

This appendix describes how to configure several DHCP vendor-specific options. Topics include?

- “Windows-Based DHCP Server” on page 795
- “DHCP Relay Agent Information Option (Option 82)” on page 797
- “Linux DHCP Servers” on page 798

Windows-Based DHCP Server

Configuring a Microsoft Windows-based DHCP server to send option 43 to the DHCP client on an Aruba AP consists of the following two tasks:

- Configuring Option 60
- Configuring Option 43

DHCP servers are a popular way of configuring clients with basic networking information such as an IP address, a default gateway, network mask, DNS server, and so on. Most DHCP servers have the ability to also send a variety of optional information, including the Vendor-Specific Option Code, also called option 43.

When a client or an AP requests for option 43 (Vendor Specific Information), the controller responds with the value configured by administrator in the DHCP pool.

Configuring Option 60

This section describes how to configure the Vendor Class Identifier Code (option 60) on a Microsoft Windows-based DHCP server.

As mentioned in the overview section, option 60 identifies and associates a DHCP client with a particular vendor. Any DHCP server configured to take action based on a client's vendor ID should also have this option configured.

Since option 60 is not a predefined option on a Windows DHCP server, you must add it to the option list for the server.

To configure option 60 on the Windows DHCP server

1. On the DHCP server, open the DHCP server administration tool by clicking **Start > Administrative Tools > DHCP**.
2. Find your server and right-click on the scope to be configured under the server name. Select **Set Predefined Options**.
3. In the Predefined Options and Values dialog box, click the **Add** button.
4. In the Option Type dialog box, enter the following information

Table 169 Configure option 60 on the Windows DHCP server

| Field | Information |
|-------------|----------------------------------|
| Name | Aruba Access Point |
| Data Type | String |
| Code | 60 |
| Description | Aruba AP vendor class identifier |

5. Click **OK** to save this information.
6. In the Predefined Options and Values dialog box, make sure **060 Aruba Access Point** is selected from the Option Name drop-down list.
7. In the Value field, enter the following information:
String : ArubaAP
8. Click **OK** to save this information.
9. Under the server, select the scope you want to configure and expand it. Select **Scope Options** and expand it. Then select **Configure Options**.
10. In the Scope Options dialog box, scroll down and select **060 Aruba Access Point**. Confirm the value is set to **ArubaAP** and click **OK**.
11. Confirm that the option **060 Aruba Access Point** is listed in the right pane.

Configuring Option 43

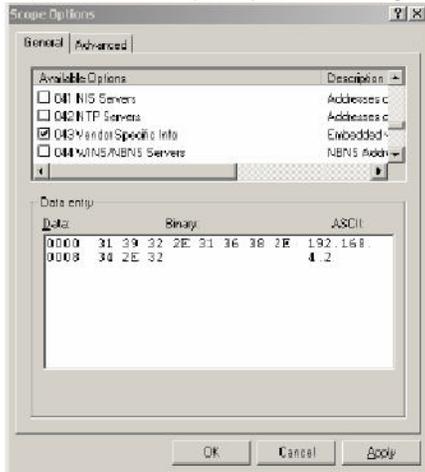
Option 43 returns the IP address of the Aruba master controller to an Aruba DHCP client. This information allows Aruba APs to auto-discover the master controller and obtain their configuration.

To configure option 43 on the Windows DHCP server:

1. On the DHCP server, open the DHCP server administration tool by clicking **Start > Administration Tools > DHCP**.

2. Find your server and right-click on the scope to be configured under the server name. Click on the Scope Options entry and select **Configure Options**.
3. In the Scope Options dialog box (Figure 195), scroll down and select 043 Vendor Specific Info

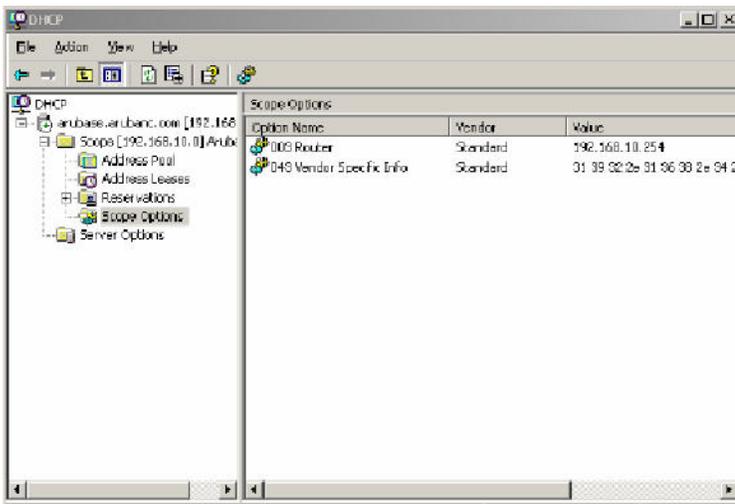
Figure 195 Scope Options Dialog Box.



4. In the Data Entry field, click anywhere in the area under the ASCII heading and enter the following information:
ASCII : Loopback address of the master controller
5. Click the **OK** button to save the configuration.

Option 43 is configured for this DHCP scope. Note that even though you entered the IP address in ASCII text, it displays in binary form.

Figure 196 DHCP Scope Values



DHCP Relay Agent Information Option (Option 82)

The DHCP Relay Agent Information option (Option 82) allows the DHCP Relay Agent to insert circuit specific information into a request that is being forwarded to a DHCP server.

The controller, when acting as a DHCP relay agent, inserts information about the AP and SSID through which a client is connecting into the DHCP request. Many service providers use this mechanism to make access control decisions.

Configuring Option 82

You can configure Option 82 using the WebUI or the CLI. You can include only the MAC address or MAC address and ESSID. The MAC address is the hardware address and ESSID is an alphanumeric name that uniquely identifies a wireless network.

In the WebUI

1. Navigate to **Configuration > Network > IP > IP Interfaces**.
2. Click **Edit** next to the VLAN ID for which you want to configure Option 82.
3. Under DHCP Helper Address select **Mac** or **Mac ESSID** from the Option-82 drop-down menu.
4. Click **Apply**.

In the CLI

This example enables Option 82 for VLAN 5 using ESSID. You can include only the MAC address or MAC address and ESSID.

```
(host) (config) #interface vlan 5
(host) (config-subif) #option-82
(host) (config-subif) #option-82 mac essid
(host) (config-subif) #
```

Linux DHCP Servers

The following is an example configuration for the Linux dhcpd.conf file. After you enter the configuration, you must restart the DHCP service.

```
option serverip code 43 = ip-address;
class "vendor-class" {
    match option vendor-class-identifier;
}
.
.
.
subnet 10.200.10.0 netmask 255.255.255.0 {
    default-lease-time 200;
    max-lease-time 200;
    option subnet-mask 255.255.255.0;
    option routers 10.200.10.1;
    option domain-name-servers 10.4.0.12;
    option domain-name "vlan10.aa.mycorpnetworks.com";
    subclass "vendor-class" "ArubaAP" {
        option vendor-class-identifier "ArubaAP";
    }
#
# option serverip <loopback-IP-address-of-master-controller>
#
    option serverip 10.200.10.10;
}
range 10.200.10.200 10.200.10.252;
}
```