



Call Management System (CMS)
R18.0.1
Release Notes
Issue 1.8
September 11, 2017

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1. Purpose

The release notes provide information about the GA version of the Call Management System (CMS) R18 software. The release notes include last minute information that is not incorporated into the standard documentation as well as a very high level of the release content.

For details about the features included in CMS R18 please see the product documentation posted at <http://support.avaya.com>.

The following table describes the release details:

Product	Version	Required Patch or PSN
Call Management System R18 18.0.1	700513155 - CMS Server – r18Ska.p (for Solaris SPARC platforms)	CMS server patch required. See Appendix A for details.
	700513154 - CMS Server – r18Xka.p (for Solaris x86 platforms)	
	700513153 - CMS Server – r18Lka.p (for Linux platforms) 700513156 - additionally required for Linux Platforms	
CMS Supervisor Web – cmsweb18ka.p (for Solaris) CMS Supervisor Web – cmsweb18ka.p (for Linux)		None
CMS Supervisor PC Client– R18 MA.36		None

2. Document Change History

Issue Number	Date	Comment
1.0	2 October 2015	Initial Release of R18.0.0.0
1.1	13 October 2015	Added information about minimum 10 second refresh rate for R18 Integrated reports. Provided additional information on Designer report issues in section 5.1
1.2	14 March 2016	Added information on 18.0.0.1 Service Pack- Bug fix release
1.3	11 July 2016	Add information on 18.0.0.2 Service Pack
1.4	16 January 2017	Remove mention of new LAN backup version support. Newer LAN backup software support has been delayed to the 18.0.1 Feature Pack.
1.5	30 January 2017	Updated section 1 to note the latest supported Supervisor PC client is version MA.27
1.6	12 June 2017	Updated for R18.0.1
1.7	15 June 2017	Updated to note new CMS Supervisor PC client availability to fix problems described in PSN004822u.
1.8	11 September 2017	Updated notes to reflect changes delivered in CMS Supervisor PC client version MA41.

3. CMS R18 Functionality

3.1. CMS R18 Provides support for Prior CMS Platforms & Configurations.

The CMS R18 release delivers the following features:

- Support upgrades to the Oracle T4 and Oracle x4270 as well as upgrades to Dell 620 and Dell 720 platforms.
- Support for new sales on the Dell R220, Dell R630, Dell R730, and HPE DL380 G9 platforms.
 - Beginning with R18.0.0.2 the HP DL20 will be supported for new sales
- Continued support for virtualized deployment on VMWare, this includes new sales and upgrades to existing VMWare deployments.
- All other previously sold Oracle servers not mentioned above are not supported for upgrade.
- New platforms will be sold headless (no Video, Keyboard, Mouse included with platform). Linux moves to an ASCII-only console.

3.2. Tenant Data Access Controls

Tenant Data Access extends the current CMS user data access management features.

- Allowing service providers to partition an ACD to be used by multiple tenants/customers
- Allowing business units sharing the same ACD to manage and have access to their own data.
- Updated Permission checking

3.3. Time Zone Data archiving enhancements

New time zone data archiving extends the current CMS time zone archiving and reporting capabilities.

- Allows additional aggregation of the interval data based on the time zone of the associated tenant.
- Allows one additional time zone aggregation of the interval data for each ACD

3.4. Third Party Software refresh

The CMS R18 release includes Informix version 12 along with data compression.

Java is upgraded to version 8 and Tomcat is version 10.

Linux deployments are version 6.6.

Solaris deployments continue to be Solaris 10

3.5. Web Client Improvements

CMS Web is updated and enhanced to provide the following operations

- Support for Integrated reports

- Support for limited administration. CMS Web will allow for agent skill changes.
- Update the look and feel based on usability studies.

3.6. CM 7 support

The following features are available only with CMS integration with CM 7

- Support for the new Attribute data field available on the Agent form in CM 7
- Support for 24,000 measured trunks
- Support for 360,000 agent skill pairs
- Support for 2000 location IDs

3.7. CMS R18 Resolved Issues and Other Improvements

Beginning with CMS R18, capacities information can now be found in the CMS Overview and Specifications document posted on support.avaya.com. The CMS Capacities document is no longer available as a separate document.

The CMS R18 release includes the following fixes:

- Move user passwords over during CUE or Platform Upgrade processes from existing CMS systems.
- Update Free Space Allocation screen to account for data compression with Informix 12
- Improve Supervisor Web to properly check for all expired user passwords.
- Fix issues with grid rotation and columnar tables in Supervisor Web client.
- Add search to Supervisor Web client
- Maintenance backups to NFS will now send an error to elog when device is not available.

3.8. Integrated Reports changes

Beginning with CMS R18, Integrated reports will query the historical database more frequently in order to provide more accurate data to the user.

As a result of this change, the minimum refresh rate for Integrated reports will be 10 seconds.

4. CMS R18.0.0.1 Functionality

4.0. New Functionality in 18.0.0.1

The Mobile App is available on 18.0.0.1

4.1. Bugs fixed in 18.0.0.1

The following CMS Server fixes have been added to CMS R18.0.0.1

- Corrected VDN & Vector Interval Call Data Overruns
- Incorrect data formatting on reports due to resizing changes
- Correction reverts the password complexity rules back the RHEL defaults
- Added support PAM authentication mechanism to authenticate the user

- Fixed memory leak in query log
- Fixed wrong value for start time for the first interval after a day boundary with integrated reports
- Fixed Tomcat deadlock Issue
- Fixed Group by functionality for Custom interval report with no default TZ defined
- Updated Database upgrade script to be re-executable
- Fixed Process Dying during a migration
- Corrected Issues with TZ reporting on Multi Table Join
- Corrections to Agent Trace with SLM implemented on the CM
- An agents hangs up first in a call that came to its reserve skill and it's not being counted as agent released
- Corrected CMS handling of ACCTIME with a "reverse" conference
- Agent Released was not set correctly with a SIP refer/replace call scenario
- Corrected OCW Information in Real Time Report
- Fixed issues seen If a call was queued to more than one skill and it was path replace transferred to a call on an unmeasured trunk
- Netbackup updated to use straight file list of the file systems to be backed up
- Introduced two more alarms for elog process
- Netconfig Enhanced to handle NICs on different subnets
- When configuring more NICs, netconfig now adds to the /etc/Hosts

The following CMS Supervisor Web fixes have been added to CMS R18.0.0.1 :

- Reports updated to support multiple word fonts, single quote, keywords in quotes
- Corrected Incorrect parsing of report definitions for integrated reports
- Updated Client to display database error messages when they occur
- Enhanced Error Handling
- Updated the minimum refresh for web integrated reports to 10 seconds
- Added robustness fix for Designer Integrated reports for Vector, Skill and VDN
- Updated logging to ensure Passwords were not logged in plain text
- Updated web client custom report to allow the selection of any Aux reason code synonyms and provide a menu for browsing the administered synonyms
- Corrected Formatting on some integer fields that are stored as time/duration fields

The following CMS Supervisor PC fixes have been added to CMS R18.0.0.1 :

- Updated Supervisor to correctly enforce private report permissions
- SSH login process fixed to correctly clean up environment
- Updated the Skills column of the change agent skills dialog to be wide enough to show the full skill name
- Client updated to support response the Linux systems returns for Password Already used
- When TE opens existing profile for telnet connection it now retains the configured port
- Exception Admin forms updated to show "Time Limit" translation correctly
- TE install updated to conclude with a "Finish" dialog

- Report inputs (e.g. Historical Trunk Daily) updated to support both the older and newer format of trunk id's
 - Updated Help to display for Threshold Settings
-

5. CMS R18.0.0.2 Functionality

5.1 New Functionality in 18.0.0.2

- Support for the HP DL20 G9 server for all new orders.

5.2 Bugs fixed in 18.0.0.2

The following CMS Server fixes have been added to CMS R18.0.0.2:

- Cannot create a new custom report by copying an existing Agent Group report.
- Intermittent login failures with web client interface.
- In many cases, existing Designer Reports were not running properly with R18 in either the Web Client or Supervisor PC client, or both. Improvements have been included in 18.0.0.2 to eliminate these issues. Examples of specifically reported issues that have been resolved are:
 - Interval historical report is empty or blank when date field and VDN name contain the same word.
 - Designer report failed to execute when report input field contained both a comma and apostrophe
 - Some Designer reports failing to execute where report queries are complex and/or report definition had manual edits to the database queries.

The following CMS Supervisor Web fixes have been added to CMS R18.0.0.2 :

- When Tenant Partitioning is installed, normal web client users were blocked from executing some Designer Reports.
- Agent Real Time report not available in user menu in Web Client, for some users.
- Web Client usage, over time, can cause CMS server CPU occupancy to increase and never reduce.
- Web Client Split/Skill Report data from one column can merge or overlap into the adjacent column.

The following CMS Supervisor PC fixes have been added to CMS R18.0.0.2:

- In some non-English languages, a range of VDNs was not accepted as input for reports. With this fix comes improved handling of 64-bit data types in report input processing for Supervisor PC client and Network Reporting.

5.3 Known Issues in CMS R18.0.0.2

1. CMS Supervisor PC client can experience issues when connecting to the CMS server if a user's password has automatically expired. While Avaya works to resolve this issue, a workaround has been provided. The workaround is a one line manual change to a file on the CMS server.

This change should be implemented during upgrade or installation of CMs R18.0.0.2.
Please see PSN004460r1 for details.

6. CMS R18.0.1

6.1 New Functionality in 18.0.1

CMS R18.0.1 provides the following features:

- Dual IP: The ability to administer two IP addresses for the same ACD, to facilitate Communication Manager failover to ESS or LSP
- LAN Backup updates: Support for Veritas Netbackup 7.7.3 and IBM Spectrum Protect 7.1.4 (Note that IBM Spectrum Storage Protect was formerly known as Tivoli Storage Manager).

6.2 Bug Fixed in 18.0.1

The following CMS Server fixes have been added to CMS R18.0.1:

- A message indicating successful completion of Tivoli restore has been added to the restore.log file
- Failure of Non-EAS multi-agent skill change failed with CMS R18 and CM 7.x have been resolved.
- In some circumstances multiple duplicate rows will appear in Integrated Reports. The duplicate rows have been eliminated.
- Running the Forecast Manager resulted in a daily false alarm. The false alarm has been removed.
- The CMS call handling code assumed an agent's hold ended when the CM changed trunks without the agent's knowledge. This has been corrected so the hold is still tracked after CM generated transfers.
- When an agent logged out before a call they were on was recorded, an extra row was written to the hagent table with a tenant ID of 0. This has been fixed so no extra row with the wrong tenant ID is written to the hagent table.
- In some of the SIP refer/replace call scenarios with Experience Portal use, the call was marked as having the agent releasing first. This is now fixed so it will correctly show the caller hanging up first.
- When multi-tenancy was activated, some non-tenant users were receiving errors when running some reports.

- For Solaris SPARC CMS implementations only, several cumulative data measures in the HVECTOR and HVDPN tables were always 0. The correct values are now written into the database.
- When agent trace is turned on or off for an agent before they log into the system, a core dump was created. The correction allows agent trace to be turned on or off at any time whether the agent is currently logged in or not.
- CMS real time processing can restart when a Designer report is executed that has an exceptionally long 'where' clause and contains another predicate word after the predicate word 'IN'.
- A complicated set of transfers used to connect calls routed by an application in Avaya Experience Portal caused problems in the CMS call handling code. That has been corrected.
- When database allocated space in a large CMS virtualized deployment exceeds 2 terabytes, various problems occur. This has been corrected to now allow up to 4 terabytes of free space in the large virtualized deployment.

The following CMS Supervisor Web fixes have been added to CMS R18.0.1 :

- Designer reports executed in CMS Web client displayed data incorrectly when the report had a "Totals" row. The report did not display the rows of data that make up the totals either above or below the totals line.
- The CMS Web client will now display an error message with the name of the missing calculation if a dictionary calculation is not present in the dictionary, allowing the customer to correct the problem.
- Real time reports may stop refreshing when executed in the CMS Web client.
- Designer reports executed in CMS Web client interface used wrong Russian Language encoding. Correct encoding now used. Details covered in PSN004823
- Reports will fail when executed in CMS Web client if a data item in a select contains an expression that contains a calculation.

The following CMS Supervisor PC fixes have been added to CMS R18.0.1:

- *11 September 2017: the following fixes are included in CMS PC Supervisor client version MA41:*
 - Some Designer Integrated Reports displaying incorrect number of rows in CMS Web where report includes Integrated and Real Time components.
 - When creating a new report using report Wizard, headings did not display properly on CMS Web.
 - A Report created using Report Designer, where input was set as multi-acd for split/skill, failed to open in CMS Web
 - CMS Web does not show the chart when the sync value on an Integrated Report is changed, the chart will not be updated with the new sync value while split/skills sync is changed.
 - The following 2 server messages were not translated into non-English languages
you have no permission for the cwc(s)
you have no permission for the tenant(s)

- For Integrated Reports (both Standard and Designer), the report refresh at 00:00 hours is now functioning properly.
- ***Added 15 June 2017:***
 - Problems are resolved where Integrated Reports in CMS R18 Supervisor PC client, would stop updating.
- In CMS Supervisor, using the browse button allowed a tenant user to see dictionary information for other tenants. Changes were not allowed, but the user could view the dictionary information. This has been corrected and tenant users can no longer view dictionary items for other tenants.
- The Australia/Brisbane time zone has been added as a choice in the default time zone menu
- For the Historical -> Agent -> Group AUX Monthly report, executed in a CMS R18 Supervisor client when executing against a CMS R18 server, the date-based selection will pop-up instead of the month-based selection.
- CMS Supervisor now provides more clear and correct messages to the user when logging in with an expired password.
- The data type is now pre-selected for Start and End time fields in the Call Records Report : "Report" menu, "Design" option.
- A Call Work Code search will now return proper information when the search uses 3 digit CWCs separated with a dash (example: 311-313).
- Report-> Historical-> Split/Skill->Preferred Skill Level Summary Daily/Monthly/Weekly report column header now displaying properly as “ % Agent Surplus Preferred Skill level Calls” instead of displaying internal software name.
- For 32bit Windows 7, custom values in the HKCU\SOFTWARE\Avaya\Supervisor\18.0 are no longer overwritten. There was never a problem with 64 bit Windows 7.
- Users can now create scripts for Tenant administration.
-

Known Issues with CMS Supervisor PC in CMS R18.0.1:

- ***Added 15 June 2017:*** For Integrated Reports (both Standard and Designer), the report refresh at 00:00 hours is not functioning properly. For any Integrated Report that is running when the time changes from 23:59 to 00:00 that Integrated Report should be stopped and restarted after 00:00 to avoid issues. The time referred to is the actual time on the CMS server, not the time on the user PC.

11 September 2017: This problem is resolved in CMS PC Supervisor client version MA41.

6.3 Documentation Updated for R18.0.1

The following documents have been updated for CMS 18.0.1:

- *Avaya CMS Overview and Specification*
- *Avaya CMS Supervisor Reports*
- *Avaya CMS LAN Backup*
- *Avaya CMS Switch Connections, Administration and Troubleshooting*
- *Avaya CMS Software Installation, Maintenance, and Troubleshooting for Linux*
- *Avaya CMS Software Installation, Maintenance, and Troubleshooting for Solaris*

You can download the document from <http://support.avaya.com>.

7. Download Instructions

For installation and upgrade implementation options, please consult your Account team or Sales team.

NOTE:

Please be sure to use the latest “Software Implementation, Maintenance and Troubleshooting” document for proper instructions.

For upgrade, customers should consult the “CMS Overview and Specifications” document to determine the proper upgrade procedure to use.

Go to <http://support.avaya.com> to view the full documentation set for CMS R18.

Appendix A: Patch Installation Instructions

A CMS server patch is required for CMS R18.0.1 GA load.

Patch summary:

The patch allows extremely complex Designer reports to execute. Without the patch, some Designer reports can fail to launch.

The patch only impacts Designer reports with very complex database queries. All standard reports and most Designer reports will execute if the patch is not installed.

Where to obtain the patch:

The patch can be downloaded from support.avaya.com

For Linux

r18ka.p_cmssp1-l.bin

For Solaris SPARC

r18ka.p.1-s.tar

Solaris x86

r18ka.p.1-x.tar

md5 checksums are provided on the site along with the patch file.

How to install the patch:

For Linux systems:

1. Download the Linux patch file to / on the CMS server.
2. Check the md5 checksum of the downloaded file from the CMS server) with the md5 checksum posted with the patch.

```
Prompt> cd /
Prompt> md5sum r18ka.p_cmssp1-l.bin
Prompt> chmod 744 r18ka.p_cmssp1-l.bin
```

3. Turn off CMS
4. Install the patch

```
Prompt> ./r18ka.p_cmssp1-l.bin
Follow prompts to install
```
5. Turn on CMS

For Solaris SPARC systems:

1. Download r18ka.p.1-s.tar to / on the CMS system.
2. Check the md5 checksum of the downloaded file from the CMS server) with the md5 checksum posted with the patch.

- ```
Prompt> cd /
Prompt> digest -v -a md5 r18ka.p.1-s.tar
```
3. Turn off CMS
  4. Install the patch

```
Prompt> tar xvf r18ka.p.1-s.tar
Prompt> /cms/cmspatches/cmspatch_install_script
Follow prompts to install
```
  5. Turn on CMS

**For Solaris X86 systems:**

1. Download r18ka.p.1-x.tar to / on the CMS system.
2. Check the md5 checksum of the downloaded file from the CMS server) with the md5 checksum posted with the patch.

```
Prompt> cd /
Prompt> digest -v -a md5 r18ka.p.1-x.tar
```
3. Turn off CMS
4. Install the patch

```
Prompt> tar xvf r18la.p.1-x.tar
Prompt> /cms/cmspatches/cmspatch_install_script
Follow prompts to install
```
5. Turn on CMS

## Appendix B: Linux RPMs included in CMS R18.0.1

|                                           |                                                       |                                           |
|-------------------------------------------|-------------------------------------------------------|-------------------------------------------|
| abrt-2.0.8-43.el6.x86_64                  | jpackage-utils-1.7.5-3.16.el6.noarch                  | parted-2.1-29.el6.x86_64                  |
| abrt-addon-ccpp-2.0.8-43.el6.x86_64       | json-c-0.11-13.el6.x86_64                             | passwd-0.77-7.el6.x86_64                  |
| abrt-addon-kerneloops-2.0.8-43.el6.x86_64 | kbd-1.15-11.el6.x86_64                                | pciutils-3.1.10-4.el6.x86_64              |
| abrt-addon-python-2.0.8-43.el6.x86_64     | kbd-misc-1.15-11.el6.noarch                           | pciutils-libs-3.1.10-4.el6.x86_64         |
| abrt-cli-2.0.8-43.el6.x86_64              | kernel-2.6.32-504.el6.x86_64                          | pcmciautils-015-4.2.el6.x86_64            |
| abrt-libs-2.0.8-43.el6.x86_64             | kernel-2.6.32-696.el6.x86_64                          | pcre-7.8-7.el6.x86_64                     |
| abrt-python-2.0.8-43.el6.x86_64           | kernel-firmware-2.6.32-696.el6.noarch                 | perl-5.10.1-144.el6.x86_64                |
| abrt-tui-2.0.8-43.el6.x86_64              | kexec-tools-2.0.0-307.el6.x86_64                      | perl-libs-5.10.1-144.el6.x86_64           |
| acl-2.2.49-7.el6.x86_64                   | keyutils-1.4-5.el6.x86_64                             | perl-Module-Pluggable-3.90-144.el6.x86_64 |
| acpid-1.0.10-3.el6.x86_64                 | keyutils-libs-1.4-5.el6.i686                          | perl-Pod-Escapes-1.04-144.el6.x86_64      |
| aic94xx-firmware-30-2.el6.noarch          | keyutils-libs-1.4-5.el6.x86_64                        | perl-Pod-Simple-3.13-144.el6.x86_64       |
| alsa-lib-1.1.0-4.el6.x86_64               | keyutils-libs-devel-1.4-5.el6.x86_64                  | perl-version-0.77-144.el6.x86_64          |
| alsa-utils-1.1.0-10.el6.x86_64            | kpartx-0.4.9-100.el6.x86_64                           | pinentry-0.7.6-8.el6.x86_64               |
| at-3.1.10-49.el6.x86_64                   | krb5-devel-1.10.3-65.el6.x86_64                       | pinfo-0.6.9-12.el6.x86_64                 |
| atmel-firmware-1.3-7.el6.noarch           | krb5-libs-1.10.3-65.el6.i686                          | pkgconfig-0.23-9.1.el6.x86_64             |
| attr-2.4.44-7.el6.x86_64                  | krb5-libs-1.10.3-65.el6.x86_64                        | plymouth-0.8.3-29.el6.x86_64              |
| audit-2.4.5-6.el6.x86_64                  | ksh-20120801-33.el6.x86_64                            | plymouth-core-libs-0.8.3-29.el6.x86_64    |
| audit-libs-2.4.5-6.el6.x86_64             | lcms-libs-1.19-1.el6.x86_64                           | plymouth-scripts-0.8.3-29.el6.x86_64      |
| augeas-libs-1.0.0-10.el6.x86_64           | ledmon-0.79-1.el6.x86_64                              | pm-utils-1.2.5-11.el6.x86_64              |
| authconfig-6.1.12-23.el6.x86_64           | less-436-13.el6.x86_64                                | policycoreutils-2.0.83-30.1.el6_8.x86_64  |
| avahi-libs-0.6.25-17.el6.x86_64           | libacl-2.2.49-7.el6.x86_64                            | polkit-0.96-11.el6.x86_64                 |
| b43-fwcutter-012-2.2.el6.x86_64           | libaio-0.3.107-10.el6.x86_64                          | poppler-0.12.4-11.el6.x86_64              |
| b43-openfwf-5.2-10.el6.noarch             | libattr-2.4.44-7.el6.x86_64                           | poppler-data-0.4.0-1.el6.noarch           |
| basesystem-10.0-4.el6.noarch              | libblkid-2.17.2-12.28.el6.x86_64                      | poppler-utils-0.12.4-11.el6.x86_64        |
| bash-4.1.2-48.el6.x86_64                  | libcap-2.16-5.5.el6.x86_64                            | popt-1.13-7.el6.x86_64                    |
| bc-1.06.95-1.el6.x86_64                   | libcap-ng-0.6.4-3.el6_0.1.x86_64                      | portreserve-0.0.4-11.el6.x86_64           |
| bfa-firmware-3.2.23.0-2.el6.noarch        | libcom_err-1.41.12-23.el6.i686                        | postfix-2.6.6-8.el6.x86_64                |
| bind-libs-9.8.2-0.62.rc1.el6.x86_64       | libcom_err-1.41.12-23.el6.x86_64                      | prelink-0.4.6-3.1.el6_4.x86_64            |
| bind-utils-9.8.2-0.62.rc1.el6.x86_64      | libcom_err-devel-1.41.12-23.el6.x86_64                | procmail-3.22-25.1.el6_5.1.x86_64         |
| binutils-2.20.51.0.2-5.46.el6.x86_64      | libcurl-7.19.7-53.el6_9.x86_64                        | procps-3.2.8-45.el6.x86_64                |
| biosdevname-0.7.2-1.el6.x86_64            | libdrm-2.4.65-2.el6.x86_64                            | psacct-6.3.2-70.el6.x86_64                |
| blktrace-1.0.1-7.el6.x86_64               | libedit-2.11-4.20080712cvs.1.el6.x86_64               | psmisc-22.6-24.el6.x86_64                 |
| bridge-utils-1.2-10.el6.x86_64            | libertas-usb8388-firmware-5.110.22.p23-3.1.el6.noarch | pth-2.0.7-9.3.el6.x86_64                  |
| btparser-0.17-2.el6.x86_64                | libevent-1.4.13-4.el6.x86_64                          | pygobject2-2.20.0-5.el6.x86_64            |
| busybox-1.15.1-21.el6_6.x86_64            | libffi-3.0.5-3.2.el6.x86_64                           | pygpme-0.1-18.20090824bzr68.el6.x86_64    |
| bzip2-1.0.5-7.el6_0.x86_64                | libfontenc-1.1.2-3.el6.x86_64                         | pyOpenSSL-0.13.1-2.el6.x86_64             |
| bzip2-libs-1.0.5-7.el6_0.x86_64           | libgcc-4.4.7-18.el6.i686                              | python-2.6.6-66.el6_8.x86_64              |

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|--------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------|
| ca-certificates-2016.2.10-65.4.el6.noarch              | libgcc-4.4.7-18.el6.x86_64                          | python-argparse-1.2.1-2.1.el6.noarch                          |
| checkpolicy-2.0.22-1.el6.x86_64                        | libgcrypt-1.4.5-12.el6_8.x86_64                     | python-dateutil-1.4.1-7.el6.noarch                            |
| chkconfig-1.3.49.5-1.el6.x86_64                        | libgpg-error-1.7-4.el6.x86_64                       | python-dmidecode-3.10.15-1.el6.x86_64                         |
| cms-R18.0.1.0-ka.p.x86_64                              | libgssglue-0.1-11.el6.x86_64                        | python-ethtool-0.6-6.el6.x86_64                               |
| cmsweb-R18.0.1.0-ka.p.x86_64                           | libgudev1-147-2.73.el6_8.2.x86_64                   | python-gudev-147.1-4.el6_0.1.x86_64                           |
| ConsoleKit-0.4.1-6.el6.x86_64                          | libICE-1.0.6-1.el6.x86_64                           | python-iniparse-0.3.1-2.1.el6.noarch                          |
| ConsoleKit-libs-0.4.1-6.el6.x86_64                     | libIcn-1.18-2.el6.x86_64                            | python-iwlib-0.1-1.2.el6.x86_64                               |
| coreutils-8.4-46.el6.x86_64                            | libjpeg-turbo-1.2.1-3.el6_5.x86_64                  | python-libs-2.6.6-66.el6_8.x86_64                             |
| coreutils-libs-8.4-46.el6.x86_64                       | libkadm5-1.10.3-65.el6.x86_64                       | python-lxml-2.2.3-1.1.el6.x86_64                              |
| cpio-2.10-13.el6.x86_64                                | libnih-1.0.1-7.el6.x86_64                           | python-magic-5.04-30.el6.x86_64                               |
| cpuspeed-1.5-22.el6.x86_64                             | libnl-1.1.4-2.el6.x86_64                            | python-pycurl-7.19.0-9.el6.x86_64                             |
| cracklib-2.8.16-4.el6.x86_64                           | libpcap-1.4.0-4.20130826git2dbcaa1.el6.x86_64       | python-rhsm-1.18.6-1.el6.x86_64                               |
| cracklib-dicts-2.8.16-4.el6.x86_64                     | libpciaccess-0.13.4-1.el6.x86_64                    | python-rhsm-certificates-1.18.6-1.el6.x86_64                  |
| crda-3.13_2015.10.22-3.el6.x86_64                      | libpng-1.2.49-2.el6_7.x86_64                        | python-six-1.9.0-2.el6.noarch                                 |
| cronie-1.4.4-16.el6_8.2.x86_64                         | libproxy-0.3.0-10.el6.x86_64                        | python-urlgrabber-3.9.1-11.el6.noarch                         |
| cronie-anacron-1.4.4-16.el6_8.2.x86_64                 | libproxy-bin-0.3.0-10.el6.x86_64                    | ql2100-firmware-1.19.38-3.1.el6.noarch                        |
| crontabs-1.10-33.el6.noarch                            | libproxy-python-0.3.0-10.el6.x86_64                 | ql2200-firmware-2.02.08-3.1.el6.noarch                        |
| cryptsetup-luks-1.2.0-11.el6.x86_64                    | libreport-2.0.9-33.el6.x86_64                       | ql23xx-firmware-3.03.27-3.1.el6.noarch                        |
| cryptsetup-luks-libs-1.2.0-11.el6.x86_64               | libreport-cli-2.0.9-33.el6.x86_64                   | ql2400-firmware-7.03.00-1.el6_5.noarch                        |
| cups-1.4.2-77.el6.x86_64                               | libreport-compat-2.0.9-33.el6.x86_64                | ql2500-firmware-7.03.00-1.el6_5.noarch                        |
| cups-libs-1.4.2-77.el6.x86_64                          | libreport-filesystem-2.0.9-33.el6.x86_64            | quota-3.17-23.el6.x86_64                                      |
| curl-7.19.7-53.el6_9.x86_64                            | libreport-plugin-kerneloops-2.0.9-33.el6.x86_64     | rdate-1.4-16.el6.x86_64                                       |
| cyrus-sasl-2.1.23-15.el6_6.2.x86_64                    | libreport-plugin-logger-2.0.9-33.el6.x86_64         | readahead-1.5.6-2.el6.x86_64                                  |
| cyrus-sasl-lib-2.1.23-15.el6_6.2.x86_64                | libreport-plugin-mailx-2.0.9-33.el6.x86_64          | readline-6.0-4.el6.x86_64                                     |
| cyrus-sasl-plain-2.1.23-15.el6_6.2.x86_64              | libreport-plugin-reportuploader-2.0.9-33.el6.x86_64 | Red_Hat_Enterprise_Linux-Release_Notes-6-en-US-8-2.el6.noarch |
| dash-0.5.5.1-4.el6.x86_64                              | libreport-plugin-rhtsupport-2.0.9-33.el6.x86_64     | redhat-indexhtml-6-6.el6.noarch                               |
| db4-4.7.25-22.el6.x86_64                               | libreport-plugin-ureport-2.0.9-33.el6.x86_64        | redhat-logos-60.0.14-1.el6.noarch                             |
| db4-utils-4.7.25-22.el6.x86_64                         | libreport-python-2.0.9-33.el6.x86_64                | redhat-release-server-6.9.0.4.el6.x86_64                      |
| dbus-1.2.24-8.el6_6.x86_64                             | libselinux-2.0.94-7.el6.i686                        | redhat-support-lib-python-0.9.7-6.el6.noarch                  |
| dbus-glib-0.86-6.el6_4.x86_64                          | libselinux-2.0.94-7.el6.x86_64                      | redhat-support-tool-0.9.8-6.el6.noarch                        |
| dbus-libs-1.2.24-8.el6_6.x86_64                        | libselinux-devel-2.0.94-7.el6.x86_64                | rfkill-0.3-4.el6.x86_64                                       |
| dbus-python-0.83.0-6.1.el6.x86_64                      | libselinux-utils-2.0.94-7.el6.x86_64                | rhn-check-1.0.0.1-43.el6.noarch                               |
| desktop-file-utils-0.15-9.el6.x86_64                   | libsemanage-2.0.43-5.1.el6.x86_64                   | rhn-client-tools-1.0.0.1-43.el6.noarch                        |
| device-mapper-1.02.117-12.el6.x86_64                   | libsepolicy-2.0.41-4.el6.x86_64                     | rhnlib-2.5.22-15.el6.noarch                                   |
| device-mapper-event-1.02.117-12.el6.x86_64             | libsepolicy-devel-2.0.41-4.el6.x86_64               | rhnsd-4.9.3-5.el6.x86_64                                      |
| device-mapper-event-libs-1.02.117-12.el6.x86_64        | libSM-1.2.1-2.el6.x86_64                            | rhn-setup-1.0.0.1-43.el6.noarch                               |
| device-mapper-libs-1.02.117-12.el6.x86_64              | libss-1.41.12-23.el6.x86_64                         | rng-tools-5-2.el6_7.x86_64                                    |
| device-mapper-persistent-data-0.6.2-0.1.rc7.el6.x86_64 | libssh2-1.4.2-2.el6_7.1.x86_64                      | rootfiles-8.1-6.1.el6.noarch                                  |
| dhclient-4.1.1-53.P1.el6.x86_64                        | libstdc4.4.7-18.el6.i686                            | rpcbind-0.2.0-13.el6.x86_64                                   |

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| dhcpc-common-4.1.1-53.P1.el6.x86_64    | libstdc4.4.7-18.el6.x86_64             | rpm-4.8.0-55.el6.x86_64                             |
| diffutils-2.8.1-28.el6.x86_64          | libstdc-devel-4.4.7-18.el6.i686        | rpm-libs-4.8.0-55.el6.x86_64                        |
| dmidecode-2.12-7.el6.x86_64            | libtar-1.2.11-17.el6_4.1.x86_64        | rpm-python-4.8.0-55.el6.x86_64                      |
| dmraid-1.0.0.rc16-11.el6.x86_64        | libtasn1-2.3-6.el6_5.x86_64            | rsh-0.17-64.el6.x86_64                              |
| dmraid-events-1.0.0.rc16-11.el6.x86_64 | libtiff-3.9.4-21.el6_8.x86_64          | rsync-3.0.6-12.el6.x86_64                           |
| dosfstools-3.0.9-4.el6.x86_64          | libtirpc-0.2.1-13.el6.x86_64           | rsyslog-5.8.10-10.el6_6.x86_64                      |
| dracut-004-409.el6_8.2.noarch          | libudev-147-2.73.el6_8.2.x86_64        | rt61pci-firmware-1.2-7.el6.noarch                   |
| dracut-kernel-004-409.el6_8.2.noarch   | libusb-0.1.12-23.el6.x86_64            | rt73usb-firmware-1.8-7.el6.noarch                   |
| e2fsprogs-1.41.12-23.el6.x86_64        | libusb1-1.0.9-0.7.rc1.el6.x86_64       | satyr-0.16-2.el6.x86_64                             |
| e2fsprogs-libs-1.41.12-23.el6.x86_64   | libuser-0.56.13-8.el6_7.x86_64         | scl-utils-20120927-27.el6_6.x86_64                  |
| ed-1.1-3.3.el6.x86_64                  | libutempter-1.1.5-4.1.el6.x86_64       | sed-4.2.1-10.el6.x86_64                             |
| efibootmgr-0.5.4-15.el6.x86_64         | Lib_Utils-1.00-09.noarch               | selinux-policy-3.7.19-307.el6.noarch                |
| eggdbus-0.6-3.el6.x86_64               | libuuid-2.17.2-12.28.el6.x86_64        | selinux-policy-targeted-3.7.19-307.el6.noarch       |
| eject-2.1.5-17.el6.x86_64              | libX11-1.6.4-3.el6.x86_64              | sendmail-8.14.4-9.el6_8.1.x86_64                    |
| elfutils-0.164-2.el6.x86_64            | libX11-common-1.6.4-3.el6.noarch       | setserial-2.17-25.el6.x86_64                        |
| elfutils-libelf-0.164-2.el6.i686       | libXau-1.0.6-4.el6.x86_64              | setup-2.8.14-23.el6.noarch                          |
| elfutils-libelf-0.164-2.el6.x86_64     | libxcb-1.12-4.el6.x86_64               | setuptool-1.19.9-4.el6.x86_64                       |
| elfutils-libelf-devel-0.164-2.el6.i686 | libXext-1.3.3-1.el6.x86_64             | sg3_utils-libs-1.28-12.el6.x86_64                   |
| elfutils-libs-0.164-2.el6.x86_64       | libXfont-1.5.1-2.el6.x86_64            | sgpio-1.2.0.10-5.el6.x86_64                         |
| ethtool-3.5-6.el6.x86_64               | libXi-1.7.8-1.el6.x86_64               | shadow-utils-4.1.5.1-5.el6.x86_64                   |
| expat-2.0.1-13.el6_8.x86_64            | libxml2-2.7.6-21.el6_8.1.x86_64        | shared-mime-info-0.70-6.el6.x86_64                  |
| expect-5.44.1.15-5.el6_4.x86_64        | libxml2-python-2.7.6-21.el6_8.1.x86_64 | slang-2.2.1-1.el6.x86_64                            |
| file-5.04-30.el6.x86_64                | libXrender-0.9.10-1.el6.x86_64         | smartmontools-5.43-3.el6.x86_64                     |
| file-libs-5.04-30.el6.x86_64           | libxslt-1.1.26-2.el6_3.1.x86_64        | snappy-1.1.0-1.el6.x86_64                           |
| filesystem-2.4.30-3.el6.x86_64         | libXtst-1.2.3-1.el6.x86_64             | sos-3.2-54.el6.noarch                               |
| findutils-4.4.2-9.el6.x86_64           | lm_sensors-libs-3.1.1-17.el6.x86_64    | sqlite-3.6.20-1.el6_7.2.x86_64                      |
| fipscheck-1.2.0-7.el6.x86_64           | logrotate-3.7.8-28.el6.x86_64          | strace-4.8-11.el6.x86_64                            |
| fipscheck-lib-1.2.0-7.el6.x86_64       | lsof-4.82-5.el6.x86_64                 | sudo-1.8.6p3-27.el6.x86_64                          |
| fontconfig-2.8.0-5.el6.x86_64          | lua-5.1.4-4.1.el6.x86_64               | sysstat-9.0.4-33.el6.x86_64                         |
| freetype-2.3.11-17.el6.x86_64          | lvm2-2.02.143-12.el6.x86_64            | system-config-firewall-base-1.2.27-7.2.el6_6.noarch |
| ftp-0.17-54.el6.x86_64                 | lvm2-libs-2.02.143-12.el6.x86_64       | system-config-firewall-tui-1.2.27-7.2.el6_6.noarch  |
| gamin-0.1.10-9.el6.x86_64              | lzo-2.03-3.1.el6_5.1.x86_64            | system-config-network-tui-1.6.0.el6.3-4.el6.noarch  |
| gawk-3.1.7-10.el6_7.3.x86_64           | m2crypto-0.20.2-9.el6.x86_64           | systemtap-runtime-2.9-7.el6.x86_64                  |
| gdb-7.2-92.el6.x86_64                  | m4-1.4.13-5.el6.x86_64                 | sysvinit-tools-2.87-6.ds1.el6.x86_64                |
| gdbm-1.8.0-39.el6.x86_64               | mailx-12.4-8.el6_6.x86_64              | tar-1.23-15.el6_8.x86_64                            |
| giflib-4.1.6-3.1.el6.x86_64            | make-3.81-23.el6.x86_64                | tcl-8.5.7-6.el6.x86_64                              |
| glib2-2.28.8-9.el6.x86_64              | MAKEDEV-3.24-6.el6.x86_64              | tcpdump-4.0.0-11.20090921gitdf3cb4.2.el6.x86_64     |
| glibc-2.12-1.209.el6.i686              | man-1.6f-39.el6.x86_64                 | tcp_wrappers-7.6-58.el6.x86_64                      |
| glibc-2.12-1.209.el6.x86_64            | man-pages-3.22-20.el6.noarch           | tcp_wrappers-libs-7.6-58.el6.x86_64                 |
| glibc-common-2.12-1.209.el6.x86_64     | man-pages-overrides-6.9.1-1.el6.noarch | tcsh-6.17-38.el6.x86_64                             |
| gmp-4.3.1-12.el6.x86_64                | mdadm-3.3.4-8.el6.x86_64               | telnet-0.17-48.el6.x86_64                           |

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| gnupg2-2.0.14-8.el6.x86_64                  | MegaCli-8.04.07-1.noarch                        | telnet-server-0.17-48.el6.x86_64                       |
| gnutls-2.12.23-21.el6.x86_64                | microcode_ctl-1.17-25.el6.x86_64                | time-1.7-38.el6.x86_64                                 |
| gpgme-1.1.8-3.el6.x86_64                    | mingetty-1.08-5.el6.x86_64                      | tmpwatch-2.9.16-6.el6.x86_64                           |
| gpg-pubkey-2fa658e0-45700c69                | mlocate-0.22.2-6.el6.x86_64                     | traceroute-2.0.14-2.el6.x86_64                         |
| gpg-pubkey-fd431d51-4ae0493b                | module-init-tools-3.9-26.el6.x86_64             | ttmkmdir-3.0.9-32.1.el6.x86_64                         |
| gpm-libs-1.20.6-12.el6.x86_64               | mtr-0.75-5.el6.x86_64                           | tzdata-2017b-1.el6.noarch                              |
| grep-2.20-6.el6.x86_64                      | mt-st-1.1-5.el6.x86_64                          | tzdata-java-2017b-1.el6.noarch                         |
| groff-1.18.1.4-21.el6.x86_64                | mysql-libs-5.1.73-8.el6_8.x86_64                | udev-147-2.73.el6_8.2.x86_64                           |
| grub-0.97-99.el6.x86_64                     | nano-2.0.9-7.el6.x86_64                         | unzip-6.0-5.el6.x86_64                                 |
| grubby-7.0.15-7.el6.x86_64                  | ncurses-5.7-4.20090207.el6.x86_64               | upstart-0.6.5-16.el6.x86_64                            |
| gskcrypt64-8.0-50.10.x86_64                 | ncurses-base-5.7-4.20090207.el6.x86_64          | usbutils-003-6.el6.x86_64                              |
| gskssl64-8.0-50.10.x86_64                   | ncurses-libs-5.7-4.20090207.el6.i686            | usermode-1.102-3.el6.x86_64                            |
| gzip-1.3.12-24.el6.x86_64                   | ncurses-libs-5.7-4.20090207.el6.x86_64          | ustr-1.0.4-9.1.el6.x86_64                              |
| hal-0.5.14-14.el6.x86_64                    | net-snmp-5.5-60.el6.x86_64                      | util-linux-ng-2.17.2-12.28.el6.x86_64                  |
| hal-info-20090716-5.el6.noarch              | net-snmp-libs-5.5-60.el6.x86_64                 | vconfig-1.9-8.1.el6.x86_64                             |
| hal-libs-0.5.14-14.el6.x86_64               | net-tools-1.60-114.el6.x86_64                   | vim-common-7.4.629-5.el6_8.1.x86_64                    |
| hdparm-9.43-4.el6.x86_64                    | newt-0.52.11-4.el6.x86_64                       | vim-enhanced-7.4.629-5.el6_8.1.x86_64                  |
| hesiod-3.1.0-19.el6.x86_64                  | newt-python-0.52.11-4.el6.x86_64                | vim-filesystem-7.4.629-5.el6_8.1.x86_64                |
| hpssacli-2.0-23.0.x86_64                    | nfs-utils-1.2.3-75.el6.x86_64                   | vim-minimal-7.4.629-5.el6_8.1.x86_64                   |
| hunspell-1.2.8-16.el6.x86_64                | nfs-utils-lib-1.1.5-13.el6.x86_64               | virt-what-1.11-1.3.el6.x86_64                          |
| hunspell-en-0.20090216-7.1.el6.noarch       | nspr-4.13.1-1.el6.x86_64                        | wget-1.12-10.el6.x86_64                                |
| hwdata-0.233-18.1.el6.noarch                | nss-3.27.1-13.el6.x86_64                        | which-2.19-6.el6.x86_64                                |
| info-4.13a-8.el6.x86_64                     | nss-softokn-3.14.3-23.3.el6_8.x86_64            | wireless-tools-29-6.el6.x86_64                         |
| initscripts-9.03.58-1.el6.x86_64            | nss-softokn-freebl-3.14.3-23.3.el6_8.i686       | words-3.0-17.el6.noarch                                |
| iproute-2.6.32-54.el6.x86_64                | nss-softokn-freebl-3.14.3-23.3.el6_8.x86_64     | xdg-utils-1.0.2-17.20091016cvs.el6.noarch              |
| iptables-1.4.7-16.el6.x86_64                | nss-softokn-freebl-devel-3.14.3-23.3.el6_8.i686 | xinetd-2.3.14-40.el6.x86_64                            |
| iptables-ipv6-1.4.7-16.el6.x86_64           | nss-sysinit-3.27.1-13.el6.x86_64                | xmlrpc-c-1.16.24-1210.1840.el6.x86_64                  |
| iputils-20071127-24.el6.x86_64              | nss-tools-3.27.1-13.el6.x86_64                  | xmlrpc-c-client-1.16.24-1210.1840.el6.x86_64           |
| ipw2100-firmware-1.3-11.el6.noarch          | nss-util-3.27.1-3.el6.x86_64                    | xorg-x11-drv-ati-firmware-7.6.1-2.el6.noarch           |
| ipw2200-firmware-3.1-4.el6.noarch           | ntp-4.2.6p5-10.el6_8.2.x86_64                   | xorg-x11-fonts-Type1-7.2-11.el6.noarch                 |
| irqbalance-1.0.7-8.el6.x86_64               | ntpdate-4.2.6p5-10.el6_8.2.x86_64               | xorg-x11-font-utils-7.2-11.el6.x86_64                  |
| ivtv-firmware-20080701-20.2.noarch          | ntsysv-1.3.49.5-1.el6.x86_64                    | xz-4.999.9-0.5.beta.20091007git.el6.x86_64             |
| iw-4.1-1.el6.x86_64                         | numactl-2.0.9-2.el6.x86_64                      | xz-libs-4.999.9-0.5.beta.20091007git.el6.x86_64        |
| iwl1000-firmware-39.31.5.1-1.el6.noarch     | openjpeg-libs-1.3-16.el6_8.x86_64               | xz-lzma-compat-4.999.9-0.5.beta.20091007git.el6.x86_64 |
| iwl100-firmware-39.31.5.1-1.el6.noarch      | openldap-2.4.40-16.el6.x86_64                   | yum-3.2.29-81.el6.noarch                               |
| iwl3945-firmware-15.32.2.9-4.el6.noarch     | openssh-5.3p1-122.el6.x86_64                    | yum-metadata-parser-1.1.2-16.el6.x86_64                |
| iwl4965-firmware-228.61.2.24-2.1.el6.noarch | openssh-clients-5.3p1-122.el6.x86_64            | yum-plugin-security-1.1.30-40.el6.noarch               |
| iwl5000-firmware-8.83.5.1_1-1.el6_1.noarch  | openssh-server-5.3p1-122.el6.x86_64             | yum-rhn-plugin-0.9.1-60.2.el6_8.noarch                 |
| iwl5150-firmware-8.24.2.2-1.el6.noarch      | openssl-1.0.1e-57.el6.i686                      | yum-utils-1.1.30-40.el6.noarch                         |
| iwl6000-firmware-9.221.4.1-1.el6.noarch     | openssl-1.0.1e-57.el6.x86_64                    | zd1211-firmware-1.4-4.el6.noarch                       |
| iwl6000g2a-firmware-17.168.5.3-             | openssl-devel-1.0.1e-57.el6.i686                | zip-3.0-1.el6_7.1.x86_64                               |

|                                                        |                                       |                                |
|--------------------------------------------------------|---------------------------------------|--------------------------------|
| 1.el6.noarch                                           |                                       |                                |
| iwl6050-firmware-41.28.5.1-2.el6.noarch                | p11-kit-0.18.5-2.el6_5.2.x86_64       | zlib-1.2.3-29.el6.i686         |
| jasper-libs-1.900.1-16.el6_6.3.x86_64                  | p11-kit-trust-0.18.5-2.el6_5.2.x86_64 | zlib-1.2.3-29.el6.x86_64       |
| java-1.8.0-openjdk-1.8.0.121-1.b13.el6.x86_64          | pam-1.1.1-24.el6.x86_64               | zlib-devel-1.2.3-29.el6.x86_64 |
| java-1.8.0-openjdk-headless-1.8.0.121-1.b13.el6.x86_64 | pam_passwdqc-1.0.5-8.el6.x86_64       |                                |

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## Appendix C: Solaris SPARC Packages Included in R18.0.1

### Solaris SPARC (X86 list follows the SPARC list):

|                                                       |                                                                  |                                                         |
|-------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------|
| CTEact 8.17                                           | SUNWgnome-search-tool-share<br>2.6.0,REV=10.0.3.2004.12.16.00.58 | SUNWpool<br>11.10.0,REV=2005.01.21.15.53                |
| RICHPs 3.4 (03:59 PM 01/05/05)                        | SUNWgnome-session<br>2.6.0,REV=10.0.3.2004.12.21.13.03           | SUNWpoolr<br>11.10.0,REV=2005.01.21.15.53               |
| SMCexpect 5.45                                        | SUNWgnome-session-root<br>2.6.0,REV=10.0.3.2004.12.21.13.03      | SUNWpostrun<br>1.0,REV=101.0.3.2008.02.06.11.57         |
| SMClgcc346 3.4.6                                      | SUNWgnome-session-share<br>2.6.0,REV=10.0.3.2004.12.21.13.03     | SUNWpostrun-root<br>1.0,REV=101.0.3.2008.02.06.11.57    |
| SMCtcl 8.5.10                                         | SUNWgnome-themes<br>2.6.0,REV=10.0.3.2004.12.15.17.41            | SUNWppm<br>11.10.0,REV=2005.01.21.15.53                 |
| SOLMEGACLI 8.00.23                                    | SUNWgnome-themes-share<br>2.6.0,REV=10.0.3.2004.12.15.17.42      | SUNWpppd<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWPython 2.3.3,REV=10.0.3.2004.12.15.14.07          | SUNWgnome-user-docs<br>2.6.0,REV=10.0.3.2004.12.16.00.50         | SUNWpppdr<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWPython-share<br>2.3.3,REV=10.0.3.2004.12.15.14.07 | SUNWgnome-vfs<br>2.6.0,REV=10.0.3.2004.12.15.17.07               | SUNWpppdt<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWaac 11.10.0,REV=2008.08.11.23.56                  | SUNWgnome-vfs-root<br>2.6.0,REV=10.0.3.2004.12.15.17.07          | SUNWpppdu<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWaccr 11.10.0,REV=2005.01.21.15.53                 | SUNWgnome-vfs-share<br>2.6.0,REV=10.0.3.2004.12.15.17.07         | SUNWpr 4.5.1,REV=2004.11.05.02.30                       |
| SUNWaccu 11.10.0,REV=2005.01.21.15.53                 | SUNWgnome-wm<br>2.6.0,REV=10.0.3.2004.12.15.20.59                | SUNWproduct-registry-root<br>11.10,REV=2005.01.09.23.05 |
| SUNWadmap 11.10,REV=2005.01.09.23.05                  | SUNWgnome-wm-root<br>2.6.0,REV=10.0.3.2004.12.15.20.59           | SUNWpsf 13.1,REV=2005.01.21.15.53                       |
| SUNWadmc 11.9,REV=2005.01.09.20.45                    | SUNWgnome-wm-share<br>2.6.0,REV=10.0.3.2004.12.15.20.59          | SUNWpsm-ipp<br>11.10.0.0,REV=2008.02.29.16.01           |
| SUNWadmfr 11.10,REV=2005.01.09.20.45                  | SUNWgnome-xml-root<br>2.6.0,REV=10.0.3.2004.12.15.14.23          | SUNWpsm-lpd<br>11.10.0,REV=2005.01.08.05.16             |
| SUNWadmfw 11.8,REV=2005.01.09.20.45                   | SUNWgnome-xml-share<br>2.6.0,REV=10.0.3.2004.12.15.14.23         | SUNWpsr 13.1,REV=2005.01.21.15.53                       |
| SUNWadmlib-sysid 11.10,REV=2005.01.09.20.45           | SUNWgss 11.10.0,REV=2005.01.21.15.53                             | SUNWpsu 13.1,REV=2005.01.21.15.53                       |
| SUNWadmr 11.10,REV=2005.01.09.23.05                   | SUNWgssc 11.10.0,REV=2005.01.21.15.53                            | SUNWqfed 5.0,REV=2004.12.10.10.0                        |
| SUNWastfb 10.0.0,REV=2009.02.20                       | SUNWgssdh 11.10.0,REV=2005.01.21.15.53                           | SUNWqlc<br>11.10.0,REV=2005.01.04.14.31                 |
| SUNWastfbcf 10.0.0,REV=2009.02.26                     | SUNWgssk 11.10.0,REV=2005.01.21.15.53                            | SUNWqlcnic<br>11.10.0,REV=2011.03.25.05.07              |
| SUNWatfsr 11.10.0,REV=2005.01.21.15.53                | SUNWgzip 11.10.0,REV=2005.01.08.05.16                            | SUNWqlcu<br>11.10.0,REV=2006.02.21.03.25                |
| SUNWatfsu 11.10.0,REV=2005.01.21.15.53                | SUNWhermon<br>11.10.0,REV=2007.06.20.13.33                       | SUNWqos<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWaudd 11.10.0,REV=2005.01.21.15.53                 | SUNWhmd 11.10.0,REV=2005.01.21.15.53                             | SUNWqosu<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWautoregr 1.0,REV=2010.07.09.12.42                 | SUNWhmdu 11.10.0,REV=2005.01.21.15.53                            | SUNWqus<br>11.10.0,REV=2005.01.04.14.31                 |
| SUNWautoregu 1.0,REV=2010.06.24.08.30                 | SUNWhxge 11.10.0,REV=2009.06.08.04.39                            | SUNWqusu<br>11.10.0,REV=2005.01.04.14.31                |
| SUNWbart 11.10.0,REV=2005.01.21.15.53                 | SUNWi13rf 3.6,REV=2004.08.12.10.14                               | SUNWrcmdc<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWbcp 11.10.0,REV=2005.01.21.15.53                  | SUNWi15cs 2.0,REV=2004.08.23.14.43                               | SUNWrcmdr<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWbind 11.10.0,REV=2005.01.08.05.16                 | SUNWi15rf 3.6,REV=2004.08.12.10.14                               | SUNWrcmds<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWbindr 11.10.0,REV=2005.01.08.05.16                | SUNWi1cs 2.0,REV=2004.08.12.10.14                                | SUNWrdsV3<br>11.10.0,REV=2010.07.14.15.40               |
| SUNWbip 11.10.0,REV=2005.01.21.15.53                  | SUNWi2rf 3.6,REV=2004.09.15.13.20                                | SUNWrdsV3u<br>11.10.0,REV=2010.07.14.15.40              |
| SUNWbipr 11.10.0,REV=2005.01.21.15.53                 | SUNWi4rf 3.6,REV=2004.11.10.13.47                                | SUNWrge<br>11.10.0,REV=2006.04.06.02.16                 |

|                                             |                                                            |                                           |
|---------------------------------------------|------------------------------------------------------------|-------------------------------------------|
| SUNWbnur 11.10.0,REV=2005.01.21.15.53       | SUNWi5rf 3.6,REV=2004.05.26.16.23                          | SUNWrmodu<br>11.10.0,REV=2004.01.27.04.10 |
| SUNWbnuu 11.10.0,REV=2005.01.21.15.53       | SUNWi7rf 3.6,REV=2004.05.26.16.23                          | SUNWroute<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWbsr 11.10.0,REV=2005.01.21.15.53        | SUNWi8rf 4.3,REV=2004.08.12.10.16                          | SUNWrpcib<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWbsu 11.10.0,REV=2005.01.21.15.53        | SUNWi9rf 3.6,REV=2004.11.22.11.20                          | SUNWrsg<br>11.10.0,REV=2005.01.21.15.53   |
| SUNWbtool 11.10.0,REV=2005.01.21.15.53      | SUNWib 11.10.0,REV=2005.01.21.15.53                        | SUNWrsgk<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWbzip 11.10.0,REV=2005.01.08.05.16       | SUNWibsdp 11.10.0,REV=2008.02.29.16.01                     | SUNWsbp2<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWcakr 11.10.0,REV=2005.08.25.02.12       | SUNWibsdpib 11.10.0,REV=2008.02.29.16.01                   | SUNWscbp 5.10,REV=2004.01.06              |
| SUNWcar 11.10.0,REV=2005.08.10.02.13        | SUNWibsdpu 11.10.0,REV=2008.02.29.16.01                    | SUNWscplp 13.1,REV=2005.01.21.15.53       |
| SUNWcdrw 11.10.0,REV=2005.01.21.15.53       | SUNWidnl 11.10.0,REV=2004.11.22.14.21                      | SUNWscpr<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWcfcl 11.10.0,REV=2005.01.04.14.31       | SUNWigb 11.10.0,REV=2008.02.29.16.01                       | SUNWscpu<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWcfclr 11.10.0,REV=2005.01.04.14.31      | SUNWinst 11.11,REV=2005.01.09.23.05                        | SUNWscsip<br>11.10.0,REV=2008.08.11.23.56 |
| SUNWcfpl 11.10.0,REV=2005.01.04.14.31       | SUNWinstall-patch-utils-root<br>11.10,REV=2005.01.09.23.05 | SUNWses<br>11.10.0,REV=2005.01.21.15.53   |
| SUNWcfplr 11.10.0,REV=2005.01.04.14.31      | SUNWintgige 11.10.0,REV=2005.09.15.00.13                   | SUNWsmagt 1.0,REV=2005.01.08.05.16        |
| SUNWchxge 11.10.0,REV=2006.02.15.20.41      | SUNWipc 11.10.0,REV=2005.01.21.15.53                       | SUNWsmapi<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWckr 11.10.0,REV=2005.01.21.15.53        | SUNWipfr 11.10.0,REV=2005.01.21.15.53                      | SUNWsmbac<br>11.10.0,REV=2005.01.08.05.16 |
| SUNWcntr 11.10.0,REV=2005.01.21.15.53       | SUNWipfu 11.10.0,REV=2005.01.21.15.53                      | SUNWsmbar<br>11.10.0,REV=2005.01.08.05.16 |
| SUNWcntr 11.10.0,REV=2005.01.21.15.53       | SUNWipoib 11.10.0,REV=2005.01.21.15.53                     | SUNWsmbau<br>11.10.0,REV=2005.01.08.05.16 |
| SUNWcntr 11.10.0,REV=2005.01.21.15.53       | SUNWippcore 13.1,REV=2005.01.08.05.16                      | SUNWsmfd<br>11.10.0,REV=2008.08.11.23.56  |
| SUNWcpc 11.10.0,REV=2005.07.25.02.27        | SUNWiscsir 11.10.0,REV=2005.01.04.14.31                    | SUNWsndmr<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWcpcu 11.10.0,REV=2005.01.21.15.53       | SUNWiscsiu 11.10.0,REV=2005.01.04.14.31                    | SUNWsndmu<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWcpp 5.10,REV=2004.11.23                 | SUNWixgb 11.10.0,REV=2005.01.21.15.53                      | SUNWsneep 7.1                             |
| SUNWcry 11.10.0,REV=2005.01.21.15.53        | SUNWixgbe 11.10.0,REV=2008.08.11.23.56                     | SUNWsolnm 10,REV=2011.08.23.15.26         |
| SUNWcryr 11.10.0,REV=2005.01.21.15.53       | SUNWj3rt 1.4.2,REV=2011.05.04.12.54                        | SUNWsprot 5.10,REV=2004.11.23             |
| SUNWcsd 11.10.0,REV=2005.01.21.15.53        | SUNWj8rt 1.8.0,REV=2014.03.18.08.02                        | SUNWssad<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWcsl 11.10.0,REV=2005.01.21.15.53        | SUNWjfbr 10.0.0,REV=2004.12.10                             | SUNWsshcu<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWcslr 11.10.0,REV=2005.01.21.15.53       | SUNWjfca 11.10.0,REV=2005.01.04.02.17                      | SUNWsshdr<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWcsr 11.10.0,REV=2005.01.21.15.53        | SUNWjfcau 11.10.0,REV=2005.01.04.02.17                     | SUNWsshdu<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWcsu 11.10.0,REV=2005.01.21.15.53        | SUNWjhrt 2.0,REV=2006.10.31                                | SUNWsshr<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWctpls 1.5,REV=2004.11.24.10.12          | SUNWjmf 2.1.2,REV=10.0.3.2004.12.14                        | SUNWsshu<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWdbus-bindings-priv 2.24.2,REV=101.0.3   | SUNWjss 4.0,REV=2004.11.05.02.31                           | SUNWswmt<br>11.10,REV=2005.01.10.17.19    |
| SUNWdbus-priv 1.2.12,REV=101.0.3            | SUNWkey 11.10.0,REV=2005.01.21.15.53                       | SUNWtavor<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWdbus-priv-libs 1.2.12,REV=101.0.3       | SUNWkrbr 11.10.0,REV=2005.01.21.15.53                      | SUNWtcpd<br>11.10.0,REV=2005.01.21.15.53  |
| SUNWdefault-java 1.6.0,REV=2010.05.12.16.03 | SUNWkrbu 11.10.0,REV=2005.01.21.15.53                      | SUNWtecla<br>11.10.0,REV=2005.01.21.15.53 |
| SUNWdoc 11.10.0,REV=2005.01.21.15.53        | SUNWkvm 11.10.0,REV=2005.08.04.12.25                       | SUNWter<br>11.10.0,REV=2005.01.21.15.53   |

|                                         |                                                  |                                                           |
|-----------------------------------------|--------------------------------------------------|-----------------------------------------------------------|
| SUNWdtbas 1.6,REV=10.2004.12.17         | SUNWkxfnt 10.0,REV=2004.08.11.17.02              | SUNWtftp<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWdtcor 1.6,REV=10.2004.12.17         | SUNWlcl 1.5,REV=2004.11.24.10.12                 | SUNWtgnome-tsol-lib<br>2.6.0,REV=101.0.3.2006.09.05.04.22 |
| SUNWdtct 1.5,REV=2004.11.24.20.31       | SUNWldomr 11.10.0,REV=2006.10.04.00.26           | SUNWtts 3.9.5,REV=2005.01.14.17.27                        |
| SUNWdtdmn 1.6,REV=10.2004.12.17         | SUNWldomu 11.10.0,REV=2006.08.08.12.13           | SUNWttsu 3.9.5,REV=2005.01.14.17.27                       |
| SUNWdtdmr 1.6,REV=10.2004.12.17         | SUNWlexpt 11.10.0,REV=2005.01.08.05.16           | SUNWtltk 3.7.2,REV=10.2004.12.17                          |
| SUNWdtdst 1.6,REV=10.2004.12.17         | SUNWlibC 5.10,REV=2004.12.22                     | SUNWtnetc<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWdtdte 1.6,REV=10.2004.12.17         | SUNWlibCf 5.10,REV=2004.01.06                    | SUNWtnetd<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWdtezt 1.6,REV=10.2004.12.17         | SUNWlibexif<br>2.6.0,REV=10.0.3.2004.12.15.17.11 | SUNWtnetr<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWdthe 1.6,REV=10.2004.12.17          | SUNWlibms 5.10,REV=2004.11.23                    | SUNWtoo<br>11.10.0,REV=2005.01.21.15.53                   |
| SUNWdthev 1.6,REV=10.2004.12.17         | SUNWlibmsr 5.10,REV=2004.11.23                   | SUNWtsg<br>11.10.0,REV=2006.10.13.16.23                   |
| SUNWdthez 1.6,REV=10.2004.12.17         | SUNWlibpopt<br>1.7,REV=10.0.3.2004.12.15.14.10   | SUNWtsr<br>11.10.0,REV=2006.10.13.16.23                   |
| SUNWdtcn 1.6,REV=10.2004.12.17          | SUNWlibsasl 11.10.0,REV=2005.01.21.15.53         | SUNWtsu<br>11.10.0,REV=2006.09.28.16.26                   |
| SUNWdtjxt 1.6,REV=10.2004.12.17         | SUNWlibstdcxx4<br>11.10.0,REV=2011.05.12.14.08   | SUNWuacm<br>11.10.0,REV=2007.06.20.13.33                  |
| SUNWdtlog 1.6,REV=10.2004.12.17         | SUNWlibusbugen<br>11.10.0,REV=2005.01.08.05.16   | SUNWudapl<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWdtrc 11.10.0,REV=2005.01.21.15.53   | SUNWllc 11.10.0,REV=2005.01.21.15.53             | SUNWudapltr<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWdtrp 11.10.0,REV=2005.01.21.15.53   | SUNWllcr 11.10.0,REV=2005.01.21.15.53            | SUNWudapltu<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWdtscm 1.6,REV=10.2004.12.17         | SUNWlldap 11.10.0,REV=2005.01.21.15.53           | SUNWudaplu<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWdtthelp 1.0,REV=10.2006.07.18       | SUNWloc 11.10.0,REV=2005.01.21.15.53             | SUNWudf<br>11.10.0,REV=2005.01.21.15.53                   |
| SUNWdttsr 1.0,REV=10.2006.07.18         | SUNWlpmsg 11.10,REV=2005.01.09.23.05             | SUNWudfr<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWdttsu 1.0,REV=10.2006.10.13         | SUNWluxop 11.10.0,REV=2005.01.04.14.31           | SUNWuecm<br>11.10.0,REV=2010.07.14.15.40                  |
| SUNWdtwm 1.6,REV=10.2004.12.17          | SUNWluxopr 11.10.0,REV=2005.01.04.14.31          | SUNWuedg<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWdvdrw 11.10.0,REV=2006.01.12.10.32  | SUNWlwact 3.3                                    | SUNWugen<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWefb 10.0.0,REV=2010.03.30           | SUNWlxml 11.10.0,REV=2005.01.08.05.16            | SUNWuiu8 1.5,REV=2004.11.24.10.12                         |
| SUNWebcf 10.0.0,REV=2010.03.30          | SUNWlxsl 11.10.0,REV=2005.01.08.05.16            | SUNWuksp<br>11.10.0,REV=2006.04.06.02.16                  |
| SUNWefbw 10.0.0,REV=2010.03.30          | SUNWman 43.0,REV=75.0                            | SUNWukspfw<br>11.10.0,REV=2006.07.11.11.28                |
| SUNWemlx 11.10.0,REV=2005.01.30.01.58   | SUNWmdar 11.10.0,REV=2005.01.21.15.53            | SUNWulcf 1.5,REV=2004.11.24.10.12                         |
| SUNWemlxu 11.10.0,REV=2005.01.30.01.58  | SUNWmdau 11.10.0,REV=2005.01.21.15.53            | SUNWuprl<br>11.10.0,REV=2006.04.06.02.16                  |
| SUNWeoib 11.10.0,REV=2010.07.14.15.40   | SUNWmdb 11.10.0,REV=2005.01.21.15.53             | SUNWusb<br>11.10.0,REV=2005.01.21.15.53                   |
| SUNWerid 11.10.0,REV=2005.01.21.15.53   | SUNWmdbr 11.10.0,REV=2005.01.21.15.53            | SUNWusbs<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWesu 11.10.0,REV=2005.01.21.15.53    | SUNWmdr 11.10.0,REV=2005.01.21.15.53             | SUNWuxlc 1.5,REV=2004.11.24.10.12                         |
| SUNWeuodf 1.5,REV=2004.12.08.17.24      | SUNWmdu 11.10.0,REV=2005.01.21.15.53             | SUNWvid 10.0.0,REV=2004.12.10.10                          |
| SUNWeurf 1.0,REV=2004.08.12.10.13       | SUNWmfrun 2.1.3,REV=10.2004.12.17                | SUNWvid 1.0,REV=2004.12.11.10.0                           |
| SUNWeuxwe 1.5,REV=2004.11.24.10.12      | SUNWmkcd 11.10.0,REV=2005.01.08.05.16            | SUNWvolr<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWexplo 7.1.12.9.7,REV=2012.9.19.0.28 | SUNWmpapi 11.10.0,REV=2006.06.15.16.36           | SUNWvolu<br>11.10.0,REV=2005.01.21.15.53                  |
| SUNWfbc 10.0.0,REV=2004.12.10           | SUNWmpapir 11.10.0,REV=2006.06.15.16.36          | SUNWvts 7.0,REV=2008.02.15.13.31                          |

|                                                                    |                                                         |                                                         |
|--------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| SUNWfcdba 11.10.0,REV=2005.01.04.14.31                             | SUNWmpathadm<br>11.10.0,REV=2006.06.15.16.36            | SUNWvtsmn 7.0,REV=2008.02.07.18.38                      |
| SUNWfcbar 11.10.0,REV=2005.01.04.14.31                             | SUNWmpathadmr<br>11.10.0,REV=2006.06.15.16.36           | SUNWvtsr 7.0,REV=2008.02.07.18.38                       |
| SUNWfcip 11.10.0,REV=2005.01.04.14.31                              | SUNWmpsvplr<br>11.10.0,REV=2006.06.15.16.36             | SUNWvtss 7.0,REV=2008.02.07.18.38                       |
| SUNWfcmdb 11.10.0,REV=2005.01.04.14.31                             | SUNWmptsas 11.10.0,REV=2009.07.14.02.37                 | SUNWvtsts 7.0,REV=2008.02.15.13.31                      |
| SUNWfcpr 11.10.0,REV=2005.01.04.14.31                              | SUNWmrsas 11.10.0,REV=2009.07.14.02.37                  | SUNWwbsup<br>11.10.0,REV=2005.01.21.15.53               |
| SUNWfcprt 11.10.0,REV=2005.08.02.13.23                             | SUNWn2cp 11.10.0,REV=2007.07.08.21.44                   | SUNWwsr2 4.0.0,REV=2005.01.09.23.05                     |
| SUNWfcsm 11.10.0,REV=2005.01.04.14.31                              | SUNWnamdt 1.0,REV=2004.08.12.10.18                      | SUNWxcu4<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWfcctl 11.10.0,REV=2005.01.04.14.31                             | SUNWnamos 11.10.0,REV=2003.12.08.12.08                  | SUNWxcu6<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWfmdd 11.10.0,REV=2005.01.21.15.53                              | SUNWnamow 1.0,REV=2004.03.03.14.07                      | SUNWxge<br>11.10.0,REV=2005.01.21.15.53                 |
| SUNWfmdr 11.10.0,REV=2006.03.29.02.15                              | SUNWnfb 10.0.0,REV=2006.07.25                           | SUNWxi18n 4.2,REV=2.0.73                                |
| SUNWfontconfig 6.6.2.7400,REV=0.2004.12.15                         | SUNWnfbcf 10.0.0,REV=2006.07.25                         | SUNWxildh 1.4.2,REV=2004.12.10                          |
| SUNWfontconfig-root<br>6.6.2.7400,REV=0.2004.12.15                 | SUNWnfbw 10.0.0,REV=2006.07.25                          | SUNWxilow 1.4.2,REV=2004.11.23                          |
| SUNWfreetype2 6.6.2.7400,REV=0.2004.12.15                          | SUNWnfsckr 11.10.0,REV=2005.01.21.15.53                 | SUNWxiirl 1.4.2,REV=2004.11.23                          |
| SUNWfsr 11.10.0,REV=2009.02.24.04.40                               | SUNWnfscr 11.10.0,REV=2005.01.21.15.53                  | SUNWxim 4.2,REV=2.0.73                                  |
| SUNWfss 11.10.0,REV=2005.01.21.15.53                               | SUNWnfscu 11.10.0,REV=2005.01.21.15.53                  | SUNWxorg-cfg<br>6.6.2.7600,REV=0.2007.06.22             |
| SUNWfsu 11.10.0,REV=2009.02.24.04.40                               | SUNWnfsskr 11.10.0,REV=2005.01.21.15.53                 | SUNWxorg-clientlibs<br>6.8.0.5.10.7400,REV=0.2004.12.15 |
| SUNWftpr 11.10.0,REV=2005.01.21.15.53                              | SUNWnfssr 11.10.0,REV=2005.01.21.15.53                  | SUNWxorg-graphics-ddx<br>6.6.2.7600,REV=0.2007.06.22    |
| SUNWftpu 11.10.0,REV=2005.01.21.15.53                              | SUNWnfssu 11.10.0,REV=2005.01.21.15.53                  | SUNWxorg-server<br>6.6.2.7600,REV=0.2007.06.22          |
| SUNWfwflash 11.10.0,REV=2008.02.29.16.01                           | SUNWnisr 11.10.0,REV=2005.01.21.15.53                   | SUNWxorg-tsol-module<br>6.6.2.0500,REV=0.2008.02.15     |
| SUNWgccruntime 11.10.0,REV=2005.01.08.05.16                        | SUNWnisu 11.10.0,REV=2005.01.21.15.53                   | SUNWxorg-xkb<br>6.6.2.7600,REV=0.2007.06.22             |
| SUNWged 3.1,REV=2004.11.17.10.0                                    | SUNWniumx 11.10.0,REV=2007.06.20.13.33                  | SUNWwxacx<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWglrt 200.1.5,REV=2011.05.5                                     | SUNWntp4r 11.10.0,REV=2009.07.02.14.13                  | SUNWxwcft<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-base-libs<br>2.6.0,REV=10.0.3.2004.12.15.15.24           | SUNWntp4u 11.10.0,REV=2009.07.02.14.13                  | SUNWxwcsI 3.0,REV=2004.11.24.10.12                      |
| SUNWgnome-base-libs-priv 2.24.2,REV=101.0.6                        | SUNWntpr 11.10.0,REV=2005.01.21.15.53                   | SUNWxwdv<br>11.10.0,REV=2005.01.21.15.53                |
| SUNWgnome-base-libs-priv-l10n<br>2.24.2,REV=101.0.6                | SUNWntpu 11.10.0,REV=2005.01.21.15.53                   | SUNWxwdxm<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-base-libs-root<br>2.6.0,REV=10.0.3.2004.12.15.15.24      | SUNWnxge 11.10.0,REV=2007.07.08.17.44                   | SUNWxwfa<br>6.6.2.7400,REV=0.2004.12.15                 |
| SUNWgnome-base-libs-share<br>2.6.0,REV=10.0.3.2004.12.15.15.24     | SUNWocf 11.10.0,REV=2005.01.21.15.53                    | SUNWxwfnt<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-config<br>2.6.0,REV=10.0.3.2004.12.15.16.48              | SUNWocfr 11.10.0,REV=2005.01.21.15.53                   | SUNWxwhl<br>6.6.2.7400,REV=0.2004.12.15                 |
| SUNWgnome-config-root<br>2.6.0,REV=10.0.3.2004.12.15.16.48         | SUNWocom 11.11,REV=2011.07.05.12.35                     | SUNWxwice<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-config-share<br>2.6.0,REV=10.0.3.2004.12.15.16.48        | SUNWoffice-launcher<br>1.1,REV=101.0.3.2010.05.26.07.13 | SUNWwxman<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-desktop-prefs<br>2.6.0,REV=10.0.3.2004.12.21.13.18       | SUNWofk 11.10.0,REV=2010.07.14.15.40                    | SUNWxwmod<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-desktop-prefs-root<br>2.6.0,REV=10.0.3.2004.12.21.13.18  | SUNWolte 3.7.3,REV=1.2004.06.28                         | SUNWxwopt<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-desktop-prefs-share<br>2.6.0,REV=10.0.3.2004.12.21.13.18 | SUNWopenssl-commands<br>11.10.0,REV=2005.01.21.15.53    | SUNWxwpft<br>6.6.2.7400,REV=0.2004.12.15                |
| SUNWgnome-dtlogin-integration<br>2.6.0,REV=10.0.3.2004.12.16.13.59 | SUNWopenssl-libraries<br>11.10.0,REV=2005.01.21.15.53   | SUNWxwpl 10.0,REV=2004.09.23.16.01                      |

|                                                                      |                                                 |                                           |
|----------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------|
| SUNWgnome-file-mgr<br>2.6.0,REV=10.0.3.2004.12.15.19.24              | SUNWopensslr<br>11.10.0,REV=2005.01.21.15.53    | SUNWxwplr<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-file-mgr-root<br>2.6.0,REV=10.0.3.2004.12.15.19.24         | SUNWowbcp 3.8.0,REV=1.2002.10.04                | SUNWxwplt<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-file-mgr-share<br>2.6.0,REV=10.0.3.2004.12.15.19.24        | SUNWpapi 11.10.0,REV=2005.01.08.05.16           | SUNWxwpsr<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-help-viewer<br>2.6.0,REV=10.0.3.2004.12.15.21.24           | SUNWpcr 13.1,REV=2005.01.21.15.53               | SUNWxwrtl<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-help-viewer-share<br>2.6.0,REV=10.0.3.2004.12.15.21.24     | SUNWpcu 13.1,REV=2005.01.21.15.53               | SUNWxwts<br>6.6.2.4099,REV=0.2006.10.13   |
| SUNWgnome-im-client-devel<br>2.7.0,REV=11.01.21.2011.03.08.04.03     | SUNWperl584core<br>11.10.0,REV=2005.01.21.15.53 | SUNWzfskr<br>11.10.0,REV=2006.05.18.02.15 |
| SUNWgnome-libs<br>2.6.0,REV=10.0.3.2004.12.15.17.32                  | SUNWperl584usr<br>11.10.0,REV=2005.01.21.15.53  | SUNWzfsr<br>11.10.0,REV=2006.05.18.02.15  |
| SUNWgnome-libs-root<br>2.6.0,REV=10.0.3.2004.12.15.17.32             | SUNWpiclr 11.10.0,REV=2005.01.21.15.53          | SUNWzfsu<br>11.10.0,REV=2006.05.18.02.15  |
| SUNWgnome-libs-share<br>2.6.0,REV=10.0.3.2004.12.15.17.32            | SUNWpiclu 11.10.0,REV=2005.01.21.15.53          | SUNWzlib<br>11.10.0,REV=2005.01.08.05.16  |
| SUNWgnome-panel<br>2.6.0,REV=10.0.3.2004.12.15.19.13                 | SUNWpixman 6.6.2.4099,REV=0.2009.06.21          | StorMan 5.50 (17530)                      |
| SUNWgnome-panel-root<br>2.6.0,REV=10.0.3.2004.12.15.19.13            | SUNWpkcmdsr 11.11,REV=2005.01.09.23.05          | cms r18ka.p                               |
| SUNWgnome-panel-share<br>2.6.0,REV=10.0.3.2004.12.15.19.13           | SUNWpkcmdsu<br>11.11,REV=2005.01.09.23.05       | cmsweb web18ka.p                          |
| SUNWgnome-removable-media<br>2.6.0,REV=10.0.3.2004.12.16.00.00       | SUNWplow1 1.0,REV=2004.11.10.13.49              | gsk8cry64 8.0.50.10                       |
| SUNWgnome-removable-media-share<br>2.6.0,REV=10.0.3.2004.12.16.00.00 | SUNWplowr 11.10.0,REV=2004.08.12.10.19          | gsk8ssl64 8.0.50.10                       |
| SUNWgnome-search-tool<br>2.6.0,REV=10.0.3.2004.12.16.00.58           | SUNWpng<br>20.2.6.0,REV=10.0.3.2004.12.15.14.11 |                                           |

## Appendix D: Solaris X86 Packages Included in R18.0.1

### Solaris X86 list:

|                                                       |                                                                      |                                                         |
|-------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------|
| BRCMbnx 11.10.0,REV=2007.06.20.13.12                  | SUNWgnome-removable-media<br>2.6.0,REV=10.0.3.2004.12.16.19.52       | SUNWpoolr<br>11.10.0,REV=2005.01.21.16.34               |
| BRCMbnxe 11.10.0,REV=2010.07.14.14.54                 | SUNWgnome-removable-media-share<br>2.6.0,REV=10.0.3.2004.12.16.19.52 | SUNWpostrun<br>1.0,REV=101.0.3.2008.02.06.05.56         |
| CADP160 1.21,REV=2005.01.17.23.31                     | SUNWgnome-search-tool<br>2.6.0,REV=10.0.3.2004.12.16.20.27           | SUNWpostrun-root<br>1.0,REV=101.0.3.2008.02.06.05.56    |
| CPQary3 11.10.0,REV=2010.07.14.14.54                  | SUNWgnome-search-tool-share<br>2.6.0,REV=10.0.3.2004.12.16.20.27     | SUNWppm<br>11.10.0,REV=2005.01.21.16.34                 |
| CTEact 8.17                                           | SUNWgnome-session<br>2.6.0,REV=10.0.3.2004.12.21.12.59               | SUNWpppd<br>11.10.0,REV=2005.01.21.16.34                |
| HPFC 1.1.0,REV=2005.01.06.07.16                       | SUNWgnome-session-root<br>2.6.0,REV=10.0.3.2004.12.21.12.59          | SUNWpppdr<br>11.10.0,REV=2005.01.21.16.34               |
| NCRos86r 11.10.0,REV=2005.01.17.23.31                 | SUNWgnome-session-share<br>2.6.0,REV=10.0.3.2004.12.21.12.59         | SUNWpppdः<br>11.10.0,REV=2005.01.21.16.34               |
| NVDAGraphics<br>260.19.29,REV=2010.12.15.09.51        | SUNWgnome-themes<br>2.6.0,REV=10.0.3.2004.12.16.15.58                | SUNWpppdu<br>11.10.0,REV=2005.01.21.16.34               |
| NVDAGraphicscr<br>260.19.29.01,REV=2011.02.07.12.11   | SUNWgnome-themes-share<br>2.6.0,REV=10.0.3.2004.12.16.15.58          | SUNWpr 4.5.1,REV=2004.11.05.03.44                       |
| RICHpse 3.4 (03:59 PM 01/05/05)                       | SUNWgnome-user-docs<br>2.6.0,REV=10.0.3.2004.12.16.20.21             | SUNWproduct-registry-root<br>11.10,REV=2005.01.09.21.19 |
| SK98sol 3.07,REV=2005.01.06.07.16                     | SUNWgnome-vfs<br>2.6.0,REV=10.0.3.2004.12.16.15.40                   | SUNWpsdcr<br>11.10.0,REV=2005.01.21.16.34               |
| SKfp 2.0.0,REV=2005.01.06.07.16                       | SUNWgnome-vfs-root<br>2.6.0,REV=10.0.3.2004.12.16.15.40              | SUNWpsdir<br>11.10.0,REV=2005.01.21.16.34               |
| SMCexpect 5.45                                        | SUNWgnome-vfs-share<br>2.6.0,REV=10.0.3.2004.12.16.15.40             | SUNWpsdpr<br>11.10.0,REV=2005.01.21.16.34               |
| SMClgcc346 3.4.6                                      | SUNWgnome-wm<br>2.6.0,REV=10.0.3.2004.12.16.18.35                    | SUNWpsf 13.1,REV=2005.01.21.16.34                       |
| SMCtcl 8.5.10                                         | SUNWgnome-wm-root<br>2.6.0,REV=10.0.3.2004.12.16.18.35               | SUNWpsm-ipp<br>11.10.0.0,REV=2008.02.29.14.37           |
| SOLMEGACLI 8.00.23                                    | SUNWgnome-wm-share<br>2.6.0,REV=10.0.3.2004.12.16.18.35              | SUNWpsm-lpd<br>11.10.0,REV=2005.01.08.01.09             |
| SUNWPython<br>2.3.3,REV=10.0.3.2004.12.16.14.40       | SUNWgnome-xml-root<br>2.6.0,REV=10.0.3.2004.12.16.14.49              | SUNWpsr 13.1,REV=2005.01.21.16.34                       |
| SUNWPython-share<br>2.3.3,REV=10.0.3.2004.12.16.14.40 | SUNWgnome-xml-share<br>2.6.0,REV=10.0.3.2004.12.16.14.49             | SUNWpsu 13.1,REV=2005.01.21.16.34                       |
| SUNWaac 11.10.0,REV=2005.01.21.16.34                  | SUNWgrub 11.10.0,REV=2005.09.03.12.22                                | SUNWqlc 11.10.0,REV=2005.01.04.14.30                    |
| SUNWaccr 11.10.0,REV=2005.01.21.16.34                 | SUNWgss 11.10.0,REV=2005.01.21.16.34                                 | SUNWqlcnic<br>11.10.0,REV=2011.03.24.04.28              |
| SUNWaccu 11.10.0,REV=2005.01.21.16.34                 | SUNWgssc 11.10.0,REV=2005.01.21.16.34                                | SUNWqlcu<br>11.10.0,REV=2006.02.21.05.35                |
| SUNWad810 11.10.0,REV=2005.01.21.16.34                | SUNWgssdh 11.10.0,REV=2005.01.21.16.34                               | SUNWqos<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWadixp 11.10.0,REV=2007.06.20.13.12                | SUNWgssk 11.10.0,REV=2005.01.21.16.34                                | SUNWqosu<br>11.10.0,REV=2005.01.21.16.34                |
| SUNWadmap 11.10,REV=2005.01.09.21.19                  | SUNWgzip 11.10.0,REV=2005.01.08.01.09                                | SUNWradpu320<br>11.10.0,REV=2005.01.21.16.34            |
| SUNWadmc 11.9,REV=2005.01.09.20.41                    | SUNWhermon 11.10.0,REV=2007.06.20.13.12                              | SUNWrcmdc<br>11.10.0,REV=2005.01.21.16.34               |
| SUNWadmfr 11.10,REV=2005.01.09.20.41                  | SUNWhxge 11.10.0,REV=2009.06.07.23.01                                | SUNWrcmdr<br>11.10.0,REV=2005.01.21.16.34               |
| SUNWadmfw 11.8,REV=2005.01.09.20.41                   | SUNWi13rf 3.6,REV=2004.08.12.10.21                                   | SUNWrcmds<br>11.10.0,REV=2005.01.21.16.34               |
| SUNWadmlib-sysid<br>11.10,REV=2005.01.09.20.41        | SUNWi15cs 2.0,REV=2004.10.17.15.04                                   | SUNWrdsV3<br>11.10.0,REV=2010.07.14.14.54               |
| SUNWadmr 11.10,REV=2005.01.09.21.19                   | SUNWi15rf 3.6,REV=2004.08.12.10.21                                   | SUNWrdsV3u<br>11.10.0,REV=2010.07.14.14.54              |
| SUNWadp 11.10.0,REV=2005.01.17.23.31                  | SUNWi1cs 2.0,REV=2004.10.17.15.04                                    | SUNWrge 11.10.0,REV=2006.03.27.18.17                    |

|                                               |                                                            |                                            |
|-----------------------------------------------|------------------------------------------------------------|--------------------------------------------|
| SUNWadpu320<br>11.10.0,REV=2005.01.21.16.34   | SUNWi2rf 3.6,REV=2004.09.15.13.24                          | SUNWrmodr<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWagp 11.10.0,REV=2006.07.11.10.58          | SUNWi4rf 3.6,REV=2004.11.10.13.52                          | SUNWrmodu<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWahci 11.10.0,REV=2007.06.20.13.12         | SUNWi5rf 3.6,REV=2004.05.26.16.52                          | SUNWroute<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWamdr8111s<br>11.10.0,REV=2006.11.06.19.53 | SUNWi7rf 3.6,REV=2004.05.26.16.52                          | SUNWrpcib<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWamr 11.10.0,REV=2005.01.21.16.34          | SUNWi8rf 4.3,REV=2004.08.12.10.22                          | SUNWrsg 11.10.0,REV=2005.01.21.16.34       |
| SUNWatfsr 11.10.0,REV=2005.01.21.16.34        | SUNWi9rf 3.6,REV=2004.11.22.11.27                          | SUNWrsgr<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWatfsu 11.10.0,REV=2005.01.21.16.34        | SUNWib 11.10.0,REV=2005.01.21.16.34                        | SUNWrts 11.10.0,REV=2005.01.21.16.34       |
| SUNWaudd 11.10.0,REV=2005.01.21.16.34         | SUNWibsdp 11.10.0,REV=2008.02.29.14.37                     | SUNWsbp2<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWaudiohd 11.10.0,REV=2006.09.26.23.47      | SUNWibsdpib 11.10.0,REV=2008.02.29.14.37                   | SUNWscpl 13.1,REV=2005.01.21.16.34         |
| SUNWautoregr 1.0,REV=2010.07.09.12.42         | SUNWibsdpu 11.10.0,REV=2008.02.29.14.37                    | SUNWscpr<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWautoregu 1.0,REV=2010.06.24.08.30         | SUNWidnl 11.10.0,REV=2004.11.22.18.47                      | SUNWscpu<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWbart 11.10.0,REV=2005.01.21.16.34         | SUNWigb 11.10.0,REV=2008.02.29.14.37                       | SUNWscsip<br>11.10.0,REV=2008.08.11.22.37  |
| SUNWbcmsata<br>11.10.0,REV=2010.07.14.14.54   | SUNWimraidsas 11.10.0,REV=2011.03.24.04.28                 | SUNWscusas<br>11.10.0,REV=2011.06.19.22.12 |
| SUNWbind 11.10.0,REV=2005.01.08.01.09         | SUNWinst 11.11,REV=2005.01.09.21.19                        | SUNWses 11.10.0,REV=2006.03.15.01.46       |
| SUNWbindr 11.10.0,REV=2005.01.08.01.09        | SUNWinstall-patch-utils-root<br>11.10,REV=2005.01.09.21.19 | SUNWsi3124<br>11.10.0,REV=2006.03.27.18.17 |
| SUNWbip 11.10.0,REV=2005.01.21.16.34          | SUNWintgige 11.10.0,REV=2005.01.21.16.34                   | SUNWsmagt 1.0,REV=2005.01.08.01.09         |
| SUNWbjpr 11.10.0,REV=2005.01.21.16.34         | SUNWipc 11.10.0,REV=2005.01.21.16.34                       | SUNWsmapi<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWbnur 11.10.0,REV=2005.01.21.16.34         | SUNWipfr 11.10.0,REV=2005.01.21.16.34                      | SUNWsmbac<br>11.10.0,REV=2005.01.08.01.09  |
| SUNWbnuu 11.10.0,REV=2005.01.21.16.34         | SUNWipfu 11.10.0,REV=2005.01.21.16.34                      | SUNWsmbar<br>11.10.0,REV=2005.01.08.01.09  |
| SUNWbsr 11.10.0,REV=2005.01.21.16.34          | SUNWipoib 11.10.0,REV=2005.01.21.16.34                     | SUNWsmbau<br>11.10.0,REV=2005.01.08.01.09  |
| SUNWbsu 11.10.0,REV=2005.01.21.16.34          | SUNWippcore 13.1,REV=2005.01.08.01.09                      | SUNWsmfd<br>11.10.0,REV=2008.08.11.22.37   |
| SUNWbtool 11.10.0,REV=2005.01.21.16.34        | SUNWicscr 11.10.0,REV=2005.01.04.14.30                     | SUNWsndmr<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWbzip 11.10.0,REV=2005.01.08.01.09         | SUNWicsciu 11.10.0,REV=2005.01.04.14.30                    | SUNWsndmu<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWcadp 11.10.0,REV=2005.01.17.23.31         | SUNWixgb 11.10.0,REV=2005.01.21.16.34                      | SUNWsneep 7.1                              |
| SUNWcakr 11.10.0,REV=2005.01.21.16.34         | SUNWixgbe 11.10.0,REV=2008.08.11.22.37                     | SUNWsolnm 10,REV=2011.08.23.14.17          |
| SUNWcar 11.10.0,REV=2005.01.21.16.34          | SUNWj3rt 1.4.2,REV=2011.05.04.14.48                        | SUNWsprot 5.10,REV=2004.12.18              |
| SUNWcdrw 11.10.0,REV=2005.01.21.16.34         | SUNWj8rt 1.8.0,REV=2014.03.18.07.33                        | SUNWsschu<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWced 1.0,REV=2004.12.24.10.0               | SUNWjhrt 2.0,REV=2006.10.31                                | SUNWsshdr<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWcfcl 11.10.0,REV=2005.01.04.14.30         | SUNWjmf 2.1.2,REV=10.0.3.2004.12.14                        | SUNWsshdu<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWcfclr 11.10.0,REV=2005.01.04.14.30        | SUNWjss 4.0,REV=2004.11.05.03.05                           | SUNWsshr<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWcfpl 11.10.0,REV=2005.01.04.14.30         | SUNWkey 11.10.0,REV=2005.01.21.16.34                       | SUNWsshu<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWcfplr 11.10.0,REV=2005.01.04.14.30        | SUNWkrbr 11.10.0,REV=2005.01.21.16.34                      | SUNWswmt<br>11.10,REV=2005.01.10.15.35     |
| SUNWchxge 11.10.0,REV=2006.02.15.19.45        | SUNWkrbu 11.10.0,REV=2005.01.21.16.34                      | SUNWtavor<br>11.10.0,REV=2005.01.21.16.34  |
| SUNWckr 11.10.0,REV=2005.01.21.16.34          | SUNWkvm 11.10.0,REV=2005.01.21.16.34                       | SUNWtcpd<br>11.10.0,REV=2005.01.21.16.34   |
| SUNWcntr 11.10.0,REV=2005.01.21.16.34         | SUNWkxfnt 10.0,REV=2004.08.11.17.02                        | SUNWtecla                                  |

|                                                |                                                |                                                           |
|------------------------------------------------|------------------------------------------------|-----------------------------------------------------------|
|                                                |                                                | 11.10.0,REV=2005.01.21.16.34                              |
| SUNWcnst 11.10.0,REV=2005.01.21.16.34          | SUNWlcl 1.5,REV=2004.11.24.10.12               | SUNWter 11.10.0,REV=2005.01.21.16.34                      |
| SUNWcnst 11.10.0,REV=2005.01.21.16.34          | SUNWlexpt 11.10.0,REV=2005.01.08.01.09         | SUNWftpp<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWcpcc 11.10.0,REV=2005.01.21.16.34          | SUNWlibC 5.10,REV=2004.12.20                   | SUNWtgname-tsol-lib<br>2.6.0,REV=101.0.3.2006.09.05.04.14 |
| SUNWcpcc 11.10.0,REV=2005.01.21.16.34          | SUNWlibCf 5.10,REV=2004.01.06                  | SUNWtcls 3.9.5,REV=2005.01.14.19.03                       |
| SUNWcpp 5.10,REV=2004.11.23                    | SUNWlibexif 2.6.0,REV=10.0.3.2004.12.16.15.42  | SUNWtclsu 3.9.5,REV=2005.01.14.19.03                      |
| SUNWcqhpcc 11.10.0,REV=2005.01.17.23.31        | SUNWlibms 5.10,REV=2004.11.23                  | SUNWtltk 3.7.2,REV=10.2004.12.17                          |
| SUNWcry 11.10.0,REV=2005.01.21.16.34           | SUNWlibmsr 5.10,REV=2004.12.18                 | SUNWtnetc<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWcryr 11.10.0,REV=2005.01.21.16.34          | SUNWlibpopt 1.7,REV=10.0.3.2004.12.16.14.42    | SUNWtnetd<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWcsd 11.10.0,REV=2005.01.21.16.34           | SUNWlibsasl 11.10.0,REV=2005.01.21.16.34       | SUNWtnetr<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWcsl 11.10.0,REV=2005.01.21.16.34           | SUNWlibstdcxx4 11.10.0,REV=2011.05.12.09.42    | SUNWtoo 11.10.0,REV=2005.01.21.16.34                      |
| SUNWcslr 11.10.0,REV=2005.01.21.16.34          | SUNWlibusbugen<br>11.10.0,REV=2005.01.08.01.09 | SUNWtsg 11.10.0,REV=2006.10.13.15.49                      |
| SUNWcsr 11.10.0,REV=2005.01.21.16.34           | SUNWllc 11.10.0,REV=2005.01.21.16.34           | SUNWtsr 11.10.0,REV=2006.10.13.15.49                      |
| SUNWcsu 11.10.0,REV=2005.01.21.16.34           | SUNWllcr 11.10.0,REV=2005.01.21.16.34          | SUNWtsu 11.10.0,REV=2006.09.28.14.49                      |
| SUNWctpls 1.5,REV=2004.11.24.10.12             | SUNWlldap 11.10.0,REV=2005.01.21.16.34         | SUNWuacm<br>11.10.0,REV=2007.06.20.13.12                  |
| SUNWdbus-bindings-priv 2.24.2,REV=101.0.3      | SUNWlloc 11.10.0,REV=2005.01.21.16.34          | SUNWudapl<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWdbus-priv 1.2.12,REV=101.0.3               | SUNWlpmsg 11.10,REV=2005.01.09.21.19           | SUNWudapl<br>11.10.0,REV=2005.01.21.16.34                 |
| SUNWdbus-priv-libs 1.2.12,REV=101.0.3          | SUNWlsimeta 11.10.0,REV=2005.09.15.00.24       | SUNWudaptu<br>11.10.0,REV=2005.01.21.16.34                |
| SUNWdefault-java<br>1.6.0,REV=2010.05.12.16.03 | SUNWluxop 11.10.0,REV=2005.01.04.14.30         | SUNWudaplu<br>11.10.0,REV=2005.01.21.16.34                |
| SUNWdoc 11.10.0,REV=2005.01.21.16.34           | SUNWlwact 3.3                                  | SUNWudff 11.10.0,REV=2005.01.21.16.34                     |
| SUNWdtbas 1.6,REV=10.2004.12.17                | SUNWlxml 11.10.0,REV=2005.01.08.01.09          | SUNWudfr<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWdtcor 1.6,REV=10.2004.12.17                | SUNWlxr 11.10.0,REV=2007.06.20.13.12           | SUNWuecm<br>11.10.0,REV=2010.07.14.14.54                  |
| SUNWdtct 1.5,REV=2004.11.24.20.31              | SUNWlxsl 11.10.0,REV=2005.01.08.01.09          | SUNWuedg<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWdtdmn 1.6,REV=10.2004.12.17                | SUNWlxu 11.10.0,REV=2007.06.20.13.12           | SUNWugen<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWdtddmr 1.6,REV=10.2004.12.17               | SUNWman 43.0,REV=75.0                          | SUNWuiu8 1.5,REV=2004.11.24.10.12                         |
| SUNWdtddst 1.6,REV=10.2004.12.17               | SUNWmdar 11.10.0,REV=2005.01.21.16.34          | SUNWuksp<br>11.10.0,REV=2006.03.27.18.17                  |
| SUNWdtddte 1.6,REV=10.2004.12.17               | SUNWmdau 11.10.0,REV=2005.01.21.16.34          | SUNWukspfw<br>11.10.0,REV=2006.07.11.10.58                |
| SUNWdtdezt 1.6,REV=10.2004.12.17               | SUNWmdb 11.10.0,REV=2005.01.21.16.34           | SUNWulcf 1.5,REV=2004.11.24.10.12                         |
| SUNWdtethe 1.6,REV=10.2004.12.17               | SUNWmdbr 11.10.0,REV=2005.01.21.16.34          | SUNWuprl<br>11.10.0,REV=2006.03.27.18.17                  |
| SUNWdtthev 1.6,REV=10.2004.12.17               | SUNWmdr 11.10.0,REV=2005.01.21.16.34           | SUNWusb<br>11.10.0,REV=2005.01.21.16.34                   |
| SUNWdtthez 1.6,REV=10.2004.12.17               | SUNWmdu 11.10.0,REV=2005.01.21.16.34           | SUNWusbs<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWdticn 1.6,REV=10.2004.12.17                | SUNWmegatas 11.10.0,REV=2008.08.11.22.37       | SUNWuxlc 1.5,REV=2004.11.24.10.12                         |
| SUNWdtjxt 1.6,REV=10.2004.12.17                | SUNWmfrun 2.1.3,REV=10.2004.12.17              | SUNWvia823x<br>11.10.0,REV=2005.02.24.20.02               |
| SUNWdtlog 1.6,REV=10.2004.12.17                | SUNWmkcd 11.10.0,REV=2005.01.08.01.09          | SUNWvld 1.0,REV=2004.12.10.10.0                           |
| SUNWdtrc 11.10.0,REV=2005.01.21.16.34          | SUNWmpapi 11.10.0,REV=2006.06.15.16.38         | SUNWvolr<br>11.10.0,REV=2005.01.21.16.34                  |
| SUNWdtrp 11.10.0,REV=2005.01.21.16.34          | SUNWmpapir 11.10.0,REV=2006.06.15.16.38        | SUNWvolu                                                  |

|                                                          |                                                         |                                                              |
|----------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|
|                                                          |                                                         | 11.10.0,REV=2005.01.21.16.34                                 |
| SUNWdtscm 1.6,REV=10.2004.12.17                          | SUNWmpathadm<br>11.10.0,REV=2006.06.15.16.38            | SUNWvts 7.0,REV=2008.02.15.15.25                             |
| SUNWdttshelp 1.0,REV=10.2006.07.18                       | SUNWmpathadmr<br>11.10.0,REV=2006.06.15.16.38           | SUNWvtssm 7.0,REV=2008.02.07.18.55                           |
| SUNWdttsr 1.0,REV=10.2006.07.18                          | SUNWmpsvplr 11.10.0,REV=2006.06.15.16.38                | SUNWvtssr 7.0,REV=2008.02.07.18.55                           |
| SUNWdttsu 1.0,REV=10.2006.10.13                          | SUNWmptsas 11.10.0,REV=2009.07.13.23.13                 | SUNWvtss 7.0,REV=2008.02.07.18.55                            |
| SUNWdtwm 1.6,REV=10.2004.12.17                           | SUNWmrsas 11.10.0,REV=2009.06.21.23.22                  | SUNWvtsts 7.0,REV=2008.02.15.15.25                           |
| SUNWdvdrw 11.10.0,REV=2006.01.12.12.33                   | SUNWmv88sx 11.10.0,REV=2006.03.27.18.17                 | SUNWwbsup<br>11.10.0,REV=2005.01.21.16.34                    |
| SUNWemlx 11.10.0,REV=2005.01.24.03.10                    | SUNWnamdt 1.0,REV=2004.08.12.10.25                      | SUNWwsr2 4.0.0,REV=2005.01.09.21.19                          |
| SUNWemlxu 11.10.0,REV=2005.01.24.03.10                   | SUNWnamos 11.10.0,REV=2004.10.17.15.04                  | SUNWxcu4<br>11.10.0,REV=2005.01.21.16.34                     |
| SUNWeoib 11.10.0,REV=2010.07.14.14.54                    | SUNWnamow 1.0,REV=2004.03.20.02.00                      | SUNWxcu6<br>11.10.0,REV=2005.01.21.16.34                     |
| SUNWesu 11.10.0,REV=2005.01.21.16.34                     | SUNWnfscr 11.10.0,REV=2005.01.21.16.34                  | SUNWxf86 6.6.2.0,REV=0.2004.12.10                            |
| SUNWeuodf 1.5,REV=2004.12.08.17.24                       | SUNWnfscr 11.10.0,REV=2005.01.21.16.34                  | SUNWxge<br>11.10.0,REV=2005.01.21.16.34                      |
| SUNWeurf 1.0,REV=2004.08.12.10.20                        | SUNWnfscu 11.10.0,REV=2005.01.21.16.34                  | SUNWxi18n 4.2,REV=2.0.73                                     |
| SUNWeuxwe 1.5,REV=2004.11.24.10.12                       | SUNWnfsskr 11.10.0,REV=2005.01.21.16.34                 | SUNWxildh 1.4.2,REV=2004.11.23                               |
| SUNWexplo 7.1.12.9.7,REV=2012.9.19.0.28                  | SUNWnfssr 11.10.0,REV=2005.01.21.16.34                  | SUNWxilow 1.4.2,REV=2004.11.23                               |
| SUNWFchba 11.10.0,REV=2005.01.04.14.30                   | SUNWnfssu 11.10.0,REV=2005.01.21.16.34                  | SUNWxilrl 1.4.2,REV=2004.11.23                               |
| SUNWFchbar 11.10.0,REV=2005.01.04.14.30                  | SUNWnge 11.10.0,REV=2005.06.22.03.40                    | SUNWxim 4.2,REV=2.0.73                                       |
| SUNWFcip 11.10.0,REV=2005.01.04.14.30                    | SUNWnir 11.10.0,REV=2005.01.21.16.34                    | SUNWxorg-cfg<br>6.8.2.5.10.0110,REV=0.2005.06.29             |
| SUNWFcmdb 11.10.0,REV=2005.01.04.14.30                   | SUNWnisu 11.10.0,REV=2005.01.21.16.34                   | SUNWxorg-client-programs<br>6.8.2.5.10.0110,REV=0.2005.06.21 |
| SUNWFcp 11.10.0,REV=2005.01.04.14.30                     | SUNWntp4r 11.10.0,REV=2009.07.02.12.26                  | SUNWxorg-clientlibs<br>6.8.0.5.10.7400,REV=0.2004.12.15      |
| SUNWFcppt 11.10.0,REV=2005.08.02.13.09                   | SUNWntp4u 11.10.0,REV=2009.07.02.12.26                  | SUNWxorg-graphics-ddx<br>6.8.0.5.10.7400,REV=0.2004.12.15    |
| SUNWFcsm 11.10.0,REV=2005.01.04.14.30                    | SUNWntpr 11.10.0,REV=2005.01.21.16.34                   | SUNWxorg-mesa<br>6.8.2.5.10.0113,REV=0.2005.08.02            |
| SUNWFctl 11.10.0,REV=2005.01.04.14.30                    | SUNWntpu 11.10.0,REV=2005.01.21.16.34                   | SUNWxorg-server<br>6.8.0.5.10.7400,REV=0.2004.12.15          |
| SUNWFipe 11.10.0,REV=2010.07.14.14.54                    | SUNWntxn 11.10.0,REV=2009.02.23.22.46                   | SUNWxorg-tsol-module<br>6.8.0.5.10.0000,REV=0.2006.10.13     |
| SUNWFmd 11.10.0,REV=2005.01.21.16.34                     | SUNWnv-sata 11.10.1,REV=2008.08.11.22.37                | SUNWxorg-xkb<br>6.8.0.5.10.7400,REV=0.2004.12.15             |
| SUNWFmdr 11.10.0,REV=2006.03.29.01.57                    | SUNWnxge 11.10.0,REV=2007.07.08.17.21                   | SUNWxsvc<br>11.10.0,REV=2005.01.17.23.31                     |
| SUNWFonconfig<br>6.6.2.7400,REV=0.2004.12.15             | SUNWocf 11.10.0,REV=2005.01.21.16.34                    | SUNWvxmpv<br>11.10.0,REV=2008.02.29.14.37                    |
| SUNWFonconfig-root<br>6.6.2.7400,REV=0.2004.12.15        | SUNWocfr 11.10.0,REV=2005.01.21.16.34                   | SUNWwxacx<br>6.6.2.7400,REV=0.2004.12.15                     |
| SUNWFreetype2<br>6.6.2.7400,REV=0.2004.12.15             | SUNWocm 11.11,REV=2011.07.05.12.38                      | SUNWxwcft<br>6.6.2.7400,REV=0.2004.12.15                     |
| SUNWFss 11.10.0,REV=2005.01.21.16.34                     | SUNWoffice-launcher<br>1.1,REV=101.0.3.2010.05.25.22.50 | SUNWxwcsi 3.0,REV=2004.11.24.10.12                           |
| SUNWFtp 11.10.0,REV=2005.01.21.16.34                     | SUNWofk 11.10.0,REV=2010.07.14.14.54                    | SUNWxwdv<br>11.10.0,REV=2005.01.21.16.34                     |
| SUNWFtpu 11.10.0,REV=2005.01.21.16.34                    | SUNWolrte 3.7.3,REV=1.2004.06.28                        | SUNWxwdxm<br>6.6.2.7400,REV=0.2004.12.15                     |
| SUNWGccruntime<br>11.10.0,REV=2005.01.08.01.09           | SUNWopenssl-commands<br>11.10.0,REV=2005.01.21.16.34    | SUNWxwfa<br>6.6.2.7400,REV=0.2004.12.15                      |
| SUNWgnome-base-libs<br>2.6.0,REV=10.0.3.2004.12.16.15.19 | SUNWopenssl-libraries<br>11.10.0,REV=2005.01.21.16.34   | SUNWxwfnt<br>6.6.2.7400,REV=0.2004.12.15                     |
| SUNWgnome-base-libs-priv<br>2.24.2,REV=101.0.6           | SUNWopensslr 11.10.0,REV=2005.01.21.16.34               | SUNWxwhl<br>6.6.2.7400,REV=0.2004.12.15                      |

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|--------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------|
| SUNWgnome-base-libs-priv-l10n<br>2.24.2,REV=101.0.6                | SUNWos86r 11.10.0,REV=2005.01.21.16.34          | SUNWxwice<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-base-libs-root<br>2.6.0,REV=10.0.3.2004.12.16.15.19      | SUNWpapi 11.10.0,REV=2005.01.08.01.09           | SUNWxwman<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-base-libs-share<br>2.6.0,REV=10.0.3.2004.12.16.15.19     | SUNWpcelx 11.10.0,REV=2005.01.21.16.34          | SUNWxwmod<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-config<br>2.6.0,REV=10.0.3.2004.12.16.15.30              | SUNWpcmci 11.10.0,REV=2005.01.21.16.34          | SUNWxwopt<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-config-root<br>2.6.0,REV=10.0.3.2004.12.16.15.30         | SUNWpcmcu 11.10.0,REV=2005.01.21.16.34          | SUNWxwpft<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-config-share<br>2.6.0,REV=10.0.3.2004.12.16.15.30        | SUNWpcmem 11.10.0,REV=2005.01.21.16.34          | SUNWxwpblr<br>6.6.2.7400,REV=0.2004.12.15 |
| SUNWgnome-desktop-prefs<br>2.6.0,REV=10.0.3.2004.12.21.13.11       | SUNWpcr 13.1,REV=2005.01.21.16.34               | SUNWxwppls 6.6.2.0,REV=0.2004.12.10       |
| SUNWgnome-desktop-prefs-root<br>2.6.0,REV=10.0.3.2004.12.21.13.11  | SUNWpcser 11.10.0,REV=2005.01.21.16.34          | SUNWxwpplt<br>6.6.2.7400,REV=0.2004.12.15 |
| SUNWgnome-desktop-prefs-share<br>2.6.0,REV=10.0.3.2004.12.21.13.11 | SUNWpcu 13.1,REV=2005.01.21.16.34               | SUNWxwrtl<br>6.6.2.7400,REV=0.2004.12.15  |
| SUNWgnome-dtlogin-integration<br>2.6.0,REV=10.0.3.2004.12.16.18.42 | SUNWpd 11.10.0,REV=2006.05.09.20.40             | SUNWxwscf 6.6.2.0,REV=0.2004.12.22        |
| SUNWgnome-file-mgr<br>2.6.0,REV=10.0.3.2004.12.16.17.52            | SUNWperl584core<br>11.10.0,REV=2005.01.21.16.34 | SUNWxwssu 6.6.2.0,REV=0.2004.12.10        |
| SUNWgnome-file-mgr-root<br>2.6.0,REV=10.0.3.2004.12.16.17.52       | SUNWperl584usr 11.10.0,REV=2005.01.21.16.34     | SUNWxwts 6.6.2.4099,REV=0.2006.10.13      |
| SUNWgnome-file-mgr-share<br>2.6.0,REV=10.0.3.2004.12.16.17.52      | SUNWpiclr 11.10.0,REV=2005.01.21.16.34          | SUNWzfskr<br>11.10.0,REV=2006.05.18.01.46 |
| SUNWgnome-help-viewer<br>2.6.0,REV=10.0.3.2004.12.16.18.49         | SUNWpiclu 11.10.0,REV=2005.01.21.16.34          | SUNWzfsr<br>11.10.0,REV=2006.05.18.01.46  |
| SUNWgnome-help-viewer-share<br>2.6.0,REV=10.0.3.2004.12.16.18.49   | SUNWpixman 6.6.2.4099,REV=0.2009.06.21          | SUNWzfsu<br>11.10.0,REV=2006.05.18.01.46  |
| SUNWgnome-im-client-devel<br>2.7.0,REV=11.01.21.2011.03.07.19.33   | SUNWpkcmdsr 11.11,REV=2005.01.09.21.19          | SUNWzlib 11.10.0,REV=2005.01.08.01.09     |
| SUNWgnome-libs<br>2.6.0,REV=10.0.3.2004.12.16.15.52                | SUNWpkcmdsu 11.11,REV=2005.01.09.21.19          | SYMhisl 11.9.0,REV=2005.01.06.07.16       |
| SUNWgnome-libs-root<br>2.6.0,REV=10.0.3.2004.12.16.15.52           | SUNWplowr 11.10.0,REV=2004.08.12.10.26          | cms r18ka.p                               |
| SUNWgnome-libs-share<br>2.6.0,REV=10.0.3.2004.12.16.15.52          | SUNWpmi 6.6.2.0,REV=0.2004.12.10                | cmsweb web18ka.p                          |
| SUNWgnome-panel<br>2.6.0,REV=10.0.3.2004.12.16.17.46               | SUNWpng<br>20.2.6.0,REV=10.0.3.2004.12.16.14.42 | gsk8cry64 8.0.50.10                       |
| SUNWgnome-panel-root<br>2.6.0,REV=10.0.3.2004.12.16.17.46          | SUNWpool 11.10.0,REV=2005.01.21.16.34           | gsk8ssl64 8.0.50.10                       |
| SUNWgnome-panel-share<br>2.6.0,REV=10.0.3.2004.12.16.17.46         |                                                 |                                           |