



Ex Libris Patch Instructions for Oracle 10 CPUs for Voyager Linux Servers

10.2.0.4

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OraCPUs System Information (Linux)

The following table describes the system information for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Linux x86_64 and x86 servers (April 2010).

OraCPUs System Information (Linux)		
Requirements	Space	50 MB (approximate) of space on your server
	Version	Oracle 10.2.0.4 The patch requires your server to be at Oracle 10.2.0.4.
Downtime	Time	90 - 120 minutes to complete (approximate but not to exceed)
	Client Availability	Down All operations are down during the patch process.
	Web Availability	Down Web searching is unavailable during the patch process.
	Oracle Availability	Down Oracle is up and down during phases of the patch process (per instructions). However, for all functional purposes, Oracle is considered down.
	Reboot Required	No (but optional)

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Ex Libris Patch Download Instructions (Linux)

The following table describes the patch download instructions for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Linux x86_64 and x86 servers (April 2010).

Ex Libris Patch Download Instructions (Linux)	
Step-by-Step Example Instructions:	Example Commands:
1) Log in to the server as the Oracle user. NOTE: For sites with a split server configuration, log in to the database server(s) and download the patch on each database server (if there is more than one).	
2) Change the directories to the incoming directory.	<code>cd /m1/incoming</code>
3) Remove the old Oracle patch files if they exist.	<code>rm p*_GENERIC.zip p*_Linux*.zip</code>
4) Run the FTP program and open the session to Ex Libris. NOTE 1: For sites with a split server configuration, log in to the database server(s) and download the patch on each database server (if there is more than one). NOTE 2: The Oracle client installation is not affected and does not need to apply this CPU.	<code>ftp ftp.endinfosys.com</code>

<p>5) Log in as OraCPU. Password: Contact Customer Support for the OraCPU password. The following is a sample:</p>	<p>LoginName: OraCPU Password:</p>
<pre> Connected to eagle.endinfosys.com. 220-Unauthorized use is prohibited. 220- 220-All transactions are logged. 220- 220 eagle.endinfosys.com FTP server (Version wu- 2.6.0(2) Fri Feb 3 08:47:43 CST 2000) ready. Name (ftp.endinfosys.com): OraCPU 331 Password required for OraCPU. Password: 230 User OraCPU logged in. Access restrictions apply. ftp> </pre>	
<p>6) Turn on the passive mode. Set FTP to the binary mode. Turn on hash marks. Toggle off prompts. See below:</p>	<p>passive bin hash prompt</p>
<pre> ftp> passive Passive mode on. ftp> bin 200 Type set to I. ftp> hash Hash mark printing on (8192 bytes/hash mark). ftp> prompt Interactive mode off. ftp> </pre>	

<p>7) Change to the proper Patch directory 10.2.0.4/April_2010/<your server architecture>, as given on the right.</p> <p>See below:</p>	<p><If server is Linux x86_64> cd 10.2.0.4/April_2010/Linux</p> <p><If server is Linux x86> cd 10.2.0.4/April_2010/Linux_x86</p>
<pre>ftp> 10.2.0.4/April_2010/Linux 250 CWD command successful. ftp></pre>	
<p>8) Begin the transfer of the CPU files plus a Linux olap file for the patch. Note the hash marks indicating that the transfer is in progress.</p> <p>For both architectures, download:</p> <ul style="list-style-type: none"> ▪ p6880880_102000_<OS>.zip ▪ p9352191_10204_<OS>.zip <p>For the Linux x86_64 server, also download: OLAP_o10204_Linux.tar.bz2</p> <p>See below:</p>	<pre>mget *.zip</pre>
<pre>ftp> mget *.zip 200 PORT command successful. 150 Opening BINARY mode data connection for p6880880_102000_Linux-x86-65.zip (XXX bytes). #####</pre>	
<p>9) After the transfer is complete, type <i>bye</i> to end the FTP session.</p>	<pre>bye</pre>

3

Ex Libris CPU Patch Application Instructions (Linux)

The following table describes the patch application instructions for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Linux x86_64 and x86 servers (April 2010).

Ex Libris CPU Patch Application Instructions (Linux)	
Step-by-Step Example Instructions:	Example Commands:
1) Log in to the server as root. NOTE: For sites with a split server configuration, log in to the database server(s) and apply the patch to each database server (if there is more than one).	su - root
2) Shut down all Ex Libris-related product processes that connect to the Oracle database. For sites with a split server configuration (like Database server, Application server, Web server), stop the services on each server where/if the programs are installed and running, respectively.	/etc/init.d/httpd2 stop /etc/init.d/voyager stop <If Cognos/Analyzer is installed> /etc/init.d/cognos /etc/init.d/dbora stop
3) Switch to the Oracle user. Check the ORACLE_HOME and ORACLE_SID environment variables. ORACLE_HOME is /oracle/app/oracle/product/10.2.0/db_1 and ORACLE_SID is VGER (for Voyager) or MRDN for Analyzer). Also, use the <i>which</i> command to verify that specific programs are available on the server and that commands are available in Oracle's \$PATH such as make, ar, ld, nm. If commands are not shown, call Customer Support to have commands added.	su - oracle echo \$ORACLE_HOME echo \$ORACLE_SID which make which ar which ld which nm which gcc

<p>4) Start up the database. Verify that the OLAP components are valid in the database. Query the database with the following queries:</p> <pre>SQL> select value from v\$option where parameter='OLAP';</pre> <p>VALUE</p> <p>-----</p> <p>TRUE</p> <p>If VALUE is TRUE for parameter='OLAP' in the v\$option table, move forward and skip the OLAP patch in Step 5. Proceed with the CPU patch only.</p> <p>If VALUE is FALSE for the OLAP parameter in the v\$option table, or "OPTION OFF" for OLAP in the dba_registry table, perform the OLAP patch in Step 5.</p>	<pre>su - oracle sqlplus / as sysdba startup select value from v\$option where parameter='OLAP'; select comp_name, status from dba_registry where comp_name like '%OLAP%'; shutdown immediate quit</pre>
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<p>5) If OLAP is “FALSE” or “OPTION OFF” as determined in Step 4, apply the OLAP patch following the steps below, using the commands in the column to the right.</p> <p>Back up the existing olap directory and then remove it from \$ORACLE_HOME.</p> <p>Reinstall it from the OLAP_o10204_Linux.tar.bz2 package.</p> <p>Chmod the olap directory to 0755.</p> <p>Execute the “make -f” commands to turn the OLAP on.</p> <p>Connect to the database as sysdba, start up the database in normal mode, and run the olap.sql script with “SYSAUX TEMP” arguments.</p> <p>Recompile the objects using utlrp.sql.</p> <p>Check the OLAP components again in the dba_registry table to ensure all are valid.</p> <p>SQL> select comp_name, status from dba_registry where comp_name like '%OLAP%'</p> <p>SQL> /</p> <pre> COMP_NAME STATUS ----- OLAP Analytic Workspace VALID Oracle OLAP API VALID OLAP Catalog VALID </pre>	<pre> cd \$ORACLE_HOME tar -cf - olap bzip2 -c \ > /m1/incoming/oracle_old_olap.tar.bz2 rm -rf olap bzip2 -dc /m1/incoming/OLAP_o10204_Linux.tar.bz2 tar xvf - chmod 0755 ./olap make -f \$ORACLE_HOME/rdbms/lib/ins_rdbms.mk olap_on make -f \$ORACLE_HOME/rdbms/lib/ins_rdbms.mk ioracle sqlplus /nolog connect / as sysdba startup @?/olap/admin/olap.sql SYSAUX TEMP; @?/rdbms/admin/utlrp.sql select comp_name, status from dba_registry where comp_name like '%OLAP%'; shutdown immediate; quit </pre>
<p>6) Go to the Oracle home directory. Back up the existing OPatch directory. Remove the existing OPatch directory once it is successfully backed up.</p>	<pre> cd \$ORACLE_HOME tar -cf - OPatch bzip2 -c \ > /m1/incoming/ORA_old_opatch.tar.bz2 rm -rf OPatch </pre>
<p>7) Unzip and install the latest update OPatch utility for Oracle 10.2.0 onto ORACLE_HOME.</p>	<pre> cd \$ORACLE_HOME unzip /m1/incoming/p6880880_102000_Linux*.zip </pre>

<p>8) Change directories to the OPatch directory and unzip the CPU zip file. You will see a directory called "9352191" that is extracted on to the \$ORACLE_HOME/OPatch directory.</p>	<pre>cd \$ORACLE_HOME/OPatch unzip /m1/incoming/p9352191_10204_Linux*.zip</pre>
<p>9) Confirm that Oracle is really down.</p>	<pre>ps -fu oracle</pre>
<p>10) Apply the CPU patch.</p> <p>NOTE: This process normally runs for about 15-20 minutes.</p> <p>Where asked "Do you want to proceed?" in the following message, continue with a 'Y' for YES, type Y to continue.</p> <p>If asked to enter your e-mail address, press Enter (to skip). When asked to provide My Oracle Support password (Optional), press Enter (to skip).</p> <p>This will hang for a while. Wait patiently for it to proceed to the next Y/N question. Type Y again to continue.</p>	<pre>cd \$ORACLE_HOME/OPatch ./opatch napply 9352191 -skip_subset - skip_duplicate</pre>

```
=> ./opatch napply 9352191 -skip_subset -
skip_duplicate

Invoking OPatch 10.2.0.4.9

Oracle Interim Patch Installer version 10.2.0.4.9

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UTIL session

Oracle Home      :
/oracle/app/oracle/product/10.2.0/db_1

Central Inventory : /oracle/app/oracle/oraInventory
  from            : /etc/oraInst.loc

OPatch version   : 10.2.0.4.9
OUI version      : 10.2.0.4.0
OUI location     :
/oracle/app/oracle/product/10.2.0/db_1/oui

Log file location :
/oracle/app/oracle/product/10.2.0/db_1/cfgtoollogs/o
patch/opatch2010-04-21_14-56-42PM.log

Patch history file:
/oracle/app/oracle/product/10.2.0/db_1/cfgtoollogs/o
patch/opatch_history.txt

Invoking utility "napply"

Checking conflict among patches...

Checking if Oracle Home has components required
by patches...

Checking skip_duplicate

Checking skip_subset
```

Checking conflicts against Oracle Home...

OPatch continues with these patches: 7155248
7155249 7155250 7155251 7155252 7155253 7155254
7197583 7375611 7375613 7375617 7609057 7609058
8309592 8309632 8309642 8568395 8568397 8568398
8568402 8568404 8568405 8836667 8836671 8836675
8836677 8836678 8836681 8836683 8836684 8836686
9173244 9173248 9173253 9352191 9442328 9442331
9442335 9442339

Do you want to proceed? [y|n]

Y

Running prerequisite checks...

Provide your email address to be informed of security issues, install and initiate Oracle Configuration Manager. Easier for you if you use your My

Oracle Support Email address/User Name.

Visit <http://www.oracle.com/support/policies.html> for details.

Email address/User Name:

Provide your My Oracle Support password to receive security updates via your My Oracle Support account.

Password (optional):

....

Execution of 'sh
/oracle/app/oracle/product/10.2.0/db_1/OPatch/93521
91/9352191/custom/scripts/post -apply 9352191 ':

Return Code = 0

The local system has been patched and can be restarted.

UtilSession: N-Apply done.

OPatch succeeded.

<p>11) Complete the post-CPU process by applying the CPU scripts (catbundle.sql) to a running Oracle instance. You need to connect as sysdba and start up the database first. This process takes about 15-20 minutes depending on your server performance. Be patient while the process is running.</p> <p>Check the following log files for errors at: \$ORACLE_HOME/cfgtoollogs/catbundle: catbundle_CPU_VGER_APPLY_<TIMESTAMP>.log catbundle_CPU_VGER_GENERATE_<TIMESTAMP>.log</p>	<pre>cd \$ORACLE_HOME/rdbms/admin sqlplus /nolog connect / as sysdba startup @catbundle.sql cpu apply</pre>
<p>12) Verify that you have to recompile views inside Oracle. This is required unless CPU Jan2008 or later has already been applied to Oracle.</p> <p>If the number returned is one or more, you may skip Step 13. If the return of COUNT is zero, then proceed with Step 13.</p> <p>SQL> select count(*) from registry\$history where ID = '6452863';</p> <pre> COUNT(*) ----- 0</pre>	<pre>sqlplus "/as sysdba" select count(*) from registry\$history where ID = '6452863'; shutdown immediate quit;</pre>
<p>13) Run the view recompilation script.</p> <p>NOTE: This script must be run with the database restarted in the UPGRADE mode that restricts connection as sysdba.</p> <p>This script may take up to 15-30 minutes to complete. Afterwards, shutdown the database.</p>	<pre>cd \$ORACLE_HOME/cpu/view_recompile sqlplus /nolog connect / as sysdba startup upgrade @view_recompile_jan2008cpu.sql shutdown immediate quit</pre>
<p>14) Connect as sysdba and start up the database in normal mode. Recompile invalid objects if any were reported in the final phase of Step 10 (@catcpu), or if you recompiled views in Step 13. Run the utlrp.sql to recompile any invalid objects.</p> <p>SQL> select object_name from dba_objects where status='INVALID';</p>	<pre>cd \$ORACLE_HOME/rdbms/admin sqlplus /nolog connect / as sysdba startup @utlrp.sql select object_name from dba_objects where status='INVALID'; shutdown immediate Quit</pre>

<p>15) Run the change_perms.sh script at \$ORACLE_HOME/install to reset the correct file permission on \$ORACLE_HOME.</p>	<pre>cd \$ORACLE_HOME/install ./changePerm.sh</pre>
<p>16) Start Oracle. Make sure that you are the root user.</p>	<pre>su - root /etc/init.d/dbora start</pre>
<p>17) Become the voyager user to test the Oracle database connection. If you have a split application server, test this from the application server.</p>	<pre>su - voyager sqlplus system/PASSWORD@VGER</pre>
<p>18) Bring the system up. Make sure that you are the root user, and start all Ex Libris products.</p>	<pre>su - root /etc/init.d/httpd2 start /etc/init.d/voyager start <If Cognos/Analyzer is installed> etc/init.d/cognos start</pre>