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

10.2.0.4

ExLibris The bridge to knowledge

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OraCPUs System Information (Windows 32)

The following table describes the system information for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Windows 32-bit servers (October 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 (optional)

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Ex Libris Patch Download Instructions (Windows 32)

The following table describes the download instructions for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Windows 32-bit servers (October 2010).

Ex Libris Patch Download Instructions (Windows 32)	
Step-by-Step Example Instructions	**Example Commands**
1) Log in to the server as `voyager` or as an administrator that was assigned the `ORA_DBA` group privilege on the Windows server. 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 directories to the incoming directory.	Open a Kornshell session: `cd D:/incoming`
3) Remove the old Oracle patch files if they exists.	`rm p*_WIN**.zip`
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.	`ftp downloads.exlibrisgroup.com`
5) Log in as: `OraCPU` Password: Refer to Ex Libris KB item 16384-11361	`Login Name: OraCPU` `Password:`

``` 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> ```	
6) Turn on the passive mode. Set the FTP to binary mode. Turn on hash marks. Toggle off prompts.	``` passive bin hash prompt ```
``` 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> ```	
7) Change to the proper operating system directory based on your server architecture.	``` cd 10.2.0.4/Oct_2010/Windows_NT ```
``` ftp> cd 10.2.0.4/Oct_2010/Windows_NT 250 CWD command successful. ftp> ```	
8) Begin the transfer of the CPU files for the patch. ▪ p6880880_102000_WINNT.zip ▪ p10084980_10204_Win32.zip Hash marks indicate that the transfer is in progress.	
``` ftp> mget *.zip 200 PORT command successful. 150 Opening BINARY mode data connection for p6880880_102000_WINNT.zip (XXX bytes). ################### ```	``` mget *.zip ```

9) After the transfer is complete, type `bye` to end the FTP session.	`bye`

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Ex Libris CPU Patch Application Instructions (Windows 32)

The following table describes the patch application instructions for the Oracle 10 Critical Patch Updates (CPU) for Voyager products on Windows 32-bit servers (October 2010).

Ex Libris CPU Patch Application Instructions (Windows 32)	
Step-by-Step Example Instructions	**Example Commands**
1) Log in to the server as `voyager` or as an administrator that was assigned the `ORA_DBA` group privilege on the Windows server. Note 1: 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). Note 2: On the Windows server, `voyager` or the `administrator` was configured as a member of the `ORA_DBA` group. To verify this, right click `My Computer -> Manage under Computer Management -> Local users and groups -> Users ->` and click `Voyager` to view `Member of`. You should see `ORA_DBA`.	Log in to the Windows server directly or via the remote desktop as `voyager` or `administrator.`

2) Shut down all Ex Libris-related product processes that connect to the Oracle database. Voyager customers should have a set of standard startup/shutdown scripts installed on `C:/etc/init.d`. If this is a non-standard installation, call Ex Libris Customer Support, or stop voyager/apache/oracle services via Services Control.	Open a Kornshell session:
	`C:/etc/init.d/VOYAGER.ksh stop`
	`C:/etc/init.d/HTTPD.KSH stop`
	`C:/etc/init.d/DBORA.KSH stop`

3) Confirm that `ORACLE_SID` and `ORACLE_HOME` are properly set in the system environment and that `ORACLE_HOME` is in `$PATH`. The standard `ORACLE_HOME` is `D:/oracle`. Verify that the `make`, `ar`, `ld`, and `nm` commands are available in `$PATH`. They should be installed in `D:/NUTCROOT/mksnt`. If these commands are not available, call Ex Libris Customer Support to have commands added.	Open a Kornshell session: ``` echo $ORACLE_SID echo $ORACLE_HOME which make which ar which ld which nm ```
4) Go to the Oracle home directory. Back up the existing `OPatch` directory. Remove the existing `OPatch` directory once it is successfully backed up.	``` cd $ORACLE_HOME tar -cf - OPatch	bzip2 -c \ > D:/incoming/ORA_old_opatch.tar.bz2 rm -rf OPatch ```
5) Unzip and install the latest update OPatch utility for Oracle 10.2.0 to `ORACLE_HOME`.	``` cd $ORACLE_HOME unzip D:/incoming/p6880880_102000_WINNT.zip ```
6) Change directories to the `OPatch` directory and unzip the CPU zip file. A directory called `10084980` is extracted to the `$ORACLE_HOME/OPatch` directory.	``` cd $ORACLE_HOME/OPatch unzip D:/incoming/p10084980_10204_Win32.zip ```
7) Confirm that Oracle is really down.	``` ps -ef	grep oracle ```
8) Use the command line utility to perform the work below. Execute `opatch` to cross check for an existing Oracle patch version. If this fails, it means the Oracle inventory was not set up properly. Call Ex Libris Customer Support. Note: Open a command line session `Start->Run-> type: cmd`	Open a command line session: ``` cd %ORACLE_HOME%\OPatch opatch lsinventory ```

9) Apply the CPU patch.
 	
Note: Perform this using the command line. This process normally runs for about 15 to20 minutes.
 	
When `Do you want to proceed?` displays, continue with `Y` for YES.
 	
When asked to enter your e-mail address, press `Enter` to skip this request.
 	
When asked `Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]:`, type `Y` to continue.
 	
When asked `Is the local system ready for patching? [y|n]`, type `Y` to continue.
	`set PATH=%PATH%;%ORACLE_HOME%\OPatch`
	
	`cd %ORACLE_HOME%\OPatch\10084980`
	
	`opatch apply`

```cd %ORACLE_HOME%\OPatch\10084980```
 	
```opatch apply```
 	
```5.0```
 	
```….```
 	
```OPatch invoked as follows: 'apply '```
 	
```INFO:```
 	
```Oracle Home   :```
```D:\oracle\app\oracle\product\10.2.0\db_1```
 	
```Central Inventory : C:\Program```
```Files\Oracle\Inventory```
 	
```   from   : n/a```
 	
```OPatch version   : 10.2.0.5.0```
 	
```OUI version   : 10.2.0.4.0```
 	
```OUI location   :```
```D:\oracle\app\oracle\product\10.2.0\db_1```
```\oui```
 	
```Log file location :```
```D:\oracle\app\oracle\product\10.2.0\db_1```
```\cfgtoollogs\opatch\opatch2010-10-26_11-```
```38-27AM.log```
 	
```Return Code = 0```
 	
```The local system has been patched and```
```can be restarted.```
 	
```The following warnings have occurred```
```during OPatch execution:```
 	
```1) OUI-67620:Interim patch 10084980 is a```
```superset of the patch(es) [9393548]```
 	
```in the Oracle Home```
 	
```OPatch Session completed with warnings.```
 	
```OPatch completed with warnings.```	

10) Inspect the ```opatch<TIMESTAMP>.log``` file generated in ```%ORACLE_HOME%\cfgtoollogs\opatch``` for any errors.	```cd %ORACLE_HOME%\cfgtoollogs\opatch``` ```more opatch<TIMESTAMP>.log```

11) Determine if the Oracle Configuration Manager (ccr) is running (as a result of opatch). If yes, stop it. Otherwise, proceed to step 12.	```ps –ef	grep ccr```
		If CCR is running:
		```cd %ORACLE_HOME%\ccr\bin```
		```emCCR stop```

| 12) Complete the post-CPU process. This means loading a set of CPU scripts into a running Oracle instance. Start up the database first, and load the scripts as `sysdba`. This process takes about 15 to 20 minutes depending on your database size.<br><br>Note: If you have trouble with starting the Oracle services, normally via sqlplus, do the startup by using `net start OracleServiceVGER`. | ```
cd  $ORACLE_HOME%\Bundle\Patch40
sqlplus /nolog
connect / as sysdba
startup
@catcpu.sql
quit
``` |
| 13) Check the log file for any errors at `%ORACLE_HOME%\cfgtoollogs\catbundle:` `catbundle_WINBUNDLE_VGER_APPLY_<TIMESTAMP>.log.` | ```
cd ..\..\cfgtoollogs\catbundle
more catbundle_WINBUNDLE_VGER_APPLY*
.log
``` |
| 14) Verify if you need to recompile views inside Oracle. This is required unless the CPU Jan2008 or later has already been applied to Oracle.<br><br>If the number returned is one or more, you may skip step 12. If the return of COUNT is zero, then shutdown the database and proceed with step 13.<br><br>```SQL> select count(*) from``` ```registry$history where ID = '6452863';```<br><br>```  COUNT(*)```<br>```----------```<br>```         0``` | ```
sqlplus / as sysdba
select count(*) from registry$history
where ID = '6452863';
shutdown
quit;
``` |
| 15) Run the view recompilation script.<br><br>Note: This script needs to be run with the database restarted in the upgrade mode that restricts connection to `sysdba`.<br><br>This script may take from 15 to 30 minutes to complete. Afterwards, shutdown the database. | ```
cd
%ORACLE_HOME%\Bundle\view_recompile
sqlplus /nolog
connect / as sysdba
startup upgrade
@view_recompile_jan2008cpu.sql
shutdown
quit
``` |

| 16) 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.<br><br>`SQL> select object_name from dba_objects where status='INVALID';`<br><br>If there are more invalid objects, you might recompile manually using the following example:<br><br>`SQL> alter <object_type> schemaname.<object_name> compile;` | ```
cd %ORACLE_HOME%\rdbms\admin
sqlplus /nolog
connect / as sysdba
startup
@utlrp.sql
select object_name from dba_objects
where status='INVALID';
shutdown
quit
``` |
| 17) Start Oracle using the standard script.

Note: Open a Kornshell session to do this. | Open a Kornshell session:
`C:/etc/init.d/DBORA.KSH start` |
| 18) Bring the system up. Start all Ex Libris products. Afterwards, test the Voyager system to ensure that all services are up and running. | `C:/etc/init.d/HTTPD.KSH start`
`C:/etc/init.d/VOYAGER.ksh start` |