



Alcatel-Lucent VitalQIP

DNS/DHCP & IP MANAGEMENT SOFTWARE | LUCENT DHCP
RELEASE 5.5 BUILD 9

RELEASE NOTES

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Refer to Appendix C, "Third party software license statements" in the *VitalQIP Installation Guide* (190-409-043R7.2) for a complete description of all software licenses used to develop this product.



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About this document

Purpose

This document provides important information about the contents of Lucent DHCP 5.5 B9. It covers new and enhanced features, system requirements, installation, and upgrades. The document is meant to be read by all customers who plan on using Lucent DHCP 5.5 B9. Please read this document carefully and completely before installing and using Lucent DHCP 5.5 B9.

Conventions used

The following table lists the typographical conventions used throughout this document.

Typographical conventions

Convention	Meaning	Example
Trebuchet bold	Names of items on screens.	Select the Client check box.
	Names of buttons you should click.	Click OK .
Courier	Output from commands, code listings, and log files	# Name: Share shared-network _200_200_200_0
Courier bold	Input that you should enter from your keyboard.	Run the following command: c:\setup.exe
	Names of commands and routines	The qip_getapplst routine returns the entire list of existing applications.
Courier bold italic	Input variable for which you must substitute another value. The angle brackets also indicate the value is a variable.	isql -U sa -P <sa_password>

Convention	Meaning	Example
Times bold	Names of keys on the keyboard to be pressed.	Press Enter to continue.
	Uniform Resource Locators (URLs)	The VitalQIP product site can be found at http://www.alcatel-lucent.com/wps/portal/products/ .
Times italics	Manual and book titles.	Refer to the <i>VitalQIP User's Guide</i> .
	Directories, paths, file names, and e-mail addresses.	A symbolic link must be created from <i>/etc/named.conf</i> that points to <i>named.conf</i> .
Times bold italic	Emphasis	<i>Read-only</i> . The name of the service element.

Technical Support

For assistance, contact Technical Support:

- For North America customers: **1-866-LUCENT8 (582-3688)**, Option 1, Option 2
- For Europe, Middle East, Africa, and China technical support: **00 800 00 LUCENT** or **+353 1692 4579**
- For Central and South America customers:
 - Mexico: 01 800 123 8705 or (52) 55 5278 7005
 - Brazil: 0800 89 19325 or (55) 193707 7900
 - Argentina: 0800 666 1687
 - Venezuela: 0 800 1004136
 - Costa Rica: 0800-012-2222 or 1800 58 58877

Important! For other local CALA numbers consult the web site <http://www.alcatel-lucent.com/support> or contact your local sales rep.

- For Asia Pacific technical support:
 - **1800-458-236** (toll free from within Australia)
 - (IDD) **800-5823-6888** (toll free from Asia Pacific -Hong Kong, Indonesia, South Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, and Thailand)
 - **(613) 9614-8530** (toll call from any country)

How to comment

To comment on this document, go to the Online Comment Form (<http://www.lucent-info.com/comments/>) or e-mail your comments to the Comments Hotline (comments@alcatel-lucent.com).



1 Release components

Overview

Purpose

This chapter describes software and documentation deliverables included in this release.

Contents

This chapter covers these topics.

Software deliverables	1-2
Documentation deliverables	1-3

Software deliverables

Software included in this release

The following table lists the software that comprises the Lucent DHCP 5.5 B9 release.

Table 1.1 Software deliverables

Type	Platform	Directory	File
Lucent DHCP Software	Linux	/vitalqip/LucentDHCP/5.5/linux/LucentDHCP5.5-linux-b9	<i>dhcpcd</i>
	Solaris	/vitalqip/LucentDHCP/5.5/solaris/LucentDHCP5.5-solaris.2x-b9	<i>dhcpcd</i>
	Windows	/vitalqip/LucentDHCP/5.5/w2k/LucentDHCP5.5-w2k-b9	<i>DHCPSERVICE.exe</i>

How to obtain software

VitalQIP Lucent DHCP 5.5 installation files are available with the installation of the VitalQIP 7.2 Remote Server.

Additionally, VitalQIP Lucent DHCP 5.5 installation files are available for download via Alcatel-Lucent Electronic Delivery (ALED) services. ALED uses secure HTTP and FTP to download files and documentation. In order to use ALED, you must be registered with Alcatel-Lucent Global Support.

If you are not registered with Alcatel-Lucent Global Support, visit <https://market.lucent.com/release/SPRegistrantTypeSvlt>. If you need assistance in registering, contact the Alcatel-Lucent Customer Support Services:

- Inside the United States: 1 (866) 582-3688, prompt 7
- Outside the United States: 1 (630) 218-7688

You must have SSH installed and configured before downloading installation files. For more information about setting up secure FTP, visit https://download.support.lucent.com/cgi-bin/ssh_ftp.cgi. After you have set up secure FTP, you can connect via secure FTP and access the **Product|Version|Platform** directory to download the product's files. To download the product via secure HTTP, follow these steps:

- 1 If you have not registered, register at <https://market.lucent.com/release/SPRegistrantTypeSvlt>.
- 2 Open a browser and go to <https://support.lucent.com/portal/olcsHome.do>.
- 3 Log in with your user name and password. The Customer Center is displayed.
- 4 Under Technical Support, click **Downloads**.

- 5 Click U-Z.
- 6 Under V, click on VitalQIP®.
- 7 Under Documentation and downloads, click **Downloads: Electronic Delivery**.
- 8 Select LDHCP and click **Next**.
- 9 Select DHCP5.5 and click **Next**.
- 10 Select the appropriate platform and click **Next**.
- 11 Select the file to download and click **Next**.
- 12 Specify the download directory on your local machine.
- 13 Click **Download** to use the legacy download agent, or **Download Plus** to use the GetPlus® download agent.

END OF STEPS

Documentation deliverables

Documentation available for this release

The following table lists the documentation that is available for the Lucent DHCP 5.5 B9 release.

Table 1.2 Documentation deliverables

Type	Directory	File
Release Notes	<ul style="list-style-type: none"> • /vitalqip/LucentDHCP/5.5/linux/DHCP5.5ReleaseNotes-linux • /vitalqip/LucentDHCP/5.5/solaris/DHCP5.5ReleaseNotes-solaris.2x • /vitalqip/LucentDHCP/5.5/w2k/DHCP5.5ReleaseNotes-w2k 	LDHCP55B9RN.pdf

To obtain documentation from OnLine Customer Support

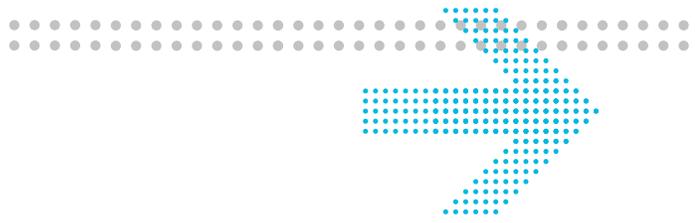
In addition to the ALED site, VitalQIP product documentation is available to customers through OnLine Customer Support (OLCS).

To navigate to OLCS, follow these steps:

- 1 Go to <https://support.lucent.com/portal/productIndexByCat.do>.

- 2 Select the product category for which you require documentation. For example, for VitalQIP documentation, select **Network, Service Management and OSS**.
 - 3 To obtain manuals, select **Manuals and Guides**. To obtain release notes, select **Release Information**.
-

END OF STEPS



2 New features

Overview

Purpose

The following sections identify the new features and/or capabilities contained in this release.

Contents

This chapter covers these topics.

New features	2-2
------------------------------	-----

New features

Features included in the Build 9 release are listed in the following table:

Table 2.1 New features in Build 9

Feature ID Number	Feature Name	Description
R.VQIP7.2-11070	Lucent DHCP 5.5 Server changes	DHCP 5.5 Server, and corresponding QIP support. The DHCP 5.5 server was modified to include vendor class information in the DHCP Lease Update Packet going up to QIP Update Service.
LDHCP00001268	Support for DHCP Timezone options	Support for Timezone options, 100 and 101, specified in RFC #4833.
LDHCP00001270	Vendor class and user class exclusion feature at scope level	Added the capability to exclude vendor and/or user classes from receiving a lease from a particular address range or scope. This feature allows multiple vendor class and/or user class values to be specified per scope and also supports the use of a trailing wildcard.
LDHCP00001274	Windows Server 2008 support.	DHCP server supported on Windows 2008.
LDHCP00001779	Shared network threshold processing	Added the capability to perform threshold monitor processing for a shared network as a single entity rather than on each individual subnet within the shared network.
LDHCP00001780	Windows XP SP3 DHCP Client workaround.	Added support for WinXPSP3OptionOrder policy to workaround problems with WinXP SP3 DHCP Client dropping DNS options when the Vendor Specific Info (option 43) occurs early in the OFFER and ACK packets.
LDHCP00001950	PingDelay policy default value to be 500 ms	The PingDelay policy has a default value of 500 ms that will cause a ping before assign to occur.
LDHCP00000277	DHCP statistic accuracy improvement	The algorithm to determine the number of unavailable D-DHCP objects in a subnet was revised.

Feature ID Number	Feature Name	Description
LDHCP00000616	DHCP MaxServerMsgQueue Size policy	The MaxServerMsgQueueSize policy was introduced to allow for the specification of a larger number of descriptor queue entries that will be dynamically allocated as needed, up to the number defined by the policy. An additional number of entries, equal to the NumberOfThreads policy value, will be allocated if all the existing entries are in use.
LDHCP00000688	DHCP Client Class support on the subnet level	Support was added for client classes (user, vendor, and device) at the subnet level.
LDHCP00000736	DHCP Depleted Subnet SNMP trap	The DHCP Subnet Depleted trap was revised to add support for identifying the shared network name when the server is unable to offer an address from a shared network.
LDHCP00000737	DHCP server last known good configuration support	The DHCP server attempts to parse <i>dhcpd.conf</i> and if successful, copies <i>dhcpd.conf</i> to <i>dhcpd.conf.lastgood</i> . If a syntax error is detected within <i>dhcpd.conf</i> , the server attempts to parse <i>dhcpd.conf.lastgood</i> . If it can parse the backup file, it copies <i>dhcpd.conf.lastgood</i> to <i>dhcpd.conf</i> . If both files are corrupt, the server exits. If <i>dhcpd.conf</i> is valid, it is copied to <i>dhcpd.conf.lastgood</i> .
LDHCP00000966	DHCP SupportRelayAgent ServerOverride policy	Support was added for DHCP server identifier override suboption of the relay agent information option (RFC 5107). With this functionality, the DHCP server can receive and process renew client messages that contain option 82 data.
LDHCP00000481	DHCP Release API callout	The DHCP Release API callout is called when the DHCP server releases an IP address.

Feature ID Number	Feature Name	Description
LDHCP00000539	AckRenewForUnused Address DHCP server policy	Allows the DHCP server to ACK a renew request from a client for an unused address (according to the server's active lease table). This capability allows the migration of clients from other DHCP servers while keeping their same addresses.
LDHCP00000540	OfferOnlyAPI RequestedAddress DHCP server policy	Forces the DHCP server to offer only the address that is specified by the discover API callout in the requested IP address parameter. This is typically from, but not restricted to, VitalAccess, if provided. If the address is not available for any reason (unmanaged, in use, forceClass mismatch, and so on), the discover message is dropped and an Info level message is written to the DHCP log. This capability allows service provider environments to only offer/ack IP addresses specified by VitalAccess.
LDHCP00000545	RFC 4388 Lease Query	DHCP server support for the lease query message has been updated to be compliant with RFC 4388. All older implementations are no longer supported.
LDHCP00000546	RFC 3004 Option 77 format	The DHCP server can be configured to support user class (option 77) values from DHCP clients that conform to RFC 3004. This RFC allows multiple values in canonical wire format as well as the previously supported ASCII encoded format.
LDHCP00000547	RFC 4702 Option 81 format	The DHCP server can now recognize and process client FQDN option 81 values that provide domain names in canonical wire format (RFC 4702) as well as the previously supported ASCII encoded format (current Microsoft Clients).

Feature ID Number	Feature Name	Description
LDHCP00000585	DHCP multiple API callout support	Allows the DHCP server to support multiple API callouts. This allows the interoperability of VitalQIP add-on products such as LDRM, Registration Manager, and custom API callouts. Refer to the <i>VitalQIP 7.2 API Toolkit User's Guide</i> for more information.



3 Test results

Overview

Purpose

This chapter is not pertinent to this Product Release.



4 Changes to interfaces, alarms, and messages

Overview

Purpose

This chapter is not pertinent to this Product Release.



5 Resolved issues

Overview

Purpose

This chapter describes resolved issues in this release.

Contents

This chapter covers these topics.

Resolved issues	5-2
---------------------------------	-----

Resolved issues

The following table identifies the customer reported issues that have been resolved in Lucent DHCP 5.5.

Table 5-1 Customer-reported ARs resolved in Lucent DHCP 5.5

Fault ID	AR number	Description of issue	Release fixed
LDHCP00002007	1-1794612	DHCP server does not like # sign in block of the corporate extensions in DHCP server conf: WARNING: dhcpd.pcy contains unknown policy option(s)	Build 9



6 Known issues

Overview

Purpose

There are no known or open issues in this Product Release.



7 System requirements

Overview

Purpose

This chapter describes software and hardware requirements and compatibility restrictions..

Contents

This chapter covers these topics.

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Supported platforms

Lucent DHCP 5.5 B9 runs on VitalQIP 7.2 remote servers. For information on platforms supported in VitalQIP 7.2, refer to the *VitalQIP 7.2 Release Notes*.

Software requirements

Lucent DHCP 5.5 B9 requires VitalQIP 7.2.

Hardware requirements

For information on Lucent DHCP 5.5 hardware requirements, refer to the VitalQIP Remote Server component in the Hardware requirements table of the *VitalQIP 7.2 Release Notes*.

Compatibility restrictions

Lucent DHCP 5.5 is compatible only with VitalQIP 7.2 and later.

Third-party or other hardware/software requirements

VMware support policy

Customers, who choose to run VitalQIP or any VitalQIP add-ons under VMware, will be supported as follows:

If an AR (Assistance Request) is opened with Alcatel-Lucent Support, customers must clearly state whether they are running the VitalQIP software in a VMware environment. It will be generally assumed that the issue being reported is common between the VMware environment and a native supported platform, and support will make every effort to resolve the problem, however respond-only objectives will apply if the issue is VMware related. In the event it becomes impossible to determine whether the problem exists with VitalQIP software or VMware, Alcatel-Lucent support reserves the right to request that the customer reproduce the issue in a native environment before further troubleshooting is attempted.

Certified performance numbers on the officially certified platforms may not hold true under VMware.

Solaris 10 Container support policy

Customers who choose to run VitalQIP components in a Solaris 10 environment will be supported as follows:

- VitalQIP Enterprise Server or Remote Server (DNS Only) will run in a Solaris 10 Container environment. The DHCP server cannot support the virtual interfaces in a container on Solaris 10.
- The customer must reproduce any problems on a native Solaris 10 platform. If the problem is reproducible in the native environment, then the customer can enter a ticket with Alcatel-Lucent Support.
- Be sure to explain that this system is running in a Solaris 10 container environment but that the problem was replicated in a supported environment. Include the version of VitalQIP you are running.
- If the problem is not reproducible in the native Solaris 10 platform, the customer must open a support request with Sun Microsystems.



8 Installation and upgrade notes

Overview

Purpose

This chapter covers the upgrade of the Lucent DHCP Service, versions 5.4 build 5 and higher to Lucent DHCP 5.5. The instructions in this chapter cover upgrades on Windows and UNIX platforms. Be aware that the failover/secondary servers must be upgraded before the primary partner servers are upgraded.

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This chapter covers these topics.

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Performing first-time installation

If you are installing Lucent DHCP 5.5 for the first time, ensure that you have met the system requirements described in the *VitalQIP 7.2 Release Notes* and then refer to the *VitalQIP Installation Guide* for instructions on remote server installation. This manual is available on the ALED site as well as the documentation area of OLCS.

Upgrade to Lucent DHCP 5.5 on Windows

To upgrade to Lucent DHCP 5.5 from Lucent DHCP 5.4:

- 1 Open the VitalQIP Service Controller by accessing **Start | Programs | VitalQIP | Service Controller**. The Service Controller window appears.
- 2 Stop the Lucent DHCP Service. Right-click **Lucent DHCP Service** and select **Stop**.
- 3 In Windows Explorer, copy the new DHCP executable **dhcbservice.exe** to *%QIPHOME%/dhcp*.
- 4 Start the Lucent DHCP Service. In the VitalQIP Service Controller, right-click the **Lucent DHCP Service** and select **Start**.

END OF STEPS

Upgrade to Lucent DHCP 5.5 on UNIX

UNIX only: pre-upgrade requirement

Before you upgrade to Lucent DHCP 5.5 on UNIX, the environment variables must be set. The environment variables will need to be set each time you start Lucent DHCP 5.5. Environment variables and their values are stored in *\$QIPHOME/etc/shrc* or *\$QIPHOME/etc/cshrc*.

To set your environmental variables, issue the following commands:

```
#cd <VitalQIP_directory>/etc  
#. ./shrc or source cshrc
```

To upgrade to Lucent DHCP 5.5 from Lucent DHCP 5.4:

- 1 Find the process ID (PID) of DHCP Server by running:

```
ps -ef | egrep dhcpd
```

-
- 2 Run kill <PID> for Lucent DHCP Server (**dhcpd**).

 - 3 Copy the executable **dhcpd** to *\$QIPHOME/usr/bin*.

 - 4 Start the VitalQIP DHCP Server by running:

```
$QIPHOME/usr/bin/dhcpd -f$QDHCPCONFIG
```

```
END OF STEPS
```



Glossary

A

ALED
Alcatel-Lucent Electronic Delivery

API
Application Programming Interface.

AR
Action Request

D

DHCP
Dynamic Host Configuration Protocol

L

LDRM
Lucent DHCP Rules Manager

R

RFC
Request For Comments

S

SNMP
Simple Network Management Protocol

SP
Service Pack

SSH
Secure Shell Protocol
