



# Ex Libris Patch Instructions for Oracle 10 CPUs for Voyager Solaris/AIX Servers

10.2.0.4

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# 1

## OraCPUs System Information (UNIX)

The following table describes the system information for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Solaris and AIX 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)

# 2

## Ex Libris Patch Download Instructions (UNIX)

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

Ex Libris Patch Download Instructions (UNIX)	
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.	<code>rm p*_GENERIC.zip p*64*.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>
5) Log in as: OraCPU Password: Contact Customer Support for the OraCPU password. See the following sample:	Login Name: OraCPU Password:

<p>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&gt;</p>	
<p>6) Turn on the passive mode. Set the FTP to the binary mode. Turn on hash marks. Toggle off prompts.</p>	<p>passive  bin  hash  prompt</p>
<p>ftp&gt; passive  Passive mode on.  ftp&gt; bin  200 Type set to I.  ftp&gt; hash  Hash mark printing on (8192 bytes/hash mark).  ftp&gt; prompt  Interactive mode off.  ftp&gt;</p>	
<p>7) Change to the proper patch directory 10.2.0.4/April_2010/&lt;your server architecture&gt;, as shown in the column to the right.</p>	<p>&lt;if Solaris&gt;  cd 10.2.0.4/April_2010/Solaris</p> <p>&lt;if AIX&gt;  cd 10.2.0.4/April_2010/AIX</p>
<p>ftp&gt; cd 10.2.0.4/April_2010/Solaris  250 CWD command successful.  ftp&gt;</p>	
<p>8) Begin the transfer of the CPU files. Note the hash marks indicating that the transfer is in progress.</p> <p>Two package files are included:</p> <ul style="list-style-type: none"> <li>▪ p9352191_10204_&lt;OS&gt;.zip</li> <li>▪ p6880880_102000_&lt;OS&gt;.zip</li> </ul>	

<pre>ftp&gt; mget p6880880_102000_SOLARIS64.zip 200 PORT command successful. 150 Opening BINARY mode data connection for p6880880_102000_SOLARIS64.zip (XXX bytes). #####</pre>	mget *.zip
9) After the transfer is complete, type <i>bye</i> to end the FTP session.	bye

# 3

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## Ex Libris CPU Patch Application Instructions (UNIX)

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

Ex Libris Patch Application Instructions (UNIX)	
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) For Solaris 10 only, check for the presence of the required Solaris patch 123908-01 or later. Using the command in the left column to verify the presence of this patch. You are required to install this patch on Solaris 10 if not present. You may download this patch from the following location and install it as root:  <a href="http://sunsolve.sun.com/search/document.do?assetkey=1-21-138634-01-1">http://sunsolve.sun.com/search/document.do?assetkey=1-21-138634-01-1</a>	<For Solaris 10> patchadd -p  grep 123908

<p>3) 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.</p> <p>NOTE: For Solaris 10 only, if “/etc/init.d/dbora stop” does not stop the SMF-managed Oracle properly, call Customer Support to get the problem fixed on Solaris 10.</p> <p>NOTE: For AIX, if the system startup scripts were installed in /etc/init.d but you do not see /etc/rc.voyager or /etc/rc.dbora or /etc/rc.httpd2 on the server, then, as root, create an appropriate symlink for them, like:</p> <pre>ln -s /etc/init.d/voyager /etc/rc.voyager ln -s /etc/init.d/dbora /etc/rc.dbora ln -s /etc/init.d/httpd2 /etc/rc.httpd2</pre>	<pre>/etc/init.d/httpd2 stop /etc/init.d/voyager stop</pre> <p>&lt;If Cognos/Analyzer is installed&gt;</p> <pre>/etc/init.d/cognos</pre> <pre>/etc/init.d/dbora stop</pre>
<p>4) 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 the commands are not shown, call Customer Support to have the commands added.</p> <p>NOTE: For AIX, verify that x1C is installed on /usr/vacpp/bin. If yes, include /usr/vacpp/bin in \$PATH to avoid an 'x1C not found' error message for the CPU. If x1C is not installed, you do not need to update \$PATH.</p>	<pre>su - oracle echo \$ORACLE_HOME echo \$ORACLE_SID which make which ar which ld which nm</pre> <p>&lt;For AIX&gt;</p> <pre>ls /usr/vacpp/bin/x1C* PATH=\$PATH:/usr/vacpp/bin export PATH which x1C</pre>
<p>5) 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 \ &gt; /m1/incoming/ORA_old_opatch.tar.bz2 rm -rf OPatch</pre>
<p>6) 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_*.zip</pre>

<p>7) Change directories to the OPatch directory and unzip the CPU zip file. You should see that a directory called 9352191 is extracted on to the \$ORACLE_HOME/OPatch directory.</p>	<pre>cd \$ORACLE_HOME/OPatch unzip /m1/incoming/p9352191_10204_*.zip</pre>
<p>8) Confirm that Oracle is really down.</p> <p>NOTE: For AIX, there is a particular CPU problem that involves the file libjox10.a being locked in memory that results in the failure of the CPU. To avoid the problem, be sure to run /usr/sbin/slibclean as the root user and rename libjox10.a twice to ensure it is released from memory.</p>	<pre>ps -fu oracle  &lt;For AIX&gt; su - root /usr/sbin/slibclean su - oracle cd \$ORACLE_HOME/lib mv libjox10.a libjox10.a.orig mv libjox10.a.orig libjox10.a</pre>
<p>9) Apply the CPU patch as the oracle user.</p> <p>NOTE: This process normally runs for about 15-20 minutes.</p> <p>Where you are 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 the My Oracle Support password (Optional), press Enter (to skip).</p> <p>This might hang for quite 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/opatch/opatch2010-04-21_14-56-42PM.log

Patch history file:
/oracle/app/oracle/product/10.2.0/db_1/cfgtoollogs/opatch/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/9352191/9352191/custom/scripts/post -apply 9352191 ':

Return Code = 0

The local system has been patched and can be restarted.

UtilSession: N-Apply done.

OPatch succeeded.

NOTE: For AIX, the OPatch process might finish with some WARNING messages. Two likely errors can be safely ignored:

- TOC overflow (TOC size: 67040 Maximum size: 65536);
- 'xlC: not found' on File 'genocish'

<p>10) 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:</p> <ul style="list-style-type: none"> <li>▪ catbundle_CPU_VGER_APPLY_&lt;TIMESTAMP&gt;.log</li> <li>▪ catbundle_CPU_VGER_GENERATE_&lt;TIMESTAMP&gt;.log</li> </ul>	<pre>cd \$ORACLE_HOME/rdbms/admin sqlplus /nolog connect / as sysdba startup @catbundle.sql cpu apply quit</pre>
<p>11) Verify that you have the 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 12. If the return of COUNT is zero, then proceed with Step 12.</p> <pre>SQL&gt; select count(*) from registry\$history where ID = '6452863';  COUNT(*) ----- 0</pre>	<pre>sqlplus /as sysdba select count(*) from registry\$history where ID = '6452863'; shutdown immediate quit;</pre>
<p>12) 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>NOTE: This script may take up to 15-30 minutes to complete.</p> <p>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>13) Recompile invalid objects if any were reported in the final phase of Step 10 (@catcpu) or if you recompiled views in Step 12. Startup the database in normal mode and run the utlrp.sql to recompile any invalid objects.</p> <pre>SQL&gt; select object_name from dba_objects where status='INVALID';</pre> <p>NOTE: If you notice an invalid package body called CORR_AQ_92, owned by sys, you can ignore it.</p>	<pre>cd \$ORACLE_HOME/rdbms/admin sqlplus / as sysdba startup @utlrp.sql select object_name from dba_objects where status='INVALID'; shutdown immediate quit</pre>

<p>14) 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>15) Start Oracle. Make sure you are the root user.</p>	<pre>su - root /etc/init.d/dbora start</pre>
<p>16) Become the voyager user to test the Oracle database connection. For a split application server, test this from the application server.</p>	<pre>su - voyager sqlplus system/PASSWORD@VGER</pre>
<p>17) Bring the system up. Make sure you are the root user, and start all the Ex Libris products on all respective servers where the programs are installed and supposed to be running.</p>	<pre>su - root /etc/init.d/httpd2 start /etc/init.d/voyager start  &lt;If Cognos/Analyzer is installed&gt; etc/init.d/cognos start</pre>