

OVERVIEW

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

[Note: *Internet Express* was formerly known as *Open Source Internet Solutions*]

Internet Express 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).

Internet Express also includes the iPlanet Directory Server and the iPlanet LDAP Software Developer's Kit (SDK) Version 4.0 for C for developing LDAP applications.

The Internet software packaged with Internet Express includes:

- Compaq Secure Web Server (*Based on Apache*)
- Samba File and Print Server for Windows
- Security (TCP Wrapper) and authentication (Interlink Networks AAA Basic 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 (procmil)
- News server (InterNetNews)
- Chat server (Internet Relay Chat)
- Proxy/caching server (Squid) with log file analyzer (calamaris)
- SOCKS proxy server (Dante)
- Streaming Media Server
- Directory server (OpenLDAP)
- Web-based mail reader (Horde IMP)
- Tools for providing dynamic Web content (Perl, PHP, Jakarta Tomcat, and XML tools)
- Database Management System (PostgreSQL)
- Web browser for character-cell terminals (Lynx)

Internet Express 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 Internet software
- All services are configured to run on *TruCluster™* Server providing a true high availability environment
- Web-based Administration utility to manage Internet services and tune kernel attributes for Internet service performance
- Online Help for the Administration utility including links to Open Source Internet software Web sites
- Internet Monitor, a Web based Quality of Service (QoS) package that allows system administrators to monitor Internet servers
- FireScreen, a basic firewall

You can access the Internet Express Administration utility through a graphical Web browser ([Note: Certain features of the Administration utility and the installation procedure require your browser to be JavaScript enabled.](#)). Links to the *Internet Express for Tru64 UNIX Administration Guide* (in HTML format) provide online help. The guide contains links to Web sites for each Open Source software component packaged with Internet Express 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 Internet Express using a command-line script interface or a Web browser interface. When you run the installation procedure using a Web browser, links to the *Internet Express for Tru64 UNIX Installation Guide* (in HTML format) provide online help.

COMPAQ

OVERVIEW *(continued)*

The following administration software is included with Internet Express Version 5.6:

- Internet Express installation procedures using a terminal command-line or Web browser interface
- Internet Express Administration utility (installed on port 8081) which allows you to perform the following tasks:
 - Register Internet Express on-line with *Compaq*[™]
 - Configure and control Open Source Internet software packaged with Internet Express, 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)

The following third-party evaluation software is also included with Internet Express 5.6:

- Tarantella Enterprise 3 from Tarantella, Inc.
- Instant ASP (IASP) from Halcyon Software.
- Advanced AAA RADIUS Server from Interlink Networks

ADMINISTRATIVE FUNCTIONS

The Internet Express 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
- Enable and configure User Self-Administration (Delegated Administration)

Manage Components

- Configure, manage, and test security for Internet components
- Install and configure FireScreen
- Configure the Compaq Secure Web Server
- Configure the iPlanet Directory Server
- Configure the OpenLDAP Directory Server
- Configure the Darwin Streaming Media Server
- Configure and manage World Wide Web (WWW) and administration servers
- Configure and manage the Internet Monitor
- Configure and control mail servers and the IMP Web-based mail reader
- Establish an anonymous FTP account, and configure the FTP server
- Configure the Samba File and Print Server for Windows
- Configure the Microsoft FrontPage 2000 Server Extensions
- 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
- 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

Internet Express includes an installation procedure that simplifies the steps required to install and start up the Internet Express Administration utility and other Internet services on *Tru64™* UNIX systems. The installer can choose either a browser or command-line interface. The Internet Express 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 *Internet Express for Tru64 UNIX Software Installation Guide* is linked to the installation procedure to provide online help.

The installation procedure will update previous versions of *Internet Express*, preserving configurations and user data. Update installation from Open Source Internet Solutions Versions 5.4 and 5.5 to Internet Express Version 5.6 is supported.

Please read the online *Internet Express for Tru64 UNIX Read This First* and *Release Notes* documents before installing the software. You can access these documents from the *index.htm* file on the Internet Express 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 iPlanet Directory Server Version is packaged with Internet Express. 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 iPlanet Directory Server provided with Internet Express is licensed for use with the Tru64 UNIX Operating System. The iPlanet Directory Server may be used as a general-purpose corporate directory or as the primary directory for products other than those distributed with Internet Express or the Tru64 UNIX Operating System. The only limitation is that it may be used for up to 200,000 entries in the Directory Server.

The OpenLDAP 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 iPlanet Directory Server or OpenLDAP Directory Server provided with Internet Express 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

Internet Express captive accounts created with the Internet Express 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

Internet Express includes the Compaq Secure Web Server based on Apache 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 Hypertext Preprocessor module, a server-side, cross-platform HTML embedded scripting language that allows you to design dynamic Web pages
- Jakarta Tomcat 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_idap LDAP authentication module
- The optional Microsoft FrontPage2000 Server Extensions.

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

SECURITY

TCP Wrapper 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 Interlink Networks AAA Basic RADIUS Server 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) is also provided in the source-tar/ directory.

NEWS SERVICE

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

SQUID CACHING/PROXY SERVER

The Squid Proxy/Caching Server is included with Internet Express. 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, Qualcomm popper (POP-2 and POP-3), Cyrus IMAP, and sendmail servers are included with Internet Express. Each of these mail servers offer secure, standards-based e-mail capability.

Majordomo is included with Internet Express to automate the creation and maintenance of mailing lists.

Procmail is also packaged with Internet Express. This utility allows users to create customized mail filters.

MAIL CLIENTS

The Horde IMP (Internet Mail Program) Web-based IMAP mail client is included in Internet Express V5.6. This Web-mail implementation allows users to access their IMAP mail folders using any graphical Web browser. The Internet Express Administration Utility can be used to configure IMP.

The Pine mail client and Pico editor are also provided with this version of Internet Express.

CLIENT SERVER

Internet Relay Chat Server 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) is provided with Internet Express.

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 is included.

TOOLS

The following tools for providing dynamic Web content are provided with Internet Express:

- Perl
- PHP
- Tomcat Java Servlet engine from the Apache Jakarta Project
- XML tools
 - Xerces-C XML parser for C++
 - Xerces-J XML parser for Java
 - Xalan Stylesheet processors for Java
 - Cocoon Web Publishing Framework
 - FOP Print Formatter

SOURCE CODE INFORMATION

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

- Interlink Networks AAA Basic RADIUS 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
- iPlanet Directory Server, licensed by Sun Microsystems, Inc.

HARDWARE REQUIREMENTS

Internet Express can run on any valid *Tru64™ UNIX AlphaServer™* system having the minimum system configuration as described in the *Tru64™ UNIX Operating System QuickSpec..* 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.

Platforms and Processors Not Supported

Internet Express does not support *OpenVMS™*, Windows NT, or any other hardware configurations outside of the *Tru64™ UNIX* hardware configurations.

Other Hardware Required

You need a network card to access the Internet.

HARDWARE REQUIREMENTS *(continued)*

Video Display Support

Internet Express 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

Internet Express 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 350 MB for a full installation of all components (includes 110 MB for iPlanet Directory Server Version 4.13)

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

Internet Express requires *Tru64™* UNIX Version 5.0A or higher.

Java Development Kit (JDK) V1.2.2 or higher is required for the Internet Monitor.

Some Internet Express components may require the use of other Internet Express components.

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

NETWORK SUPPORT

Internet Express supports a variety of network protocols, topologies, and hardware interconnects, including TCP/IP as specified by the *Tru64™* UNIX *Software Product Description (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 Internet Express Administration utility, FireScreen, LDAP Module for System Authentication, and the Internet Monitor are furnished under a license from Compaq Computer Corporation. *Tru64™* UNIX is licensed by Compaq Computer Corporation.

The iPlanet Directory Server provided with Internet Express is licensed for use with the *Tru64™* UNIX Operating System. The iPlanet Directory Server may be used as a general-purpose corporate directory or as the primary directory for products other than those distributed with Internet Express or the Tru64 UNIX Operating System. The only limitation is that it may be used for up to 200,000 entries in the Directory Server.

All Open Source software included with Internet Express is licensed by the developers of the individual products. For more information on the licenses for these Open Source third-party products, please see the Open Source Software Description and Software Licensing Terms document included on the Internet Express CD-ROM.

For more information about Compaq™ licensing terms and policies, contact a local *Compaq™* office or distributor.

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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 Internet Express, 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

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

Software License/Media/Documentation: QB-3NCAA-SA

QB-3NCAA-SA contains the Internet Express License and Internet Express CD-ROM, which contains the *Compaq*[™] and Internet Express software and online documentation.

SOFTWARE PRODUCT SERVICES

The following services are available for Internet Express 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)

For more information, contact your local *Compaq*[™] office or distributor.

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