Page</a> section in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i>.</p>
Severe Alert Threshold	<p>The <b>Severe Alert Threshold</b> determines the severity level that results in a Severe Alert. Specify either Normal, Warning, Minor, Major, or Critical as the severity alert threshold value. These threshold values are tied to triggers that are created on the <b>System &gt; Triggers</b> page. For example, if a trigger is defined to result in a Critical alert, and if the Severe Alert Threshold here is defined as Major, then the list of Severe Alerts will include all Major and Critical alerts. Similarly, if this value is set to Normal, which is the lowest threshold, then the list of Severe Alerts will include all alerts.</p> <p>When a Severe Alert exists, a component named <b>Severe Alerts</b> will appear at the right of the <b>Status</b> field in bold red font. This field will not display if a Severe Alert does not exist. In addition, only users who are enabled for viewing Severe Alerts on the <b>Home &gt; User Info</b> page can see severe alerts.</p>
Search	Use the Search field to perform partial string searches on a large number of fields including the notes, version, secondary version, radio serial number, device serial number, LAN MAC, radio MAC and apparent IP of all the APs as well as the client MAC, VPN user, LAN IP, VPN IP fields.

## Navigation Section

The **Navigation** section displays tabs for all main GUI pages within OV3600. The top bar is a static navigation bar containing tabs for the main components of OV3600, while the lower bar is context-sensitive and displays the subtabs for the highlighted tab.

**Figure 5** Navigation section of the Home > Overview Page



Some navigation items may be hidden for users depending on a user's role. The table below describes the navigation elements in further detail.

**Table 4: Components and Subtabs of OV3600 Navigation**

Main Tab	Description	Subtabs
Home	<p>The <b>Home</b> pages provide basic OV3600 information including system name, host name, IP address, current time, running time, and software version.</p> <p>The Home pages also provide a central point for network status information and monitoring tools, giving graphical display of network activity, and links to many of the most frequent tools in OV3600. For additional information, refer to <a href="#">Monitoring and Supporting OV3600 with the Home Pages</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i>.</p>	Overview Firewall RF Performance RF Capacity Network Deviations Search Documentation License User Info
Groups	<p>The <b>Groups</b> pages provide information on the logical groups of devices that have been established for efficient monitoring and configuration. For additional information, see <a href="#">Configuring and Using Device Groups</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i>.</p> <p>Some of the focused subtabs will not appear for all groups. Focused subtabs are visible based on the device type field on the <b>Groups &gt; Basic</b> page. This subtab is the first page to appear when adding or editing groups.</p> <p><b>NOTE:</b> When individual device configurations are specified, device-level settings override the Group-level settings to which a device belongs.</p>	List Focused Subtabs: <ul style="list-style-type: none"> <li>● Monitor</li> <li>● Basic</li> <li>● Templates</li> <li>● Security</li> <li>● SSIDs</li> <li>● AAA Servers</li> <li>● Radio</li> <li>● Controller Config</li> <li>● Cisco WLC Config</li> <li>● PTMP</li> <li>● Proxim Mesh</li> <li>● MAC ACL</li> <li>● Firmware</li> </ul>
APs/Devices	<p>The <b>APs/Devices</b> pages provide detailed information about all authorized APs and wireless LAN switches or controllers on the network, including all configuration and current monitoring data.</p> <p>These pages interact with several additional pages in OV3600. Refer to <a href="#">Discovering, Adding, and Managing Devices</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i>.</p> <p><b>NOTE:</b> When specified, device-level settings override the default Group-level settings.</p>	List New Up Down Mismatched Ignored  Focused Subtabs: <ul style="list-style-type: none"> <li>● Monitor</li> <li>● Interfaces</li> <li>● Manage</li> <li>● Audit</li> <li>● Compliance</li> <li>● Rogues Contained</li> </ul>
Clients	<p>The <b>Clients</b> pages provide detailed information about all client devices and users currently and historically associated to the WLAN, including VPN users. Prior to 7.4, this tab was called Users. For additional information, refer to <a href="#">Monitoring and Supporting WLAN Clients</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i>.</p>	Overview Connected All Rogue Clients Guest Users VPN Sessions VPN Users Tags VPN Users Subtab: <ul style="list-style-type: none"> <li>● VPN User Detail</li> </ul>

Main Tab	Description	Subtabs
Reports	The <b>Reports</b> pages list all the standard and custom reports generated by OV3600. For additional information, refer to <a href="#">Creating, Running, and Emailing Reports</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i> .	Generated Definition  <i>Definition</i> Subtab: <ul style="list-style-type: none"> <li>Detail</li> </ul>
System	The <b>System</b> page provides information about OV3600 operation and administration, including overall system status, the job scheduler, trigger/alert administration, and so forth. For additional information, refer to <a href="#">Monitoring and Supporting OV3600 with the System Pages</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i> .	Status Syslog & Traps Event Log Triggers Alerts Backups Configuration Change Jobs Firmware Upgrade Jobs Performance
Device Setup	The <b>Device Setup</b> pages provide the ability to add, configure, and monitor devices, to include setting AP discovery parameters, performing firmware management, defining VLANs, and so forth. For additional information, refer to <a href="#">Enabling OV3600 to Manage Your Devices</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i> .	Discover Add Communication Alcatel-Lucent Configuration (if Use global Alcatel-Lucent Configuration is enabled in OV3600 Setup > General) Upload Firmware & Files Certificate
OV3600 Setup	The <b>OV3600 Setup</b> pages provide all information relating to the configuration of OV3600 itself and its connection to your network. This page entails several processes, configurations, or tools in OV3600. <b>NOTE:</b> Some <b>OV3600 Setup</b> pages may not be visible depending on the role of the logged-in user set in OV3600.	General Network Users Roles Guest Users Authentication MDM Server Device Type Setup WLSE ACS NMS RADIUS Accounting PCI Compliance
RAPIDS	The <b>RAPIDS</b> pages provide all information relating to rogue access points, including methods of discovery and lists of discovered and possible rogues. For additional information, refer to <a href="#">Using RAPIDS and Rogue Classification</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i> . <b>NOTE:</b> The <b>RAPIDS</b> pages may not be visible to the logged-in user, depending on their role set in OV3600.	Overview List IDS Events Setup Rules Score Override Audit Log
VisualRF	<b>VisualRF</b> pages provide graphical access to floor plans, client location, and RF visualization for floors, buildings, and campuses that host your network. Refer to <a href="#">Using VisualRF</a> in the <i>OmniVista 3600 Air Manager 7.7 User Guide</i> .	Floor Plans Setup Import Audit Log

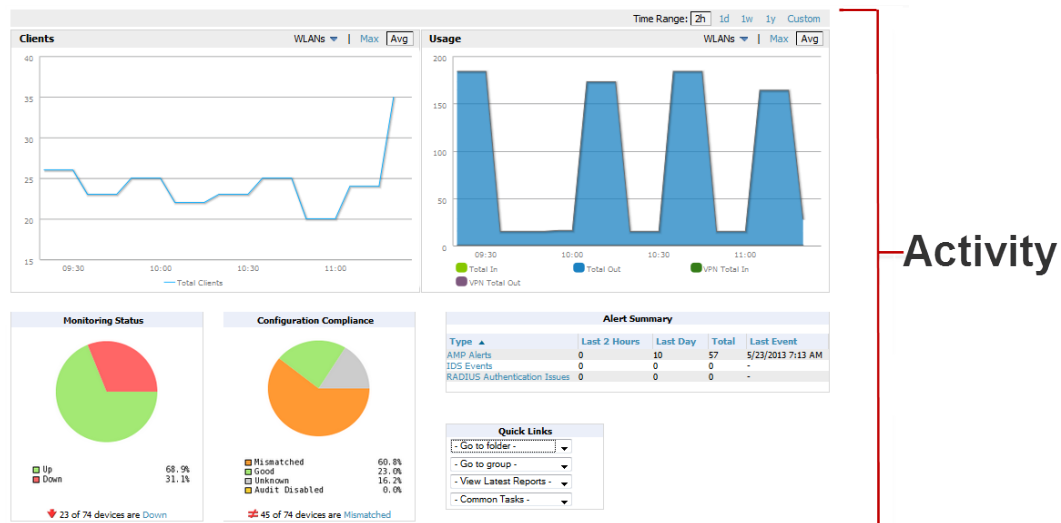


The **OV3600 Setup** tab varies with the user role.

## Activity Section

The **Activity** section is the main section of the user interface. This section displays all detailed configuration and monitoring information. It is where you view activity and implement configuration changes.

**Figure 6** Activity section of the *Home > Overview Page*



## Common List Settings

All of the lists in OV3600 Setup have some common options. All lists are paginated with a configurable number of items per page. Selecting the **Records Per Page** drop down menu (which usually looks like a range such as 1-20 on the upper left hand side of a list table) enables you select or enter the number of rows that appear at a time in the list. The next down arrow displays a drop down menu that allows you to select the exact page you would like to view, as shown in [Figure 7](#).

The **Choose Columns** option, illustrated on [Figure 7](#), allows you to configure the columns that are presented in the list and the order in which they are presented. To disable a column, clear its checkbox. To reorder the columns, drag a row to the appropriate new position. When you are satisfied with the enabled columns and their order, select **Save** at the top of the columns list.

**Figure 7 Common List Settings Choose Columns Illustration**

**Connected Clients**

1-22 ▼ of 22 Connected Clients Page 1 ▼ of 1 Reset filters **Choose columns** Choose columns for roles

Username	Device Type ▼	Save   Cancel	ID ▼
awilson	iPhone	<input checked="" type="checkbox"/> Username	↕ ersphere-wpa2
lbrooks	OS X	<input checked="" type="checkbox"/> Device Type	↕ ersphere-wpa2
pgollapudi	iPhone	<input checked="" type="checkbox"/> MAC Address	↕ ersphere-wpa2
rikinder.mahal@protiviti.com	Windows 7	<input checked="" type="checkbox"/> SSID	↕ JBA-VISITOR
ssellers	Android	<input checked="" type="checkbox"/> VLAN	↕ ersphere-wpa2
pgollapudi	iPad	<input checked="" type="checkbox"/> Interface	↕ ersphere-wpa2
ARUBANETWORKS\sgiri	Windows 7	<input checked="" type="checkbox"/> Association Time	↕ ersphere-wpa2
pgollapudi	OS X	<input checked="" type="checkbox"/> Duration	↕ ersphere-wpa2
cpurohit@arubanetworks.com	OS X	<input checked="" type="checkbox"/> Auth. Type	↕ ersphere-wpa2
gwatts	iPhone	<input checked="" type="checkbox"/> Cipher	↕ ersphere-wpa2
ARUBANETWORKS\sarvidson	Windows 7	<input checked="" type="checkbox"/> Auth. Time	↕ ersphere-wpa2
ARUBANETWORKS\tle	Windows 7	<input checked="" type="checkbox"/> Sig. Qual.	↕ ersphere-wpa2
gwatts	iPad	<input checked="" type="checkbox"/> Usage	↕ ersphere-wpa2
ARUBANETWORKS\ssellers	Windows 7	<input checked="" type="checkbox"/> Goodput	↕ ersphere-wpa2
ARUBANETWORKS\danderl	Windows 7	<input checked="" type="checkbox"/> Speed	↕ ersphere-wpa2
ARUBANETWORKS\sburke	Windows 7	<input checked="" type="checkbox"/> LAN IP Addresses	↕ ersphere-wpa2
ARUBANETWORKS\psuciadi	Windows 7	<input checked="" type="checkbox"/> LAN Hostnames	↕ ersphere-wpa2
ARUBANETWORKS\echao	Windows 7	<input checked="" type="checkbox"/> Notes	↕ JBA-VISITOR
ARUBANETWORKS\awilson	Windows 7	<input type="checkbox"/> Connection Mode	
ARUBANETWORKS\dmoores	Windows 7		
ARUBANETWORKS\ymarquez	Windows 7		
-	Hewlett-Packard Company		

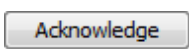




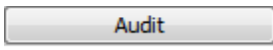

1-22 ▼ of 22 Connected Clients Page 1 ▼ of 1 Reset filters










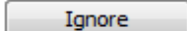






These settings are user specific. To reset them, select **Reset List Preferences** on **Home > User Info**.

**Buttons and Icons**






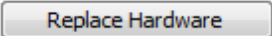
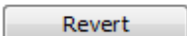

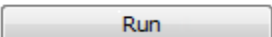
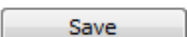
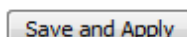
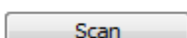
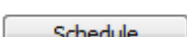



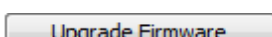




Standard buttons and icons are used throughout OV3600 as follows:

**Table 5: Standard Buttons and Icons on OV3600 pages**

Function	Image	Description
Acknowledge		Acknowledges and clears an OV3600 alert.
Add		Adds the object to both the OV3600 database and the onscreen display list.
Add Folder		Adds a new folder to hierarchically organize APs.
Alert		Indicates an alert.
Apply		Applies all saved configuration changes to devices on the WLAN.
Audit		Reads device configuration, compare to desired, and update status.
Choose		Chooses a new Helpdesk incident to be the Current Incident.

Function	Image	Description
Clients		Indicates WLAN users. Select this number to see a list of connected clients.
Create		Creates a new Helpdesk incident.
Customize		Ignores selected settings when calculating the configuration status.
Delete		Deletes an object from OV3600's database.
Down		Indicates Down devices and radios.
Download Original Floor Plan		Downloads the original VisualRF floor plan drawing. When you click this button, you have the option of opening the drawing or saving it to a file.
Drag and Drop		Dragging and dropping objects with this icon changes the sequence of items in relation to each other.
Duplicate		Duplicates or makes a copy of the configuration of an OV3600 object.
Edit		Edits the object properties.
Email		Links to email reports.
Filter (Funnel icon)		Filters list by values of the selected column. To reset all filters in all columns, click Reset filters link at the bottom of the table.
Google Earth		Views device's location in Google Earth (requires plug-in).
Ignore		Ignores specific device(s) - devices selected with check boxes.
Import		Updates a Group's desired settings to match current settings.
Manage		Manages the object properties.
Mismatched		Indicates mismatched device configuration, in which the most recent configuration in OV3600 and the current configuration on a device are mismatched.
Monitor		Indicates an access point is in monitor only mode.
New Devices		Indicates new access points and devices.
Open in New Window		Opens a VisualRF floor plan in a new browser window.
Poll Now		Polls device (or controller) immediately, override group polling settings.



Function	Image	Description
Preview		Displays a preview of changes applicable to multiple groups.
Print		Prints the report.
Reboot		Reboots devices on OV3600.
Refresh		Refreshes the display of interactive graphs when settings have changed.
Relate		Relates an AP, Group or Client to a Helpdesk incident.
Replace Hardware		Confers configuration and history of one AP to a replacement device.
Revert		Returns all configurable data on the screen to its original status.
Rogue		Indicates a rogue AP, and links to RAPIDS.
Run		Runs a new user-defined report.
Save		Saves the information on the page in the OV3600 database.
Save & Apply		Saves changes to OV3600's database and apply all changes to devices.
Scan		Scans for devices and rogues using selected networks.
Schedule		Schedules a window for reports, device changes, or maintenance.
Search		Searches OV3600 for the specified client, device, rogue, group, folder, tag, or session.
Set Time Range		Sets the time range for interactive graphs to the range specified.
Up		Indicates devices that are in the Up status.
Upgrade Firmware		Applies a new firmware image to an AP/device.
Usage		Displays current bandwidth.
View Historical Graph in New Window		Displays all data series for the selected graph over the last two hours, last day, last week, last month, and last year in one new pop-up window.
VisualRF		Links to VisualRF - real time visualization.
XML		Links to export XHTML versions of reports.

## Getting Started with OV3600

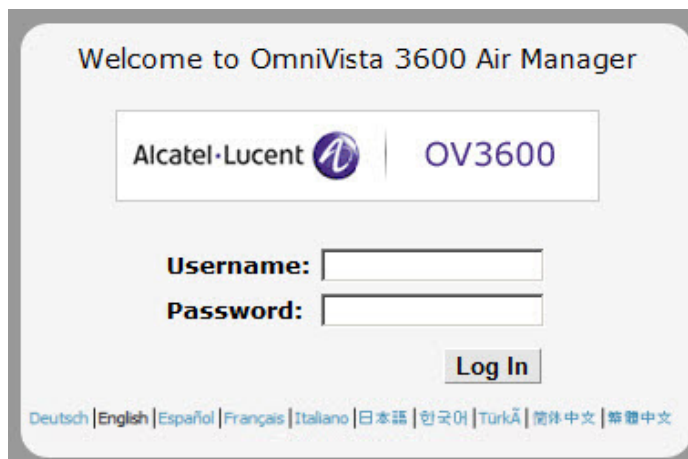
This topic describes how to perform an initial launch of the OV3600 network management solution on a session-based authentication scheme.

When an OV3600 URL is accessed either interactively using a browser or programmatically using an API, a sent cookie may match a session stored in the database, granting authentication (but not necessarily access, depending on how the user's role matches the required role for the URL). If the cookie is not present or the session in the database has expired, the request is denied.

For browser requests, this results in a login form being displayed. When you submit the login form, the supplied credentials are checked against the OV3600's user database, an external RADIUS server, an external TACACS+ server, or an external LDAP server, per the OV3600 configuration. If the credentials are valid, the user's browser is sent a session cookie to use in subsequent requests.

Use your browser to navigate to the static IP address assigned to the internal page of the OV3600, as shown in [Figure 8](#). Enter the User Name and Password as **admin/admin** for your initial login, and then select **Log In**.

**Figure 8** OV3600 Login Form



If desired, you can set one of the available languages for your login. OV3600 will remember your selected language until you log out and select another. You must log out in order to select a different language.

The first page to appear after you initially log in is the **Home > License** page. Paste the OV3600 license key you received into the license field on this page, then click **Save** to display the OmniVista 3600 Air Manager licensing agreement.

Click **I Accept** to agree to the terms of the license agreement and apply the license key.

For subsequent logins, your browser launches the OV3600 **Home > Overview** page.



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OV3600 pages are protected via SSL. Some browsers will display a confirmation dialog for your self-signed certificate. Signing your certificate will prevent this dialog from displaying. Changing the default login and password on the **OV3600 Setup > Users** page is recommended. Refer to the procedure [Creating OV3600 User Roles](#) in the *OmniVista 3600 Air Manager 7.7 User Guide* for additional information.

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