

# HP-UX AAA Server A.08.00.01 Release Notes

HP-UX 11i v2 and HP-UX 11i v3

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# 1 HP-UX AAA Server A.08.00.01 Release Notes

This document discusses the most recent product information on HP-UX AAA Server A.08.00.01. HP-UX AAA Server A.08.00.01 is supported on HP-UX 11i v2 (B.11.23) and HP-UX 11i v3 (B.11.31).

This document addresses the following topics:

- “Product Overview” (page 5)
- “What is New in This Version” (page 8)
- “Obsolescence of Features and Their Replacements”
- “Fixes Included in the HP-UX AAA Server A.08.00.01” (page 11)
- “Known Problems and Limitations in HP-UX AAA Server A.08.00.01” (page 12)
- “Supplicant Support and Interoperability” (page 15)
- “OATH-Compliant OTP Generators and Interoperability” (page 16)
- “Product Documentation” (page 17)
- “Installation Corequisites” (page 17)
- “Availability in Native Languages” (page 20)

## Product Overview

The HP-UX AAA Server utilizes the industry standard Remote Authentication Dial-In User Service (RADIUS) protocol and Extensible Authentication Protocol (EAP) to provide standards-based user authentication, authorization, and accounting services to network devices and software applications.

The HP-UX AAA Server can be utilized for securing wired and wireless LAN access, provide authentication and accounting for Virtual Private Network (VPN) gateways, firewalls and other network devices, and to enhance the security of RADIUS-enabled software applications in Enterprise and Service Provider environments.

## Product Features

The HP-UX AAA Server includes the following features:

- **Dynamic Authorization:** Enables the HP-UX AAA Server to act as a client to send RADIUS server-initiated `Disconnect` and `Change-of-Authorization (CoA)` messages and assimilate responses as specified in RFC 5176.
- **EAP-SIM and EAP-AKA authentication methods:** Supports Extensible Authentication Protocol (EAP) for authentication and session key distribution using Global System for Mobile Communications (GSM) Subscriber Identity Module (SIM) as specified in RFC 4186 and using Universal Mobile Telecommunications System (UMTS) Authentication Key Agreement (AKA) as specified in RFC 4187 in 3rd Generation Partnership Project (3GPP) network environment.

- **Scalability and High Availability:** Supports running and managing a group of multiple HP-UX AAA Servers on a single host to process multiple RADIUS requests simultaneously to offer scalability and better performance. This feature also supports running and managing a group of multiple HP-UX AAA servers on different hosts to offer high availability.
- **MS-CHAP v2 for OTP Authentication:** MS-CHAP v2 module supports Open Authentication (OATH) standards-based One-Time Password (OTP) authentication.
- **OATH Standards-Based OTP and Two-Factor Authentication:** Provides Open Authentication (OATH) standards-based One-Time Password (OTP) authentication for additional security to protect networks from phishing attacks, unauthorized network access, and identity theft. OATH standards-based OTP authentication in the HP-UX AAA Server can be customized easily to suit various deployment scenarios. Typically, OTP is used to provide two-factor authentication.
- **Web-Based User Database Administration Manager:** Provides a customizable web interface that can be used to manage user and token information stored in a SQL database.
- **HP-UX AAA Server SDK:** Server Plug-in Software Developer's Kit (SDK) for customizing and extending the features of the HP-UX AAA Server. It enables the creation of plug-ins to customize the implementation of the HP-UX AAA Server. The HP-UX AAA Server SDK is now provided with the HP-UX AAA Server.
- **Advanced Policy Engine:** An updated policy engine that provides extended syntax for complex policy actions to manipulate RADIUS requests and replies based on attribute content. The default policy files enable the administrator to execute policies without customizing the Finite State Machine (FSM). This feature includes substring manipulation.
- **Common Database Interface:** Supports HP-UX AAA Server interaction with supported databases via the SQL Access AATV and database client connector libraries.
- **EAP Support for Authenticated LAN Access:** Secure wired and wireless LANs using Extensible Authentication Protocol (EAP) to support 802.1x enabled network access devices. EAP methods supported include PEAP, TTLS, TLS, GTC, MS-CHAP v2, and MD5.
- **Multi-Server Session Management:** Supports user, group, or custom limits on concurrent logins to limit simultaneous sessions. Customizable shared session management for multiple HP-UX AAA Servers is supported via the SQL Access feature.
- **IP Address Management:** DHCP interface for centralized administration of IP Address assignment.

- **IPv6 Support:** Supports RADIUS IPv6 attributes with HP-UX 11i v2, and HP-UX 11i v3 operating systems. This feature also supports RADIUS communication over IPv6 transports with HP-UX 11i v2 and HP-UX 11i v3 operating systems.
- **SNMP Support:** Effectively integrate and manage HP-UX AAA Servers with SNMP compliant network management tools.
- **LDAP Integration:** Supports user profile storage and authentication using LDAP Version 3–compliant directories with request load balancing and failover.
- **Web-based Administration:** The Server Manager web-based administration utility provides management and configuration of multiple HP-UX AAA Servers sharing a common configuration set.
- **Secure LAN Advisor:** Utility inside the Server Manager administration tool to help plan, configure, and deploy authenticated LAN access via 802.1x and EAP.
- **Robust RADIUS Proxy Capabilities:** Forwards authentication and accounting requests to other RADIUS servers by DNS, realm, or custom criteria with configurable retry and time-out periods.
- **Multi-vendor RADIUS Client Support:** Includes pre-defined attribute mappings for leading network access vendors and a customizable vendor dictionary to support a wide range of RADIUS clients.
- **Flexible and Customized Session Logging:** Customize session logs to capture the desired volume of session and accounting information. Session logging formats for Merit (default) and Livingston CDR Standard are included. Logging directly to the database, including shared accounting for multiple HP-UX AAA Servers is also supported via the SQL Access feature.
- **IETF RADIUS RFC Standards:** Supports the following IETF RFCs:

**Table 1-1 Supported IETF RFCs**

RFC#	RFC Title
2284	PPP Extensible Authentication Protocol (EAP)
2619	RADIUS Authentication Server MIB
2621	RADIUS Accounting Server MIB
2716	PPP EAP-TLS Authentication Protocol
2865	Remote Authentication Dial-In User Service (RADIUS)
2866	RADIUS Accounting
2867	RADIUS Accounting Modifications for Tunnel Protocol Support
2868	RADIUS Attributes for Tunnel Protocol Support
2869	RADIUS Extensions

**Table 1-1 Supported IETF RFCs** (*continued*)

RFC#	RFC Title
3162	RADIUS and IPv6
4186	EAP Method for Global System for Mobile Communications (GSM) Subscriber Identity Modules (EAP-SIM)
4187	EAP Method for 3rd Generation Authentication and Key Agreement (EAP-AKA)
4226	HOTP: An HMAC-Based One-Time Password Algorithm
4672	RADIUS Dynamic Authorization Client MIB
5176	Dynamic Authorization Extensions to Remote Authentication Dial In User Service (RADIUS)

## What is New in This Version

HP-UX AAA Server version A.08.00.01 includes the following new and enhanced features:

- “Dynamic Authorization”
- “EAP-SIM and EAP-AKA authentication methods”
- “Scalability and High Availability”
- “MS-CHAP v2 for OTP Authentication”

## Dynamic Authorization

HP-UX AAA Server A.08.00.01 supports dynamic authorization, which is based on the client functionality of the HP-UX AAA Server.

RFC 5176 defines new RADIUS standards that support RADIUS server-initiated requests. These RADIUS server-initiated requests can be used to send `Disconnect` packets to disconnect user sessions, or to send `Change-Of-Authorization (CoA)` packets to change the authorization attributes of the user sessions. The HP-UX AAA Server implements the dynamic authorization capability to send requests to the authenticator, to disconnect user sessions or to change the session attributes.

For more information on how the dynamic authorization capability of the HP-UX AAA Server works, see the “Configuring the HP-UX AAA Server for Dynamic Authorization” chapter in the *HP-UX AAA Server A.08.00.01 Administrator’s Guide*.

For more information on how the client functionality of the HP-UX AAA Server works, see the “Configuring the HP-UX AAA Server for Client Functionality” chapter in the *HP-UX AAA Server A.08.00.01 Administrator’s Guide*.

## EAP-SIM and EAP-AKA authentication methods

HP-UX AAA Server A.08.00.01 supports the Extensible Authentication Protocol Subscriber Identity Module (EAP-SIM) as specified in RFC 4186 and Extensible Authentication Protocol Authentication Key Agreement (EAP-AKA) as specified in RFC 4187. EAP-SIM and EAP-AKA enable usage of mobile network authentication infrastructure for secure access to wireless LAN. EAP-SIM provides more reliable security using the underlying Global System for Mobile Communications (GSM) authentication and key agreement mechanism. EAP-AKA enhances the third generation Authentication and Key Agreement mechanism used for Universal Mobile Telecommunications System (UMTS) and CDMA2000 networks.

EAP-SIM and EAP-AKA include the following key features:

- In-built key generation (A3/A8/AKA) algorithm that can be customized or replaced with operator-specific algorithm using HP-UX AAA Server A.08.00.01 Software Development Kit (SDK).
- The Users credential (Ki) can be retrieved from the supported data stores like SQL-compliant database server. The credential can also be retrieved from external storage like an Authentication Center (AuC), if a plug-in is implemented using HP-UX AAA Server SDK.
- In-built support for an optional identity privacy support using pseudonym identity and an optional fast re-authentication procedure on per-realm basis.

For more information on the EAP-SIM and EAP-AKA authentication methods, see the “Configuring EAP-SIM and EAP-AKA Authentication Methods” chapter in the [\*HP-UX AAA Server A.08.00.01 Administrator’s Guide\*](#).

## Scalability and High Availability

HP-UX AAA Server A.08.00.01 supports scalability and high-availability.

Scalability is achieved by supporting multiple HP-UX AAA Servers on the same host and high-availability is achieved by supporting cloned HP-UX AAA Servers on the same or different hosts.

HP-UX AAA Server supports running multiple HP-UX AAA Servers on a single host, thereby ensuring optimum utilization of system resources and addressing the organizational scalability requirements.

HP-UX AAA Server can be cloned on the same host or on a different host for high-availability. If the primary HP-UX AAA Server fails or during HP-UX AAA Server maintenance, the cloned HP-UX AAA Servers serve as backup, and process client requests. If the host on which the primary HP-UX AAA Server is running fails, a clone running on a different host can serve as a backup. This ensures high-availability of the solution.

For more information on scalability and high-availability, see the “Configuring HP-UX AAA Server for Scalability and High-Availability” chapter in the [\*HP-UX AAA Server A.08.00.01 Administrator’s Guide\*](#).

## MS-CHAP v2 for OTP Authentication

HP-UX AAA Server A.08.00.01 supports MS-CHAP v2 for OTP authentication. OTP support for MS-CHAP v2 is compatible with RFC 4226.

The following functions are supported for MS-CHAP v2:

- Validate OTP
- Validate Password
- Validate OTP and Password
- Store OTP
- Proxy the OTP and password to another RADIUS server for OTP and password validation

For more information on MS-CHAP v2 for OTP Authentication, see the “OATH Standards-Based OTP Authentication” chapter in the [\*HP-UX AAA Server A.08.00.01 Administrator's Guide\*](#).

## Obsolescence of Features and Their Replacements

Starting with the HP-UX AAA Server A.08.00.01 release, some authentication methods are obsolete. The following describes the obsolete authentication methods and their corresponding replacements:

### EAP-LEAP

The EAP-LEAP authentication method is obsolete in this release of the HP-UX AAA Server. The EAP-LEAP authentication method can be replaced by the EAP-PEAP authentication method. HP recommends that you use EAP-PEAP in place of EAP-LEAP for improved security. Unlike EAP-LEAP, EAP-PEAP supports mutual authentication and uses an encrypted tunnel to transmit the user's credentials. For more information on EAP-PEAP, see the *Securing LAN Access With EAP* chapter in the [\*HP-UX AAA Server A.08.00.01 Administrator's Guide\*](#).

### Oracle Authentication

The Oracle authentication module is obsolete in this release of the HP-UX AAA Server. The Oracle authentication module is supported using the `SQL Access` feature. HP recommends that you set up your HP-UX AAA Server to interact with the Oracle database using the `SQL Access` feature. For more information on implementing the `SQL Access` feature, see the [\*HP-UX AAA Server A.08.00.01 Administrator's Guide\*](#).

### SecurID authentication

The SecurID authentication is obsolete in this release of the HP-UX AAA Server. The SecurID authentication can be replaced by Open AuTHentication (OATH) standards-based One-Time Password (OTP) authentication. OATH is an industry-wide collaboration to develop open-reference architecture for strong authentication. The OATH standards-based OTP authentication solution supports hardware and software

tokens from multiple vendors. For more information on OATH standards-based OTP authentication solution, see the [HP-UX AAA Server A.08.00.01 Administrator's Guide](#).

## Fixes Included in the HP-UX AAA Server A.08.00.01

The following defect fixes are included in the A.08.00.01 release:

<b>QuIX-PCT ID</b>	<b>Description</b>
QXCR1000832156	<p>Starting with the HP-UX AAA Server A.08.00.01 release, in any EAP method, reply attributes are not sent in the <code>Access-Challenge</code> messages. Instead, the HP-UX AAA Server sends the reply attributes only in the <code>Access-Accept</code> messages.</p> <p>Prior to the HP-UX AAA Server A.08.00.01 release, in any EAP method, the HP-UX AAA Server sent reply attributes in the <code>Access-Challenge</code> messages.</p>
QXCR1000882653	<p>Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server supports the <code>append_proxytarget_returned_attr</code> configuration parameter in the <code>/etc/opt/aaa/aaa.config</code> file. When the state of the <code>append_proxytarget_returned_attr</code> configuration parameter is set to <code>on</code>, the attributes added by the proxy target server, which precede the <code>Proxy-state</code> attribute, are retained.</p> <p>Prior to the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server removed the attributes added by the proxy target server, which preceded the <code>Proxy-state</code> attribute.</p>
QXCR1000859712	<p>Starting with the HP-UX AAA Server A.08.00.01 release, the SQL <code>Access AATV</code> can map the RAW format data retrieved from the SQL database to the tagged attributes. In addition, conversion functions are included to allow mapping of the ASCII format data retrieved from the SQL database to the tagged attributes.</p> <p>Prior to the HP-UX AAA Server A.08.00.01 release, the SQL <code>Access AATV</code> incorrectly mapped the RAW format data to the tagged-attributes.</p>
QXCR1000867886	<p>Starting with the HP-UX AAA Server A.08.00.01 release, the SQL <code>Access AATV</code>'s <code>reconnect_time_wait</code> configuration parameter is extended to reconnect to the database if the communication channel between the HP-UX AAA Server and the SQL database breaks, or if the database server restarts.</p> <p>Prior to the HP-UX AAA Server A.08.00.01 release, the SQL <code>Access AATV</code> did not attempt to reconnect to the database if</p>

the communication channel to the database broke, or if the database server restarted.

- QXCR1000855732 Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server processes the authentication requests successfully when an LDAP backend server is configured with Bind as the Authenticate configuration parameter.
- Prior to the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server did not always respond when the LDAP backend server was configured with Bind as the Authenticate configuration parameter.
- QXCR1000873194 Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server supports returning the ERROR events from the SQL Access AATV if any internal error occurs. Also, the result mapping for the SQL action supports flexible mapping of the database errors to the HP-UX AAA Server events.
- Prior to the HP-UX AAA Server A.08.00.01 release, NAK was returned when internal ERRORS occurred.
- QXCR1000867034 Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server handles the proxy of inner realm for EAP-PEAP correctly.
- Prior to the HP-UX AAA Server A.08.00.01 release, the EAP-PEAP authentication failed when the proxy server was configured to process the outer realm locally and proxy the inner realm.
- QXCR1000782488 Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server Manager supports leap year dates in the drop-down menu filters of the Server Logfile, Accounting, Statistics, and Session pages.
- Prior to HP-UX AAA Server A.08.00.01 release, February 29 was not displayed in the drop-down menu filter.
- QXCR1000832137 Starting with the HP-UX AAA Server A.08.00.01 release, the HP-UX AAA Server dictionary includes 3GPP attributes.

## Known Problems and Limitations in HP-UX AAA Server A.08.00.01

This section lists the known problems and limitation of the HP-UX AAA Server A.08.00.01.

## Known Problems

- Using the HP-UX AAA Server Manager, if you modify a realm, whose User Profile Storage value is SQL Access, and the SQL Action Id value is more than 16 characters long, the HP-UX AAA Server Manager inserts a set of <br> characters in the SQL Action Id string while saving the value in the /etc/opt/aaa/authfile and /etc/opt/aaa/EAP.authfile files. This problem occurs while changing the values of attributes other than the SQL Action Id, in the Modify screen. Also, this problem is observed when Radius Attribute is selected for User Storage Parameter.

**Workaround:** Every time you want to modify a realm using the HP-UX AAA Server Manager, reselect the correct SQL Action Id value that does not include the <br> tag, in the SQL Action Id drop-down menu. If Radius Attribute is used to configure the SQL action, remove the unwanted <br> characters from the Radius Attribute field.

- When a realm is configured with a comment that includes spaces, the HP-UX AAA Server Manager removes the realm entry while saving the configuration in the /etc/opt/aaa/authfile and /etc/opt/aaa/EAP.authfile files.

**Workaround:** Do not include spaces in the comments.

- Decreased RADIUS response time under heavy load due to increased CPU consumption.



**NOTE:** This problem occurs with the HP-UX AAA Server A.08.00.01 on HP 9000 systems running HP-UX 11i v2 or HP-UX 11i v3. HP Integrity® systems running HP-UX 11i v2 or HP-UX 11i v3 are not affected.

**Workaround 1:** Utilize the pthread environment variable that minimizes pthread overhead for the HP-UX AAA Server in the environment where the radiusd daemon is launched:

```
$export PTHREAD_FORCE_SCOPE_SYSTEM=ON
```

**Workaround 2:** Install the PHCO\_35997 pthread library patch on HP 9000 systems running HP-UX 11i v2, or PHCO\_37477 on HP 9000 systems running HP-UX 11i v3. These patches are available at:

<http://itrc.hp.com>

- The HP-UX AAA Server leaks memory when the SQL Access feature uses the MySQL Unix ODBC/MySQL client to interact with a MySQL database.



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**NOTE:** This problem occurs with the HP-UX AAA Server A.08.00.01 on HP 9000 systems running HP-UX 11i v2 with the PHSS\_31849 (or later) patch only. HP 9000 systems running HP-UX 11i v3, and HP Integrity systems running HP-UX 11i v2 or HP-UX 11i v3 are not affected.

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**Workaround:** Install PHSS\_34858 (linker + fdp cumulative patch) on the HP 9000 system running HP-UX 11i v2, where the `radiusd` daemon is launched.

- Updating the HP-UX operating system on a system that does not have the HP-UX AAA Server installed, using an operating system (OS) bundle that includes the HP-UX AAA Server fails.

**Workaround 1:** Adding a group, called `aaa`, prior to updating the OS overcomes this problem. To add a group, complete the following steps:

1. Log in as superuser.
2. Enter the following command at the HP-UX prompt:

```
$ groupadd aaa
```

The `aaa` group is added.

**Workaround 2:** Do not include the HP-UX AAA Server in the OS bundle. Instead, you can install the product separately from the AR media or from the Software Depot after the OS update is completed.

- Cold-installing HP-UX on a system using an OS bundle that includes the HP-UX AAA Server fails.

**Workaround:** Do not include the HP-UX AAA Server in the OS bundle. Instead, you can install the product separately from the AR media or from the Software Depot after the OS install is completed.

- When the HP-UX AAA Server is configured using policies, and a realm is configured to proxy the requests to a remote RADIUS server, the proxy egress policy is not executed for the proxied accounting requests.

**Workaround:** None. If you encounter this problem, contact HP support personnel.

- If the `/etc/opt/aaa/radius.fsm` file is modified to allow a request to be processed by the `RAD2RAD` action module more than once, the HP-UX AAA Server causes a memory leak. The `RAD2RAD` action module is usually configured to process a request more than once if the HP-UX AAA Server needs to proxy the request to more than one RADIUS server.

**Workaround:** None. If you encounter this problem, contact HP support personnel.

## Known Limitations

- Using stored procedure output parameters with MySQL databases will result in NULL values for SQL Access output mappings. Input mappings can be processed normally with MySQL stored procedures.

**Workaround:** Utilize direct SQL statements for SQL Actions requiring output data from MySQL databases.

- The HP-UX AAA Server does not recognize realm aliases for local realms configured with local user file storage.

**Workaround:** Configure separate realms for each alias.

- The HP-UX AAA Server A.08.00.01 loads all shared libraries in the `/opt/aaa/aatv/` directory when starting. Libraries with unresolved external references will cause the startup to fail. User-created libraries for previous versions of the product may also fail during execution. Updating the installation replaces only the libraries originally installed with the product—any user-created libraries will remain.

**Workaround:** Remove any user-created shared libraries from the `/opt/aaa/aatv/` directory before starting the HP-UX AAA Server.

- Unsupported browsers, including Netscape Navigator 7.0 and Mozilla 1.2.X periodically display various Server Manager icons, buttons, and default values incorrectly.

**Workaround:** Use a supported browser version with Server Manager.

## Supplicant Support and Interoperability

This section lists the supplicants and EAP methods (for each supplicant) certified with the HP-UX AAA Server A.08.00.01.

### Cisco Secure Services Client Version 5.0

The following EAP methods are certified for the Cisco Secure Services Client (formerly, Meetinghouse AEGIS SecureConnect) Version 5 supplicant with HP-UX AAA Server A.08.00.01:

- EAP-TTLS (PAP, CHAP, MS-CHAP, MS-CHAP v2, EAP-MD5, EAP-MS-CHAP v2)
- EAP-TLS
- PEAP (EAP-GTC, EAP-MS-CHAP v2)

The following EAP methods are certified for OATH standards-based OTP authentication with the Cisco Secure Services Client Version 5.0:

- EAP-TTLS (PAP, MS-CHAP v2)
- PEAP (EAP-GTC)

## Juniper Networks Odyssey Access Client Version 4.7

The following EAP methods are certified for the Juniper Networks Odyssey (formerly, Funk Software Odyssey) Access Client Version 4.7 supplicant with the HP-UX AAA Server A.08.00.01:

- EAP-TTLS (PAP, CHAP, MS-CHAP, MS-CHAP v2, EAP-MD5, EAP-MS-CHAP v2)
- EAP-TLS
- EAP-MD5
- PEAP (EAP-GTC, EAP-MS-CHAP v2)

The following EAP methods are certified for OATH standards-based OTP authentication with the Juniper Networks Odyssey Access Client Version 4.7:

- EAP-TTLS (PAP, MS-CHAP v2)
- PEAP (EAP-GTC)

## Microsoft for Windows XP (SP1 or SP2), and Windows Vista

The following EAP methods are certified for the Microsoft Windows XP (SP1 or SP2) and Windows Vista supplicants with the HP-UX AAA Server A.08.00.01:

- PEAP (EAP-MSCHAPv2)
- EAP-TLS

## OATH-Compliant OTP Generators and Interoperability

This section discusses the HOTP algorithm-based OTP generators (hard token and software) that are certified for the OATH standards-based OTP authentication with the HP-UX AAA Server A.08.00.01.

### Hard Tokens

The following table lists the hard tokens that are certified for OATH standards-based OTP authentication:

**Table 1-2 Certified Hard Tokens and their Vendors**

Hard Token	Vendor Name
A-Key® 3600 Token	Authenex
Protiva™ 350 Device	Gemalto
DIGIPASS® GO 3	Vasco

### Software (Soft Token)

The MobileID v4.50 software, by PortWise, is certified for OATH standards-based OTP authentication.

## Product Documentation

See the HP technical library at <http://www.docs.hp.com> for a list of the HP-UX AAA Server documentation.

The documents listed in Table 1-3 are also installed with the HP-UX AAA Server.

**Table 1-3 Documentation Installed with the HP-UX AAA Server**

Document	Location
Text Release Notes	/opt/aaa/README
Administrator's Guide	/opt/aaa/share/doc/admin.pdf
Man pages	/opt/aaa/share/man/
Secure LAN Advisor Help System	Server Manager administration utility



**NOTE:** The Administrator's Guide can also be accessed using the Server Manager administration utility



**IMPORTANT:** See [the HP-UX AAA Server documentation](#) for the most recent product documentation.

## The Secure LAN Advisor

The Secure LAN Advisor is an HTML help system in the Server Manager administration utility that explains the process of securing LANs and WLANs with the HP-UX AAA Server, using the Server Manager screens and tasks.

The Secure LAN Advisor is informational only, it does not edit configuration files. Follow the Secure LAN Advisor and use the Server Manager to create and deploy basic AAA configurations for securing LANs and WLANs. See the HP-UX AAA Server A.08.00.01 Administrator's Guide on <http://docs.hp.com> for more information.

## Installation Corequisites

This section lists the HP-UX AAA Server A.08.00.01 corequisites:

### Hardware and Operating Systems Requirements

Following are the hardware and operating systems requirements for installing HP-UX AAA Server A.08.00.01:

- Hardware: HP 9000 and HP Integrity Servers
- Operating Systems: HP-UX 11i v2 or HP-UX 11i v3
- Minimum of 128 MB memory
- 5 GB disk space

## System Resource Requirements

Following are the minimum system resources required to install and run HP-UX AAA Server A.08.00.01:

- Disk Space: 5 GB
- Memory: 128 MB

## Product Requirements

Table 1-4 lists the product requirements for the HP-UX AAA Server A.08.00.01 on HP-UX 11i v2 and HP-UX 11i v3:

**Table 1-4 Product Requirements**

Product Requirements	HP-UX 11i v2	HP-UX 11i v3
	Version	Version
HP-UX SDK for Java	1.4.2.x or later	1.4.2.x or later
HP-UX Tomcat-based Servlet Engine	1.0.10.01 or later	B.5.5.9.04 or later
OpenSSL	A.00.09.07m or later	A.00.09.08h or later

All the product requirements can be downloaded at the HP Software Depot (<http://software.hp.com>) using the following links:

- [HP-UX SDK for Java](#)
- [HP-UX Tomcat-based Servlet Engine](#)
- [OpenSSL from HP](#)



**NOTE:** HP-UX Tomcat-based Servlet Engine is a component of HP-UXWSSUITE on HP-UX 11i v2. On HP-UX 11i v3, HP-UX Tomcat-based Servlet Engine version B.5.5.9.04 is available as part of the core operating environment.

## Patch Requirements

Table 1-5 lists the patch requirements for the HP-UX AAA Server A.08.00.01 on HP-UX 11i v2 and HP-UX 11i v3.

**Table 1-5 Patch Requirements**

Patch Requirements	HP-UX 11i v2	HP-UX 11i v3
BUNDLE11i	Required (September 2004 or later)	Not applicable

Download the patch dependencies from the Patch/Firmware Database in the [maintenance and support for HP products](#) section of HP's IT Resource Center at <http://www.itrc.hp.com>.

## Web Browser Requirements

A Web browser is required to use the Server Manager interface to administer and configure the HP-UX AAA Servers. Following are the Web browser requirements for HP-UX AAA Server A.08.00.01:

- Use only the following web browsers with the HP-UX AAA Server A.08.00.01 – known interoperability issues exist with other web browser versions:
  - Internet Explorer 6.0 or higher with Java 1.4.2.09 or higher
  - Mozilla 1.7.12 or higher with Java1.4.x or higher
- Set the browser preferences (Internet options) to “always compare loaded pages to cached pages”.



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**NOTE:** Download Mozilla free of charge from HP at:  
<http://www.hp.com/products1/unix/java/mozilla/index.html>

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## LDAP Compatibility

The HP-UX AAA Server A.08.00.01 is designed to interoperate with LDAP version 3 compliant directories. HP has certified the HP-UX AAA Server A.08.00.01 with the Netscape/Red Hat Directory Server version 7.10.30 and OpenLDAP version 2.3.43.001.



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**NOTE:** HP recommends the Netscape/Red Hat Directory Server for environments requiring high performance and availability.

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## SQL Access Requirements

The HP-UX AAA Server A.08.00.01 is designed to interoperate with the Oracle OCI and ODBC compliant database clients/drivers. The database client/driver products are not included with the HP-UX AAA server, and must be acquired and installed separately.

In addition, the HP-UX AAA Server provides connectors for the client/driver products. Connectors for the following database clients/drivers are included with this release:

**Table 1-6 SQL Access Requirements for HP-UX AAA Server A.08.00.01**

Vendor	Client
Oracle - OCI	Oracle Instant Client Version 10.2.0.2
MySQL - ODBC	MySQL Unix ODBC Client Version 2.2.11/MySQL Client 5.0.67

For information on obtaining additional connectors for other database clients or drivers, email [aaainfo@cup.hp.com](mailto:aaainfo@cup.hp.com).

## User Database Administration Manager Requirements

The User Database Administration Manager is designed to operate with the Apache Web Server, PHP5, PHP database abstraction layer (PEAR DB or PEAR MDB2) , and Oracle or MySQL database clients.

HP has certified the User Database Administration Manager with HP-UX Apache Web Server version 2.22 (32-bit) to work with the following database clients:

**Table 1-7 User Database Administration Manager Requirements**

<b>Product</b>	<b>Version</b>
Oracle Install Client	10.2.0.2
MySQL Client	5.0.67

The database client and driver are not included with the HP-UX AAA Server. They must be obtained and installed separately.

## Availability in Native Languages

The HP-UX AAA Server A.08.00.01 is currently available in English only.