



## Software Product Description

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**PRODUCT NAME: Open Source Internet Solutions  
Version 5.4 for Tru64 UNIX**

**SPD 63.90.16**

### DESCRIPTION

Compaq™ Open Source Internet Solutions for Tru64™ UNIX is a collection of popular Open Source Internet software and administration software developed by Compaq™. Open Source Internet Solutions is shipped with all Tru64™ UNIX AlphaServers™, or it can be purchased separately.

Open Source Internet Solutions includes a Compaq™ developed Quality of Service (QoS) tool, Internet Monitor. The Internet Monitor can be used by system administrators to monitor the performance of Internet servers. Administrators can use the information collected by the Internet Monitor to make changes to their system and network configurations to improve performance of a particular Internet server. Administrators and end users can use the historical information collected by the Internet monitor to check conformance of Service Level Agreements (SLAs).

Open Source Internet Solutions also includes the Netscape Directory Server and the Netscape LDAP Software Developer's Kit (SDK) Version 4.0 for C for developing LDAP applications.

The Open Source Internet software packaged with Open Source Internet Solutions includes:

- Compaq Secure Web Server (*Based on Apache*)
- Samba File and Print Server for Windows
- Security (TCP Wrapper) and authentication (Basic Merit AAA RADIUS Server – binaries only), and tools to help your system from being attacked or exploited in a denial of service attack
- Mail servers (sendmail, IMAP-4, POP3) and clients (Pine)

- Mailing list management (Majordomo)
- Mail filtering (procmail)
- News server (InterNetNews)
- Chat server (Internet Relay Chat)
- Proxy/caching server (Squid) with log file analyzer (calamaris)
- Directory server (OpenLDAP)
- Web-based mail reader (Horde IMP)
- Tools for providing dynamic Web content (Perl, Tcl, Tcl\_cgi, TclTk, TclX, expect, PHP, Jserv, and XML tools)
- Database Management System (PostgreSQL)
- Web browser for character-cell terminals (Lynx)

Open Source Internet Solutions provides the following features and benefits:

- A collection of Open Source Internet software (binaries and sources), tested and qualified on Tru64™ UNIX
- Automatic installation and configuration of Open Source Internet software
- Web-based Administration utility to manage Internet services and tune kernel attributes for Internet service performance
- Internet Monitor, a Web based Quality of Service (QoS) package that allows system administrators to monitor Internet servers
- Links to Open Source Internet software Web sites through the Open Source Internet Solutions Administration utility's online help
- FireScreen, a basic firewall

You can access the Open Source Internet Solutions Administration utility through a graphical Web browser<sup>1</sup>. Links to the *Open Source Internet Solutions for Tru64 UNIX Administration Guide* (in HTML format) provide online help. The guide contains hot links to Web sites for each Open Source software component packaged with Open Source Internet Solutions and Web sites at Compaq that may interest Internet server administrators.

All the selected Open Source Internet and administration software components included with the product are configured and available for use when the installation is complete. You can install Open Source Internet Solutions using a command-line script interface or a Web browser interface. When you run the installation procedure using a Web browser, links to the *Open Source Internet Solutions for Tru64 UNIX Installation Guide* (in HTML format) provide online help.

The following administration software is included with Open Source Internet Solutions Version 5.4:

- Open Source Internet Solutions installation procedures using a terminal command-line or Web browser interface
- Open Source Internet Solutions Administration utility (installed on port 8081) which allows you to perform the following tasks:
  - \* Register Open Source Internet Solutions on-line with *Compaq*<sup>TM</sup>
  - \* Configure and control Open Source Internet software packaged with Open Source Internet Solutions, including adding and removing components
  - \* Configure and control the Internet Monitor
  - \* Add captive and system user accounts, and assign users' mail delivery
  - \* Configure the LDAP module for system authentication
  - \* Manage printers and print queues
  - \* Reboot the system
  - \* Tune kernel attributes to improve performance of Internet services
  - \* Configure your system as a firewall (a command-line script is also provided)

- \* Configure Internet services to run in a *TruCluster*<sup>TM</sup> Available Server environment, (ASE) including:

- User accounts
- Mail services (sendmail, POP, IMAP, Majordomo)
- InterNetNews (INN)
- Squid proxy/caching server
- Public Web server
- Anonymous FTP
- Netscape Directory Server
- Internet Monitor

A command-line script for configuring services in ASE is also provided.

Note that *TruCluster*<sup>TM</sup> 5.0 is fully supported and *TruCluster*<sup>TM</sup> configuration of Internet services is automatic.

## ADMINISTRATIVE FUNCTIONS

The Open Source Internet Solutions Administration utility allows a system administrator to easily perform the following component and system management tasks using a Web browser:

### Manage Users

- Add or remove user accounts, individually or based on group assignment
- Modify the attributes of existing user accounts, including mail delivery
- Display information for all users or a specific set of users
- Change the password for a user or automatically generate passwords for a user or group of users

### Manage Components

- Configure, manage, and test security for Internet components
- Install and configure FireScreen
- Configure the Compaq Secure Web Server
- Configure the Netscape Directory Server
- Configure and manage World Wide Web (WWW) and administration servers

<sup>1</sup> Certain features of the Administration utility and the installation procedure require your browser to be JavaScript enabled.

- Configure and manage the Internet Monitor
- Configure and control mail servers
- Establish an anonymous FTP account, and configure the FTP server
- Manage the Squid proxy/caching server
- Set up an InterNetNews (INN) environment
- Create and delete Majordomo mailing lists on a local system, and modify list parameters
- Configure Internet components to fail over when running in a TruCluster Available Server environment (ASE)
- Add or remove Internet components from your system

### Manage System

- Manage the local printers and print queues
- Shut down and reboot the system
- Tune kernel for Internet services
- Configure the LDAP module for system authentication

## INSTALLATION

Open Source Internet Solutions includes an installation procedure that simplifies the steps required to install and start up the Open Source Internet Solutions Administration utility and other Internet services on *Tru64™* UNIX systems. The installer can choose either a browser or command-line interface. The Open Source Internet Solutions installation procedure prompts the installer for site-specific information, allows the installer to tune kernel subsystem attributes to improve performance, configures the system, and installs requested subsets.

When run in a browser, the online *Open Source Internet Solutions for Tru64 UNIX Software Installation Guide* is linked to the installation procedure to provide online help.

The installation procedure will update previous versions of Open Source Internet Solutions, preserving configurations and user data. Update installation from Open Source Internet Solutions Versions 5.2 and 5.3 to Open Source Internet Solutions Version 5.4 is supported.

Please read the online *Open Source Internet Solutions for Tru64 UNIX Read This First/Release Notes* document before installing the software. You can access this document from the `index.htm` file on the Open Source Internet Solutions for Tru64 UNIX CD-ROM.

## INTERNET MONITOR

The Internet Monitor allows system administrators to monitor the performance of Internet servers in use in their enterprise. The Internet Monitor is capable of monitoring the following Internet services:

- HTTP
- FTP
- NNTP
- SMTP
- POP
- IMAP
- LDAP
- DNS
- Network connections

The Internet Monitor provides the following features:

- Allows administrators to monitor the performance of Internet services running anywhere on the network.
- Data collection agents placed anywhere on the network poll Internet services and report performance data to the data collection server
- Graphically monitors the performance of Internet services from the same perspective as an actual user of those services
- Can generate alerts or cause other automated actions to be performed when administrator-defined performance thresholds are crossed
- Collects and archives performance data and generates historical performance reports and graphs
- May be used as the basis for ensuring conformance to Service Level Agreements (SLAs)
- Provides a Web-based administration utility for configuring the Internet Monitor.

## DIRECTORY SERVERS

The Netscape Directory Server Version 4.12 is packaged with Open Source Internet Solutions. Lightweight Directory Access Protocol (LDAP) is an Internet standard directory service protocol that runs over TCP/IP. It can be used to provide a standalone directory service or to provide lightweight access to an X.500 directory.

The Netscape Directory Server provided with Open Source Internet Solutions is licensed for use with the Tru64 UNIX Operating System. The Netscape Directory Server may not be used as a general-purpose corporate directory or as the primary directory for products other than those distributed with Open Source Internet Solutions or the Tru64 UNIX Operating System.

The OpenLDAP 1.2.11 Directory Server is also included.

## LDAP MODULE FOR SYSTEM AUTHENTICATION

The LDAP Module for System Authentication allows user identification and authentication information stored in an LDAP server to be used for all applications, including the following:

- login authentication (rlogin, ftp, and telnet)
- POP and IMAP authentication
- transparent LDAP database access for the `getpw*()` and `getgr*()` routines in the `libc` library

The Netscape Directory Server provided with Open Source Internet Solutions is automatically configured for use with the LDAP Module for System Authentication. The LDAP Module for System Authentication subset includes tools designed to query the LDAP server for user and group information based on a standard POSIX schema. You can choose the LDAP Module for System Authentication as an option during installation.

## END-USER FUNCTIONS

Open Source Internet Solutions captive accounts created with the Open Source Internet Solutions Administration utility provide access to a menu that offers several common applications, including the ability to:

- Use the Pine mail client
- Access the INN newsgroups
- Use the Lynx Web browser
- Define or change passwords for captive accounts

- Access the online *Internet Services User's Guide*, which describes these captive account capabilities

**Note:** Publicly accessible media like the Internet present a security risk if suitable precautions are not taken to ensure and enforce security.

## WEB SERVER

Open Source Internet Solutions includes the Compaq Secure Web Server (*Based on Apache*) V1.3.12 software developed by the Apache Software Foundation (<http://www.apache.org/>). The Compaq Secure Web Server lets users create and manage a Web site on the Internet or Intranet.

The Compaq Secure Web Server includes SSL (Secure Socket Layer) capability that allows secure encrypted connections to Web browsers.

The Web Server also includes

- PHP Version 3.0.11 Hypertext Preprocessor module, a server-side, cross-platform HTML embedded scripting language that allows you to design dynamic Web pages
- Apache Jserv servlet module that allows the Web server to execute Java servlets in response to browser requests.
- Fast CGI, an open extension to CGI that provides high performance without the limitations of server specific APIs
- `auth_ldap` LDAP authentication module
- The optional Microsoft FrontPage2000 Server Extensions.

Analog Version 4.03, a tool for analyzing log files, is included with the Compaq Secure Web Server.

## SECURITY

TCP Wrapper Version 7.6 provides enhanced Internet security by letting the system administrator control access to certain Internet services, including telnet, FTP, remote shell, rlogin, remote execute, fingerd, talk, POP-2, POP-3, IMAP, or any other service started by the `inetd` daemon.

The Basic Merit AAA Server Version 3.5.14.2 supports standard Remote Authentication Dial In User Service (RADIUS) authorization. This server extends standard RADIUS authentication to a distributed authentication and authorization scheme. This server also functions as a proxy server that relays authentication and authorization requests to

other RADIUS servers, and receives and relays the responses.

Tools to configure network ingress and egress filtering are included, as well as tools to help prevent your system from being attacked or exploited in certain denial of service (DoS) attacks.

The Security and Network Analyzer Tool (SATAN) Version 1.1.4exp is also provided in the source-tar/ directory.

### NEWS SERVICE

The InterNetNews Server (INN) Version 2.2.3 and TIN news reader Version 1.4.3 provide tools to manage newsfeed services, including connections to external newsfeeds and newsfeed configurations, and control of client access to newsgroups.

### SQUID CACHING/PROXY SERVER

The Squid Proxy/Caching Server Version 2.3.STABLE4 is included with Open Source Internet Solutions. It allows the user's system to intelligently cache Web pages in a central location for quick and easy retrieval. The calamaris log file analyzer for Squid is also included.

### MAIL SERVERS

UW-IMAP-4.7c (v12.264), Qualcomm popper Version 2.53 (POP-2 and POP-3), Cyrus IMAP Version 1.6.19, and sendmail Version 8.10.2 servers are included with Open Source Internet Solutions. Each of these mail servers offer secure, standards-based e-mail capability.

Majordomo Version 1.94.5 is included with Open Source Internet Solutions to automate the creation and maintenance of mailing lists.

Procmail Version 3.14 is also packaged with Open Source Internet Solutions. This utility allows users to create customized mail filters.

The Horde IMP (Internet Mail Program) Web-based IMAP mail client is included in Open Source Internet Solutions V5.4. This Web-mail implementation allows users to access their IMAP mail folders using any graphical Web browser. The Open Source Internet Solutions Administration Utility does not yet offer any configuration capabilities for IMP. It is planned that future releases of Open Source Internet Solutions will include a major update to IMP or possibly even a different Web-mail implementation, as well as improved facilities to administer Web-mail.

### MAIL CLIENT

The Pine mail client and Pico editor Version 4.21 are also provided with this version of Open Source Internet Solutions.

### CHAT SERVER

Internet Relay Chat Server Version 2.10.3p1 allows users to communicate with each other, in real time, across a network of Internet servers.

### FTP SERVER

Washington University File Transfer Protocol (FTP) Server (wu-ftp) Version 2.6.1 is provided with Open Source Internet Solutions.

### FILE AND PRINT SERVER

Samba is an open source software suite that provides seamless file and print services to SMB/CIFS (e.g., Microsoft Windows) clients.

### DATABASE MANAGEMENT SYSTEM

PostgreSQL Relational Database Management System Version 6.5.3 is included.

### TOOLS

The following tools for providing dynamic Web content are provided with Open Source Internet Solutions:

- Perl Version 5.6.0
- Tcl Version 8.3.1, TclTk Version 8.3.1, TclX Version 8.2.0
- Tcl\_cgi Version 1.6
- expect Version 5.32.1
- PHP 3.0.11
- ApacheJserv 1.1
- XML tools
  - \* Xerces-C XML parser for C++ Version 1.1.10
  - \* Xerces-J XML parser for Java Version 1.0.3
  - \* Xalan Version 1.0.0 Stylesheet processors for C++ and Java
  - \* Cocoon Web Publishing Framework Version 1.7
  - \* FOP Print Formatter Version 0.12.1

## SOURCE CODE INFORMATION

Source code is included for all the Open Source Internet Solutions software on the binary kit except the following:

- Basic Merit AAA Server. License terms do not allow source redistribution.
- Open\_ssl and Apache mod\_ssl sources not included due to export restrictions.
- Compaq proprietary software:
  - \* Administration utility
  - \* Internet Monitor
  - \* LDAP Module for System Administration
- Netscape Directory Server, licensed by Netscape Corporation.

## HARDWARE REQUIREMENTS

Open Source Internet Solutions can run on any valid *Tru64™* UNIX *AlphaServer™* system having the minimum system configuration as described in the *Tru64™* UNIX Software Product Description (41.61 or 70.70). The actual amount of work supported at one time, with good performance, depends on the types of processing performed as well as the physical memory and secondary storage available.

### *Processors Not Supported*

Open Source Internet Solutions does not support *OpenVMS™*, Windows NT Intel, Windows NT Alpha, or any other hardware configurations outside of the *Tru64™* UNIX hardware configurations.

### *Other Hardware Required*

You need a network card to access the Internet.

### *Video Display Support*

Open Source Internet Solutions supports a wide variety of display devices, including VT510 and X Window System display devices, Microsoft Windows client desktops, and Macintosh client desktops.

### *Memory Requirements*

Open Source Internet Solutions requires a minimum of 64 MB of memory. Additional memory may also be required based on system loading.

### *Disk Space Requirements*

Maximum required /usr file system disk space is approximately 324 MB for a full installation of all components (includes 110 MB for Netscape Directory Server Version 4.12)

**Note:** This count refers to the disk space required on the system disk. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options. Additional disk space may be required to create or expand component databases or create user files as components are used.

## SOFTWARE REQUIREMENTS

Open Source Internet Solutions requires *Tru64™* UNIX Version 4.0F or higher.

Java Development Kit (JDK) V1.1.8 or higher is required for the Internet Monitor.

Some Open Source Internet Solutions components may require the use of other Open Source Internet Solutions components.

See the *Installation Guide*, available on line in HTML, PDF, and PostScript format, for more information.

## NETWORK SUPPORT

Open Source Internet Solutions supports a variety of network protocols, topologies, and hardware interconnects, including TCP/IP as specified by the *Tru64™* UNIX Version 4.0F or higher *Software Product Description* (41.61 or 70.70).

For additional information about supported features, hardware models and revision levels, and required or optional software, see the Software Product Description for the product in question.

## SOFTWARE LICENSING

Only the Open Source Internet Solutions Administration utility, FireScreen, LDAP Module for System Authentication, and the Internet Monitor are furnished under a license. *Tru64™* UNIX is licensed by Compaq Computer Corporation.

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## GROWTH CONSIDERATIONS

The minimum hardware and software requirements for any future version of this product may be different from the requirements for the current version.

## DISTRIBUTION MEDIA AND DOCUMENTATION

Distribution media and documentation for Open Source Internet Solutions, is distributed on CD-ROM. You can print the electronic documentation accompanying the software as reasonably necessary to exercise your license to use the software.

## ORDERING INFORMATION

Open Source Internet Solutions is included with all *AlphaServers™* that ship with the *Tru64™* UNIX Operating System. Open Source Internet Solutions may also be purchased separately by ordering the following:

Software License/Media/Documentation:

QB-3NCAA-SA

QB-3NCAA-SA contains the Open Source Internet Solutions License and Open Source Internet

Solutions CD-ROM, which contains the *Compaq™* and Open Source Internet Solutions software and online documentation.

## SOFTWARE PRODUCT SERVICES

The following services are available for Open Source Internet Solutions for Tru64 UNIX:

QT-3NCAA-XA – Packages Services (Includes rights to new versions and media/documentation)

QT-3NCAA-TA – New Version License Subscription Service (Includes only rights to new versions, does not include media and documentation)

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