

VitalQIP®

Infrastructure setup

To set up the initial infrastructure of the VitalQIP® Management system after VitalQIP has been installed, perform the following basic functions in the order shown. You can refine the steps later or configure them to manage any size network.

Note: *The variable QIPHOME is used in this document as shorthand for the VitalQIP path set in the Directory Name window during installation.*

Step 1: Log into VitalQIP

- Open a web browser and enter the VitalQIP web client URL in the following format:

– For a nonsecure Tomcat server:

http://<machine name or IP address>:<Tomcat web server port>/qip

– For a secure Tomcat server:

https://<machine name or IP address>:<secure Tomcat web server port>/qip

Note: *If the VitalQIP web client was installed with the nonsecure Tomcat web server port assigned to the default port 80, the URL format is **http://<machine name or IP address>/qip**. The default secure port is 743.*

- Enter a User ID and Password and click Login. The VitalQIP opens with all the menu items.

Step 2: (Optional) Define the organization

Note: *VitalQIP has a default organization already defined called "VitalQIP Organization". Follow this step if you wish to add an additional organization to your infrastructure.*

- Click the Infrastructure tab and select Manage Organization.
- Click the Add menu and select Add Organization.

- Enter a name (such as the company name) in the Organization Name field and click Save. The organization created successfully.
- Click the Actions menu and select Switch Organization or select the organization from the drop-down list of organizations.
- Click OK in the confirmation dialog box.

Step 3: Define a domain

- Select DNS ► Zones. The Zone Hierarchy opens.
- Click the Add menu and select Add Zone.
- Enter a domain name in the Name field. *Note the domain name for reuse later.*
- Enter an email address in the Email Address field. This address is entered in the Start of Authority (SOA) record. *Note the email address for reuse later.*
- Leave the time settings at their default values and click Save. The Zone saved successfully.

Step 4: Create a DNS server

- Select DNS ► DNS Servers. The DNS Servers Hierarchy opens.
- Click the Add menu and select Add Server.
- Select a server type, such as Lucent DNS 5.X, from the Server Type list. A set of parameters opens.
- Enter a name (of up to 63 alphanumeric characters) for the DNS server in the Host Name field. *Note the host name for reuse later.*
- Select the domain from the Domain Name list. A set of parameters opens.
- Required server parameters appear in the server parameters list. Select the parameter and enter values as follows:

- Default Directory. Enter either `%QIPHOME%\named` on Windows, or `$QIPHOME/named` on UNIX.
 - Email address for local and reverse zones. Enter the same address you entered in Step 3d.
 - RNDK Key. ***BIND-9.X, LUCENT DNS 4.X, and LUCENT DNS 5.X only***. Enter the value of the key to be placed in `named.conf`.
- g. Click Save. The DNS server saved successfully.

Step 5: Assign primary DNS server to zone

- a. Select DNS ► DNS Servers. The DNS Servers Hierarchy opens.
- b. Expand the Servers hierarchy and select the DNS server that you created in Step 4. The Server properties page opens.
- c. Click the Manage Zones tab and then click the Add as Primary icon. The Add as Primary screen opens.
- d. Click the Search button next to the Zone Search field. available zones appear in the list.
- e. Select the zone that you created in Step 3. Click Add=> to add the selected zones to the Selected Zones list and then click OK.
- f. Click Save. The DNS server is now set up, but an address must be assigned later after a network and a subnet are set up

Step 6: Define a network and subnet

- a. Select Address Management ► IPv4 ► Networks. The IPv4 Hierarchy opens.
- b. Click the Add menu and select Add Network.
- c. In the Network Address field, enter the address of the network. 0, 127 and greater than 239 are not allowed in the first octet since these numbers are reserved.
- d. Enter a name for the network in the Network Name field.
- e. Select the server from the Reverse Zone Server field. The Contact Email field is automatically populated.
- f. Click Save. Network added successfully.
- g. In the Network Properties page, click the Manage Subnets tab and then click Add subnets(s) icon.
- h. Select a subnet length from the Length field (the network size is the default).
- i. Click the ... button beside the Domain Name field.
- j. Click Search, select the domain you created in Step 3 from the list, and then click Add=> so it appears in the Associated Domain list.
- k. Click Apply and verify that the managed domain appears in the Domain Name field.

- l. Check Ping Before Assign field. VitalQIP will later ping the address when each object is created.
- m. Click Calculate. The Search Results list is populated with a foldered list of all possible subnets for the network and length/mask.
- n. Place a checkmark beside the subnet you want to create.
- o. Click Save and click OK in response to the confirmation message. The Subnet save successfully.

Step 7: Assign the DNS server an address

- a. Select the subnet that you created in Step 6. The subnet properties page opens.
- b. Click the Manage Objects tab. The Manage Objects in Subnet page opens.
- c. In the IP Address column, double-click an unused IP address. The Add Object page opens.
- d. Select Server from the Object Class field.
- e. Enter same DNS server name as you entered in Step 4d in the Object Name field.
- f. Click Save.

Step 8: Define the DHCP server

- a. Select DHCP ► DHCP Servers. The DHCP Servers Hierarchy opens.
- b. Click the Add menu and select Add Server. The Server Properties screen opens.
- c. Select a server type, such as Lucent DHCP 5.5, from the Server Type list. A set of server parameters opens.
- d. To install the DHCP Server software on the same server as the DNS server, enter the host name you entered in Step 4d in the Host Name field. Otherwise, enter a different host name and add an object for it (as described in “Step 7: Assign the DNS server an address”).
- e. Select the domain from the drop-down list. Select the domain you entered in Step 3c, or select the domain that you want.
- f. Required server parameters appear in italics. Select the parameter and enter values (if necessary) as follows:
 - Default Directory. Enter either `%QIPHOME%\dhcp` on Windows, or `$QIPHOME/dhcp` on UNIX.
 - DHCP Template. Select general.
- g. Click Save.

Step 9: Verify the subnet profile

- a. Select Address Management ► IPv4 ► Subnets. The IPv4 Hierarchy opens.

- b. Expand the subnet hierarchy and select the subnet you created in Step 6. The Subnet Properties screen opens.
- c. Enter a name in the Subnet Name field.
- d. Ensure the domain is correct.
- e. In the Preferred DNS Server field, select the DNS server defined in Step 4.
- f. Select the DHCP server you created in Step 8 from the DHCP Server drop-down list.
- g. Select general from the DHCP Option Template drop-down list.
- h. Click Save.

Step 10: Test the environment

- a. To test the environment, create three dynamic objects. Click Managed Objects.
- b. Select three unused IP addresses and click Define Scope icon. The Define Scope(s) screen opens with the range added to the scope list.
- c. Select Workstation from the Object Class field. Note that the Other required fields already display the default values you want.
- d. Click Create and click OK in response to the confirmation message.
- e. Select DNS ► DNS Servers. The DNS Servers Hierarchy opens.
- f. Expand the Servers hierarchy and select the DNS server you added in Step 4. The DNS Properties screen opens.
- g. Click Actions menu and select DNS Generation. The DNS Generation screen opens.
- h. In the Type field, select the Configuration and Data option.
- i. In the Generate To field, select the Preview option.
- j. Click Submit and click OK in response to the Scheduled the Job. Job ID is: *nnn*. message. Click Cancel.
- k. Select Tasks ► Scheduler.
- l. Double click on the completed status. The QIP DNS Generation screen opens.
- m. Click Select All followed by View Selected. Check the DNS configuration files on the screen and check that the infrastructure is configured as intended.
- n. Click the Return to file list link. To download files so you can review and/or print them, select them again and choose one of the download functions. Close the screen.

Step 11: Verify services are started

- a. Verify that all services are started:

- On Windows, click Start and select Programs ► VitalQIP ► VitalQIP Service Controller.
 - On UNIX, list all currently running VitalQIP processes by running `ps -ef | grep qip`.
- b. If the services are not running, start the VitalQIP Services. See “VitalQIP services on Windows” or “VitalQIP services on UNIX” in Chapter 2 of the *VitalQIP Administrator Reference Manual* for information on starting services.

Note: You can find additional help troubleshooting VitalQIP services in Chapter 20 of the *VitalQIP Administrator Reference Manual*.

- c. If any services cannot be started:
 - For Windows, select the **Event Viewer** tab in the Service Controller to see if there are any error messages.
 - For UNIX, refer to “Troubleshooting services/daemons on UNIX” in Chapter 20 of the *VitalQIP Administrator Reference Manual* for information on troubleshooting services.

Step 12: Initialize the DHCP server

- a. Select DHCP ► DHCP Servers. The DHCP Servers Hierarchy opens.
- b. Expand Standalone/Primary and select the DHCP server you added in Step 8. The DHCP Server Properties screen opens.
- c. Click Actions menu and select DHCP Generation. The DHCP Generation screen opens.
- d. Check that the Type field is set to Server and that the Generate to Directory field is correct.
- e. Click Submit and click OK in response to the confirmation message.

Step 13: Initialize the DNS Server

- a. Select DNS ► DNS Server. The DNS Server Hierarchy opens.
- b. Expand the Servers hierarchy and select the DNS server you added in Step 4. The DNS Properties screen opens.
- c. Click Actions menu and select DNS Generation. The DNS Properties screen opens.
- d. Check that the Type field is set to Update and that the Generate To field is set to Server.
- e. Click Submit and click OK in response to the confirmation message.

Step 14: Final test

- a. Turn on a PC on the subnet that is configured to obtain an address from a DHCP server (DHCP compliant).
- b. The PC will broadcast and receive one of the addresses created from the VitalQIP server. The PC name (Host name) will be registered in DNS. The VitalQIP database will be updated with the PC name and its MAC address.
- c. Select Address Management ► IPv4 ► Subnets. The IPv4 Hierarchy opens.
- d. Expand the subnet hierarchy and select the subnet you created in Step 6. The Subnet Properties screen opens.
- e. Click Manage Objects. The address assignment list for the subnet opens.
- f. Double-click on the IP address of the PC and check the information in the Modify Object Profile screen.

Contacting Technical Support

If you need assistance with VitalQIP, you can contact the Technical Assistance Center for your region. Contact information is provided in the following table.

Phone	Email
1. Go to http://alcatel-lucent.com/support/supportredirect.html .	support@alcatel-lucent.com
2. Select your country.	