Sun Java™ System Calendar Server Release Notes for HP-UX

Version 6 2005Q1

Part Number 819-1563-10

These Release Notes contain important information available at the time of release of Sun Java™ System Calendar Server 6 2005Q1 for HP-UX. Known issues and limitations, and other information are addressed here. Read this document before you begin using Calendar Server 6 2005Q1.

The most up-to-date version of these release notes can be found at the Sun Java System documentation web site:

http://docs.sun.com/prod/entsys.05q1

Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and product documentation.

These release notes contain the following sections:

- Release Notes Revision History
- About Calendar Server, Version 6 2005Q1
- Bugs Fixed in This Release
- Important Information
- Known Issues and Limitations
- Redistributable Files
- Communications Express
- Delegated Administrator Utility
- How to Report Problems and Provide Feedback
- Additional Sun Resources

Read these Release Notes before you install and configure Calendar Server.

Sun Java™ System Calendar Server was formerly Sun™ ONE Calendar Server.

Release Notes Revision History

Table 1   Revision History

Date	Description of Changes
February, 2005	Initial release of Sun Java System Calendar Server 6 2005Q1 Release Notes for HP-UX.
July, 2005	Release of RR version of Sun Java System Calendar Server Release 6 2005Q1 Notes for HP-UX.

About Calendar Server, Version 6 2005Q1

Calendar Server is a scalable, web-based solution for centralized calendaring and scheduling for enterprises and service providers. Calendar Server supports user calendars for both events and tasks as well as calendars for resources, such as conference rooms and equipment. For a list of new features, see the following section,

Calendar Server offers two graphical user interfaces, Calendar Express and Communications Express. It also offers customers the flexibility to use the Web Calendar Access Protocol (WCAP) to access calendar data directly in either `text/calendar` or `text/xml` format.

This section includes:

- What's New in This Release
- Hardware and Software Requirements

What's New in This Release

Calendar Server 6 2005Q1 includes the following changes and new features:

- "Automatic Backups" on page 3
- "Read-Only Database" on page 5
- "Support for Rebuilding Alarm Database Separately" on page 5
- "Automatic Database Verification in csdb rebuild" on page 6
- "User Management Utility Name Change" on page 6

Automatic Backups

This section covers the following topics:

Overview of the Old csstored.pl

In earlier versions of Calendar Server, one of the utilities bundled with the product was csstored.pl, which could be invoked to perform an online (hot) archival operation for calendar databases and log files (that is, it took a snapshot of the databases and log files). It performed the following functions:

- Copied the database files and current log files to a backup archive directory and a "hot" backup directory.

- Copied the log files returned by the Berkeley database db_archive utility to a backup archive directory and a "hot" backup directory.

- Removed all log files returned by the Berkeley database db_archive utility from the current database directory, except the last file. This identifies all the log files that have already been applied to the current databases.

- Ran the Berkeley database db_verify on the database files in the "hot" backup directory.

Overview of the New csstored Service

With the release of Calendar Server 6 2005Q1, this Perl script has been changed into a service (csstored) that starts automatically when you issue start-cal. However, the service does not perform a backup until it is configured and enabled. You can configure Calendar Server for automatic backups at the following times:

- When the Calendar Server configuration program, csconfigurator.sh, runs.

- At any time after post-installation configuration, by performing the steps described in the "Configuring Automatic Backups (csstored)" chapter of the *Sun Java System Calendar Server Administration Guide*.

The new csstored service performs the following functions:

- At configured intervals, takes a snapshot of the database files. (Copies the database files and current log files to an archive directory, or a "hot" backup directory, or both, depending on how it is configured.)

- Runs db_verify against the snapshot.

- If the verify step fails (the database is corrupted), the service notifies the administrator. The administrator can put the current database into read-only mode. While the database is in read-only mode, no modify or delete transactions are accepted. It notifies the calendar administrator of the corruption. The administrator can run this step manually if database corruption is detected before the next snapshot.

- If db_verify verifies the snapshot, the current database continues to run during the interval period. In real time throughout the interval, the service moves already applied transaction log files from the current database directory to the archive or hotbackup (or both) directory.

- Asynchronously applies the log files to the hotbackup copy of the databases. This assures that the hotbackup copy is as current as the last transaction log applied to it.

How to Recover from a Database Failure

If your current database ever fails and you need to replace it with a backup, the hotbackup copy can be used with a minimum of processing (and thus a minimum of downtime). To prepare the hotbackup copy, you need only copy the unapplied transactions to the hotbackup directory and run db_recover against it. That utility applies the final unapplied transaction logs, and checks for corruptions. Then, run db_verify to check the state of the database. If the database is OK, then the hotbackup copy is ready to be used as your new production copy.

For more information about the new autobackup feature and the procedures needed to configure and administer it, see the chapter on autobackups in the *Sun Java System Calendar Server Administration Guide*.

For more information about restoring one of your automatic backups, see the "Troubleshooting" chapter of the *Sun Java System Calendar Server Administration Guide.*

Until automatic backups are enabled, the service sends an error message every 24 hours to the calendar administrator saying it is unconfigured. Performing hotbackups is a best practice for Calendar Sever.

TIP	If you have automatic backups disabled, be sure to enable circular logging (caldb.berkeley.circularlogging="yes") so that old transaction logs do not fill up available diskspace. Circular logging must be disabled (caldb.berkeley.circularlogging="no") when doing automatic backups.

Configuring Automatic Backups in csconfigurator.sh

The configuration program now asks you if you want to configure automatic backups. The configuration program will set up automatic backups (hotbackups) for you, or at a later date, you can configure automatic backups by following the instructions in the *Sun Java System Calendar Server 6 2005Q1 Administration Guide*.

Read-Only Database

Calendar Server uses Berkeley Database for its calendar databases (other than LDAP for the user and resource information). If your current Berkeley databases become corrupted and you need to continue to provide user access to them while you are recovering the data, Calendar Server 6 2005Q1 allows you to put the databases in read-only mode. In this mode, the server will not accept any update or delete transactions against any of the databases. Only read transactions are supported.

With automatic backups configured, the service runs `db_verify` against each new snapshot of the databases. If corruption is detected, it automatically sends a warning message to the administrator. The administrator can then put the databases into read-only mode.

However, you might detect corruption later on during the day, between snapshots. If this is the case, you can put your current databases into read-only mode while you are trying to recover. You can not selectively place individual Berkeley databases into read-only mode.

For more information about this, see the "Troubleshooting" chapter in the *Sun Java System Calendar Server 6 2005Q1 Administration Guide*.

To make the Berkeley databases read-only:

1. Edit the `ics.conf` file as follows:

   ```
   caldb.berkeleydb.readonly="yes"
   ```

2. Restart Calendar Server:

   ```
   ./start-cal
   ```

Support for Rebuilding Alarm Database Separately

In earlier releases of Calendar Server, when you ran `csdb rebuild`, all the Calendar Server databases were rebuilt. In Calendar Server 6 2005Q1, you can choose to rebuild only the alarms database. The reason for this is that analysis has shown that the alarms database was the most prone to corruption and was the quickest to rebuild. If you do not know which database is corrupt, you can run it for the alarm database only first to see if that catches the problem. If not, you can then run the full rebuild utility (`csdb`).

Automatic Database Verification in csdb rebuild

In earlier releases of Calendar Server, after rebuilding databases with `csdb`, you had to run `db_verify` manually to verify the rebuilt databases. Now, the `csdb` utility `rebuild` command automatically runs `db_verify` on the rebuilt database.

User Management Utility Name Change

The User Management Utility, a command-line only utility used for provisioning and management of users, resources and domains, has been renamed to the Delegated Administrator Utility and is still the only provisioning tool for Schema 2 that supports Calendar Server.

The Delegated Administrator graphical user interface released for 2005Q1 does not support Calendar Server.

NOTE	This is not the same Delegated Administrator used by earlier versions of Messaging Server for Schema 1provisioning. (It never supported Calendar Server either.)
	If you are still using Schema 1, use the Calendar Server command-line utilities described in the *Sun Java System Calendar Server 6 2005Q1 Administration Guide*.

Installation Changes - Directory Server Preparation Script (comm_dssetup.pl)

The `Directory Server Preparation Script (comm_dssetup.pl)` is no longer bundled with the Calendar Server and Messaging Server products. It has become a separately installable component in the Java Enterprise System installer. On the component selection panel, you can select the Directory Server Preparation Script by itself. Or, it is selected automatically if you select Directory Server.

In general, due to product changes, you will need to install the new Directory Server Preparation Script and run it even if you have run earlier versions. Do not rerun an earlier version you may already have as it will not contain the necessary updates.

Web Calendar Access Protocol (WCAP) Changes

The following changes were made in WCAP:

- "Freebusy Redirect URL" on page 6
- "Changes to Existing WCAP Commands" on page 7
- "New Error Message" on page 8

Freebusy Redirect URL

This sections covers the following topics:

- "What is the Freebusy Redirect URL Feature?" on page 7

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What is the Freebusy Redirect URL Feature?

For customers migrating from Microsoft Exchange to Calendar Server, a new feature was added to WCAP that allows both databases to be searched, first the Calendar Server database and then the Microsoft Exchange database. This enables customers to maintain calendar services during the transition. To accomplish this, two changes were made in WCAP:

- The following `ics.conf` parameter was added:

  `service.wcap.freebusy.redirecturl`

- The following parameter was added to the `free_busy` command:

  `noredirect`

  This parameter is an integer with two values, `0` and `1`. The default is `0`, which causes the server to use the free_busy redirect URL if it exists in the `ics.conf` file.

  When the value is set to `1`, the server will neither look for, nor use the redirect URL, even if it exists in the `ics.conf` file.

How Does it Work?

When the server receives a `free_busy` command, it checks the Calendar Server calendar database. If the server can not find the calendar, the following steps take place:

1. The server checks to see if the `noredirect` parameter was passed in the `get_freebusy` command.

2. If the value of the `noredirect` parameter is `0`, or was not passed in, the server looks for the value in the `ics.conf` file parameter `service.wcap.freebusy.redirecturl`.

3. If the `service.wcap.freebusy.redirecturl` parameter exists and has a URL as its value, it passes the URL back to the requesting program. It is up to the requesting program to use the URL to look for the calendar in the Microsoft Exchange databases.

4. If either of the following is true, the server returns an error.

   ○ The `service.wcap.freebusy.redirecturl` parameter either does not exist or has a blank value.

   ○ The `get_freebusy` command passed in the `noredirect` parameter with a value of `1`.

Changes to Existing WCAP Commands

The following parameter changes were made to existing WCAP commands:

- `notify`–The `notify` parameter was removed from the following commands:

  ○ `deletecomponents_by_range`

- ❍ `deleteevents_by_id`

- ❍ `deleteevents_by_range`

- `smtp`–The `smtp` parameter was added to replace the `notify` parameter.

- `noredirect`–The `noredirect` parameter was added to the `free_busy` command. It tells the server not to return the redirect URL in case the requested calendar can't be found.

- `fetchorder`–This parameter was added to all `fetch*_by` commands. It allows you to choose in which order events and todos are returned. The choices are ascending order, descending order, or a special (legacy) order that is mostly ascending.

- `excludedtstart`–This parameter was added to the `storeevents` and `storetodos` commands. It specifies whether or not the `dtstart` date will be included in a recurring series even if the date falls outside the set of dates generated by the `rrules`.

For further information about these parameters, see the *Sun Java System Calendar Server 6 2005Q1 Developer's Guide*.

New Error Message

One new error message was added: error 81: `RECURRING_COMPONENT_NOT_FOUND`–Recurring component not found. This only happens when `recurring=1` is passed in by a fetch command. This code is returned if part of a recurring series is missing (either the master or an exception).

This error can be caused by a recurring series being truncated by a limit in the maximum number of transactions fetched, or by a date range limitation.

Old Deployment Guides Deprecated

The *Sun Java System Calendar Server 6 2004Q2 Deployment Guide* and the *Sun Java Communications Services 6 2004Q2 Enterprise Deployment Planning Guide* have been deprecated in favor of the *Sun Java System Communications Services 6 2005Q1 Deployment Planning Guide*.

Hardware and Software Requirements

This section describes the hardware and software required and recommended for this release of Calendar Server.

- Hardware Requirements and Recommendations

- Software Requirements and Recommendations

NOTE	For Calendar Server installations that separate functionality across front-end and back-end machines, the hardware platforms and operating systems must be the same on each end.

Hardware Requirements and Recommendations

- Approximately 500 Mbytes of disk space for typical installation. For production systems, at least 1 Gbytes.

- 128 Mbytes of RAM. For production systems, 256 Mbytes to 1 Gbytes for best performance.

- RAID storage for fast access (recommended for large databases).

Software Requirements and Recommendations

- Supported Software Platforms

- Recommended Browsers for Client Computers

Supported Software Platforms

HP-UX 11i v1 (PA-RISC)

Recommended Browsers for Client Computers

Sun Java System Calendar Express 6 2005Q1 requires a JavaScript-enabled browser. For optimal performance, the following browsers are recommended:

Table 2   Recommended Browser Versions for Calendar Server 6

Browser	HP-UX
Netscape™ Communicator	7.0
Microsoft Internet Explorer	5.5 or 6.0
Mozilla	1.2 or 1.4

Bugs Fixed in This Release

None.

Important Information

This section contains preinstallation information that you should know before you install Calendar Server 6 2005Q1, including:

CAUTION	Calendar Server does not support Network File System (NFS) mounted partitions. Do not install or create any part of Calendar Server; including executable, database, configuration, data, temporary, or log files on an NFS-mounted partition.

Front-End and Back-End Machines and Operating Systems

For Calendar Server installations that separate functionality across front-end and back-end machines, the hardware platforms must be the same on each end.

For more information about installing Calendar Server on front-end and back-end machines, see the *Sun Java System Calendar Server 6 20004Q2 Administration Guide* at:

http://docs.sun.com/coll/CalendarServer_04q2

HP-UX Platform Support

Java Enterprise System runs on the HP-UX platform. The default installation locations are listed for the following:

- Calendar Server
- Communications Express
- Delegated Administrator Utility (formerly User Management Utility)

Calendar Server

The following table provides the directory path details for Calendar Server:

Table 3   Directory Path details on HP-UX Platforms

HP-UX Directory
/opt/sun/calendar
/etc/opt/sun/calendar/config
/var/opt/sun/calendar

Communications Express

The default installation location in HP-UX for Communications Express is:

/opt/sun/uwc

Delegated Administrator Utility (formerly User Management Utility)

The default installation location in HP-UX for Delegated Administrator is:

/opt/sun/comms/commcli

OS Patches

You must apply the required operating system patches before installing Calendar Server 6 2005Q1. Calendar Server Patches are available at http://sunsolve.sun.com.

Table 4   Calendar Server 6 2005Q1 Alignment Patches Required For HP-UX

Patch Number	**Patch Description**
B.11.11.0406.5	Gold Applications Patches for HP-UX 11i v1, June 2004
B.11.11.0406.5	Gold Base Patches for HP-UX 11i v1, June 2004
A.02.00	Transport Optional Upgrade Release for B.11.11
2.03.01	Java2 Out-of-box for HP-UX
B.11.11.08	HP-UX 11.11 Strong Random Number Generator

CAUTION	To avoid breaking product dependencies, it is mandatory to install the patches in the order provided in the table

Required Privileges

To run the Sun Java™ Enterprise System installer or the Calendar Server 6 2005Q1 configuration program on HP-UX Systems, you must log in as or become the superuser (`root`).

Java Enterprise System Installer

Install Calendar Server 6 2005Q1 using the Sun Java™ Enterprise System installer. The Java Enterprise System installer installs the Sun component product packages, including Calendar Server 6 2005Q1, and the shared components that are used by the various products.

This section covers the following topics:

- Default Installation Directory
- HP-UX Depot Files

Default Installation Directory

The default installation directory (`cal_svr_base`) for HP-UX packages (for core and API) is:

`/opt/sun`

After installation, HP-UX Calendar Server files are found in `/opt/sun/calendar`.

HP-UX Depot Files

The table below lists the Depot packages for the various Calendar Server related components.

Table 5   HP-UX Depot packages for Calendar Server Related Components

Component	Depot File
Calendar Server	sun-calendar-core
	sun-calendar-api
	Localized files: sun-calendar-core-es sun-calendar-core-ko sun-calendar-core-fr sun-calendar-core-zh_CH sun-calendar-core-de sun-calendar-core-ja sun-calendar-core-zh_TW
Communications Express	sun-uwc
Delegated Administrator Utility	sun-commcli-client sun-commcli-server

Post-Installation Configuration Steps

After installing Calendar Server 6 2005Q1, you *must* configure it as follows:

1. Run the Directory Server Setup Script (`comm_dssetup.pl`) to configure Sun Java System Directory Server for Calendar Server schema.

2. Run the Calendar Server Configuration Program (`csconfigurator.sh`) to configure your site's specific requirements.

For instructions, refer to the *Sun Java System Calendar Server 6 2005Q1 Administration Guide*.

Where to Find Calendar Server Data and Utilities

For Java Enterprise System Release 3, Calendar Server provides the links for HP-UX locations shown in the table below.

Table 6   Directory Locations

File Names	HP-UX Locations*
Administrator utilities: start-cal, stop-cal, csattribute, csbackup, cscal, cscomponents, csdb, csdomain, csexport, csimport, csmonitor, csplugin, cspurge, csrename, csresource, csrestore, csschedule, csstats, cstool, and csuser	/opt/sun/calendar/sbin
Migration utilities: csmig, csvdmig, ics2migrate and cs5migrate	
Scripts: icsasm, legbackup.sh, legrestore.sh, and private2public.pl	
Administrator utilities: csstart and csstop	/opt/sun/calendar/lib
Configuration files: ics.conf, version.conf, counter.conf, and sslpassword.conf	/opt/sun/calendar/config-template
LDAP server update files: 60iplanet-calendar.ldif, ics50-schema.conf, and um50-common-schema.conf	
Mail formatting (*.fmt) files	/etc/opt/sun/calendar/config/language
Schema IDIF files: 20subscriber.ldif, 50ns-value.ldif, 50ns-delegated-admin.ldif, 55ims-ical.ldif, 50ns-mail.ldif, 56ims-schema.ldif, 50ns-mlm.ldif, 60iplanet-calendar.ldif, 50ns-msg.ldif	/etc/opt/sun/calendar/config/schema
Library (.sl) files	/opt/sun/calendar/lib
SSL utilities: certutil and modutil	
Session database	/opt/sun/calendar/lib/http
timezones.ics file	/opt/sun/calendar/data
Counter statistics files: counter and counter.dbstat	/opt/sun/calendar/lib/counter

Directory Server Performance

To improve the performance of your LDAP directory server, especially if you are using calendar searches of the LDAP directory consider the following items:

- Indexing the LDAP Directory Server Attributes
- Checking and Setting the Size Limit and the Look Through Limit Parameters

Indexing the LDAP Directory Server Attributes

To improve performance when Calendar Server accesses the LDAP directory server, add indexes to the LDAP configuration file for various attributes.

The configuration program, comm_dssetup.pl, will optionally do the indexing for you.

To see the performance difference indexing can give you, perform the following test:

1. Enable calendar searches of the LDAP directory server by making sure the following parameter in the ics.conf file is set to "yes":

   service.calendarsearch.ldap = "yes" (*Default*)

2. Run the following LDAP command:

   ldapsearch -b "*base*"
   "(&(icscalendarowned=**user**)(objectclass=icsCalendarUser))"

   where *base* is the LDAP base DN of the directory server where the user and resource data for Calendar Server is located, and *user* is the value that an end user can enter in the Calendar Express Subscribe > Calendar Search dialog.

Tests have shown that with 60,000 entries, the above search took about 50-55 seconds without indexing icsCalendarOwned. After indexing, the above search took only about 1-2 seconds.

For more information about adding directory server indexes, refer to the *Sun Java System Directory Server 5 2005Q1* documentation at:

http://docs.sun.com/coll/DirectoryServer_05q1

Checking and Setting the Size Limit and the Look Through Limit Parameters

To determine if the Look Through Limit (nsslapd-lookthroughlimit) and Size Limit (nsslapd-sizelimit) parameters are set to appropriate values, try the following command:

   ldapsearch -b "*base*"
   "(&(icscalendarowned=**user**)(objectclass=icsCalendarUser))"

where, *base* is the LDAP base DN of the directory server where the user and resource data for Calendar Server is located, and *user* is the value that an end user can enter in the Calendar Express Subscribe > Calendar Search dialog.

If the LDAP server returns an error, the `nsslapd-sizelimit` or the `nsslapd-lookthroughlimit` parameter might not be large enough. Follow these guidelines to set these parameters:

- Ensure that the value for the `nsslapd-sizelimit` parameter in the `slapd.conf` or equivalent file is large enough to return all the desired results; otherwise, truncation can occur, and no results will be displayed.

- Ensure that the value for the `nsslapd-lookthroughlimit` parameter in the `slapd.ldbm.conf` or equivalent file is large enough to complete a search of all the users and resources in the LDAP directory. If possible set `nsslapd-lookthroughlimit` to -1, which causes no limit to be used.

Communications Express Using Schema 1

There are two issues with Schema 1 in Communications Express:

- If you are running Communications Express with Sun LDAP Schema 1, before running the Communications Express configuration program, you must add the DC root node to your LDAP using ldapmodify. The entry should look like this:

```
dn: o=internet
objectClass: organization
o: internet
description: Root level node in the Domain Component (DC) tree
```

- The calendar utility used to provision users in Schema 1, `csuser`, was designed for Calendar Express and does not enable a user for Address Book service as is needed for Communications Express.

Provisioning Tools

There are two tools for provisioning users, groups and domains for Calendar Server: The Delegated Administrator Utility and Calendar Server utilities. For information on Delegated Administrator, see the *Sun Java System Communications Services 6 2005Q1 Delegated Administrator Guide*. For information on the Calendar Server utilities, see the *Sun Java System Calendar Server 6 2005Q1 Administration Guide*.

NOTE	Do not attempt to provision users through the Access Manager Console. Though it is possible to create users and assign them a calendar service, do not use this method as results will be unpredictable and negatively impact your deployment.

Calendar Server 6 Documentation

Calendar Server 6 includes the following documentation. Part numbers are in parentheses.

- *Sun Java System Calendar Server 6 2005Q1 Release Notes* (819-1563)

- *Sun Java System Calendar Server 6 2005Q1 Administration Guide* (819-0024)

- *Sun Java System Calendar Server 6 2005Q1 Developer's Guide* (819-0025)

- *Sun Java System Communications Express 6 2005Q1 Administration Guide* (819-0115)

- *Sun Java System Communications Express 6 2005Q1 Customization Guide* (819-0116)

- *Sun Java System Communications Services 6 2005Q1 User Management Utility Administration Guide* (819-0114)

- *Sun Java System Communications Services 6 2005Q1 Schema Reference* (819-0113)

- *Sun Java System Communications Services 6 2005Q1 Event Notification Service Guide* (819-0109)

Calendar Express 6 2005Q1 Online Help is available with the Calendar Express software. Communications Express 6 2005Q1 Online Help is available with the Communications Express software.

Calendar Server 6 2005Q1 documentation is available on the following Web site:

http://docs.sun.com/coll/CalendarServer_05q1

Known Issues and Limitations

This section describes the known issues and limitations of Sun Java System Calendar Server 6 2005Q1 for HP-UX. For a list of the known issues and limitations in this component, refer to the following Release Notes:

> http://docs.sun.com/app/docs/doc/819-0023

The following topics are the known issues:

- Installation
- Security

Installation

Calendar Server installation fails in absence of nobody user and nobody group in the system (6290338).

Calendar Server installation fails if user nobody and group nobody is not available in the system.

Workaround

The system administrator has to create the following before installing Calendar Server using Java Enterprise System installer:

- new group as nobody

    command to execute: groupadd nobody

- new user as nobody

    command to execute: useradd -g nobody nobody

Security

Calendar DB files are created with the wrong permissions (6291250).

Anyone with access to the system has the potential to view private calendars and events due to wrong permissions.

Workaround

To overcome this security issue,

1. Install the Calendar Server using Java Enterprise System installer.

2. Once the installation succeeds, execute "umask 022."

3. Run the Calendar Server configurator.

Calendar server log files world writeable by default (6291057).

Log files are created in the wrong mode 644 or 640, instead of mode 666.

Workaround

To overcome this security issue,

1. Install the Calendar Server using Java Enterprise System installer.

2. Once the installation succeeds, execute "umask 022."

3. Run the Calendar Server configurator.

Redistributable Files

Sun Java System Calendar Server 6 2005Q1 contains the following set of files for which Sun Microsystems, Inc. grants you a non-exclusive, non-transferable, limited license to reproduce and distribute in binary form.

In addition, you may copy and use but not modify the listed header files and class libraries solely to cause your resulting binaries to be able to interface with Sun's software APIs.

Sample code is provided solely for reference purposes pursuant to creating the above mentioned binaries.

All the redistributable files for Calendar Server are for the plugin API, known as CSAPI. The API is described in the *Sun Java System Calendar Server 6 2005Q1 Developer's Guide* at:

http://docs.sun.com/coll/CalendarServer_04q2

In the following files, `cal_svr_base` is the directory into which Calendar Server was installed. The default for Solaris is `/opt/SUNWics5/cal`, for Linux it is `/opt/sun/calendar`

Redistributable files are found in various subdirectories of `cal_svr_base/csapi`:

- authsdk
- bin
- classes
- include
- plugins
- samples

authsdk

The following are the redistributable files in this subdirectory (`cal_svr_base/csapi/authsdk/`):

```
cgiauth.c

expapi.h

login.html

nsapiauth.c
```

bin

The following are the redistributable files in this subdirectory (`cal_svr_base/csapi/bin/`):

```
libcsapi_xpcom10.sl
libicsexp10.sl
```

classes

The following are the redistributable files in this subdirectory (`cal_svr_base/csapi/classes/`):

```
ens.jar
jms.jar
```

include

The following are the redistributable files in this subdirectory (`cal_svr_base/csapi/include/`):

IIDS.h	nsIEnumerator.h
csIAccessControl.h	nsIEventQueueService.h
csIAuthentication.h	nsIFactory.h
csICalendarDatabase.h	nsIPtr.h
csICalendarLookup.h	nsIServiceManager.h
csICalendarServer.h	nsIServiceProvider.h
csIDBTranslator.h	nsISizeOfHandler.h
csIDataTranslator.h	nsISupports.h
csIMalloc.hpluginscsIPlugin.h	nsISupportsArray.h
csIQualifiedCalidLookup.h	nsMacRepository.h
csIUserAttributes.h	nsProxyEvent.h
mozIClassRegistry.h	nsRepository.h
mozIRegistry.h	nsString.h
nsAgg.h	nsTraceRefcnt.h
nsCOMPtr.h	nsVector.h

nsCRT.h	nsUnicharUtilCIID.h
nsCom.h	nsXPComCIID.h
nsDebug.h	nsXPComFactory.h
nsError.h	nscore.h
nsHashtable.h	pasdisp.h
nsIAtom.h	publisher.h
nsICaseConversion.h	subscriber.h
nsICollection.h	xcDll.h
nsID.h	xcDllStore.h

plugins

This directory (cal_svr_base/csapi/plugins/) has redistributable files in the following subdirectories:

- accesscontrol
- authentication
- datatranslator
- userattributes

accesscontrol

The following redistributable files are found in this subdirectory (cal_svr_base/csapi/plugins/accesscontrol/):

csAccessControl.cpp

csAccessControl.h

csAccessControlFactory.cpp

authentication

The following redistributable files are found in this subdirectory (cal_svr_base/csapi/plugins/authentication/):

csAuthentication.cpp

`csAuthentication.h`

`csAuthenticationFactory.cpp`

datatranslator

The following redistributable files are found in this subdirectory
(`cal_svr_base/csapi/plugins/datatranslator/`):

`csDataTranslator.cpp`

`csDataTranslator.h`

`csDataTranslatorFactory.cpp`

userattributes

The following redistributable files are found in this subdirectory
(`cal_svr_base/csapi/plugins/userattributes/`):

`csUserAttributes.cpp`

`csUserAttributes.h`

`csUserAttributesFactory.cpp`

samples

This directory (`cal_svr_base/csapi/samples/`) has redistributable files in the following
subdirectories:

- authentication

- datatranslator

- ens

- userattributes

authentication

The following redistributable files are found in this subdirectory
(`cal_svr_base/csapi/samples/authentication/`):

`authlogon.c`

`authlogon.h`

`authtest.c`

`csAuthenticationLocal.cpp`

`csAuthenticationLocal.h`

`csAuthenticationLocalFactory.cpp`

datatranslator

The following redistributable files are found in this subdirectory
(`cal_svr_base/csapi/samples/datatranslator/`):

`csDataTranslatorCSV.cpp`

`csDataTranslatorCSV.h`

`csDataTranslatorCSVFactory.cpp`

ens

The following redistributable files are found in this subdirectory (`cal_svr_base/csapi/samples/ens/`):

`apub.c`

`asub.c`

`rpub.c`

`rsub.c`

userattributes

The following redistributable files are found in this subdirectory
(`cal_svr_base/csapi/samples/userattributes/`):

`csUserAttributesDB.cpp`

csUserAttributesDB.cpp

csUserAttributesDBFactory.cpp

Communications Express

Sun Java™ System Communications Express Version 6 2005Q1 provides an integrated web-based communication and collaboration client that consists of three client modules - Calendar, Address Book and Mail. The Calendar and Address Book client modules are deployed as a single application on any web container and are collectively referred to as Unified Web Client (UWC). Messenger Express is the standalone web interface mail application that uses the HTTP service of the Messaging Server.

This section contains the following topics:

- Supported Browsers
- Installation Notes

Supported Browsers

Communications Express can be viewed using:

- Netscape™ Communicator 6.2.x, 7
- Internet Explorer 5.x, 6.0
- Mozilla™ 1.0 or higher

Installation Notes

The following are the dependent services for Communications Express:

1. **Directory Server.** Install Sun Java™ System Directory Server 5 2005Q1.

2. **Calendar Server.** Install Sun Java™ System Calendar Server 6 2005Q1 (6.2).

3. **Web Container.** Install Sun Java™ System Web Server 6 2005Q1 (6.1 SP4) with JDK version1.5. or

4. **Application Server**. Install Sun Java™ System Application Server 8.1 DAS (Domain Administration Server)

5. **Messaging Server**. Install Sun Java™ System Messaging Server 6 2005Q1 (6.2).

6. **Access Manager** Install Sun Java™ System Access Manager 6 2005Q1.

NOTE	Communications Express has been tested and is supported only with the server versions mentioned above.

Refer to chapter 2, "Installing and Configuring Communications Express" of *Sun Java™ Systems Communications Express Administration Guide* for instructions on how to install and configure Sun Java System Communications Express.

Refer to chapter 4, "Implementing Single Sign-On" of *Sun Java™ Systems Communications Express Administration Guide* for instructions on how to configure Sun Java System Communications Express when Access Manager is deployed.

Delegated Administrator Utility

These Release Notes contain important information available at the time of release of Sun Java System Delegated Administrator 6.2 2005Q1 for HP-UX. Known issues and limitations, and other information are addressed here.

This release notes contains the following sections:

- About Delegated Administrator 6.2 2005Q1

- Delegated Administrator Supported Browsers

- Delegated Administrator Installation Notes

- Known Issues and Limitations of Delegated Administrator

About Delegated Administrator 6.2 2005Q1

Sun Java™ System Delegated Administrator Version 6.2 2005Q1 is a set of command-line tools for provisioning users, groups, domains, and resources for Sun Java System Messaging Server and Sun Java System Calendar Server using Sun Java System Identity Server.

Delegated Administrator Supported Browsers

Delegated Administrator can be viewed using:

- Netscape™ Communicator 6.2.x, 7

- Internet Explorer™ 5.5 or higher

- Mozilla™ 1.0 or higher

Delegated Administrator Installation Notes

*T*he following are the dependent services for Delegated Administrator:

1. **Directory Server.** Install Sun Java™ System Directory Server version 5.2.

2. **Calendar Server.** Install Sun Java™ System Calendar Server Version 6.1.

3. **Web Server.** Install Sun Java™ System Web Server version 6.1 SP4 with JDK version1.5.

4. **Messaging Server**. Install Sun Java™ System Messaging Server 6.1.

5. **Identity Server.** Install Sun Java™ System Identity Server 6.2.

6. **Application Server.** Install Sun Java™ System Application Server 8.1.

NOTE	Delegated Administrator has been tested and is supported only with the server versions mentioned above. The Delegated Administrator for JES 3 Release can be deployed only on Sun Java System Application Server 8.1. Also, the Communication Express Configurator supports only the Domain Administration Server (DAS) deployment for Application Server 8.1.

Known Issues and Limitations of Delegated Administrator

This section contains a list of the known issues and limitations with Delegated Administrator. The following topics are the known issues:

Configure Now

Delegated Administrator in Configure Now mode does not work (6242742).

Delegated Administrator in Configure Now mode does not work, because this feature is not supported.

Workaround

None.

How to Report Problems and Provide Feedback

If you have problems with Sun Java System Calendar Server, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at
  http://www.sun.com/service/sunone/software

  This site has links to the Online Support Center, and Product Tracker, as well as to maintenance programs and support contact numbers.

- The IT Resource Center website for HP-UX at
  www1.itrc.hp.com

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation

- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem

- Detailed steps on the methods you have used to reproduce the problem

- Any error logs or core dumps

To assist in reporting problems, Sun provides the `capture_environment.pl` tool, a Perl script that captures the current Calendar Server environment, including the `ics.conf` file, log files, calendar database files, platform information, and core files (if available). These files can be useful to Calendar Server development to debug problems.

To run the `capture_environment.pl` tool:

1. If necessary, download the `capture_environment.pl` tool from customer support.

2. If necessary, install Perl and add it to your path. (If you cannot install Perl, see the instructions in the `capture_environment.pl` file that describe how to manually create a snapshot of your Calendar Server environment.)

3. Log in as (or become) `root`.

4. Run the `capture_environment.pl` tool. The tool copies the files to a directory named `archive_directory`. On UNIX systems, it places all files into a tar file named `tar_file`. On Windows 2000 systems, however, you must manually add the files in `archive_directory` to a `Zip` file.

5. Send the `tar file` or `Zip file` to customer support.

Sun Welcomes Your Comments

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To share your comments, go to http://docs.sun.com and click Send Comments. In the online form, provide the document title and part number. The part number is a seven-digit or nine-digit number that can be found on the title page of the guide or at the top of the document.

Additional Sun Resources

Useful Sun Java System information can be found at the following Internet locations:

- Documentation for Sun Java System Calendar Server 6
  http://docs.sun.com/coll/CalendarServer_04q2

- Sun Java System Documentation
  http://docs.sun.com/prod/entsys_04q2

- Sun Java System Professional Services
  http://www.sun.com/service/sunps/sunone

- Sun Java System Software Products and Service
  http://www.sun.com/software

- Sun Java System Software Support Services
  http://sunsolve.sun.com/pub-cgi/show.pl?target=help/collections

- Sun Java System Support and Knowledge Base
  http://www.sun.com/service/support/software

- Sun Java System Software Support Services
  http://www.sun.com/support/

- Sun Java System Consulting and Professional Services
  http://www.sun.com/service/sunps/sunone

- Sun Java System Developer Information
  http://developers.sun.com/prodtech/index.html

- Sun Developer Support Services
  http://www.sun.com/developers/support

- Sun Java System Software Training
  http://www.sun.com/software/training

- Sun Software Data Sheets
  http://wwws.sun.com/software