KnowledgeBase Update Process and Instructions

Version 2.0

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1

Introduction to the KnowledgeBase Update Process

Verde's KnowledgeBase is updated continuously to reflect changes in the availability of electronic products in the global market. Ex Libris releases these changes in monthly KnowledgeBase updates.

The KnowledgeBase update process in Verde performs the following operations:

- Creates new e-products and work records
- Updates existing e-products and work records
- Deletes e-products
- Cleans up duplicate e-products

Adding New Records

New e-interfaces, e-packages, and e-standalones added to the Verde KnowledgeBase are inactive by default.

New e-constituents are handled in the following way:

- e-Constituents of **active aggregator** packages and **active selective complete** packages are updated so that their e-product status, selection status, and expiration date match that of the package. The activation date will match the date that the KB update was applied.
- e-Constituents of **active selective partial** packages are not activated.

Note: New constituents added to active aggregator packages as part of a KB update become active in Verde inheriting the package activation. But the activation information is not sent to SFX and as a result, the parallel SFX portfolios stay inactive.

To prevent this problem, it is recommended to turn on the auto-active flag for those SFX targets that match the active Verde aggregator packages for which KB Update adds new constituents.

Updating Existing Records

In Verde, there is a clear differentiation between local and global fields. The local work record and e-product fields can be updated by the user. The global fields are updated by the KB update process only.

The following fields in the work record are updated by the KnowledgeBase update process:

- Title
- Identifier (ISSN/e-ISSN/ISBN/e-ISBN/CODEN)
- Category
- Publisher
- Alternate title
- Format

The following fields in the e-product record are updated:

- Workexpression code
- Free/ Subscription
- Up code
- Package type (aggregator or selective)
- Global coverage
- Global embargo
- JKEY

Deleting Records

The KnowledgeBase update deletes only e-product records. Work records are not deleted.

The following rules apply to the deletion of localized e-products:

- Localized e-products are not deleted, but are assigned a selection status of **Withdrawn by Publisher**. Note that this does not apply to the e-constituents of the aggregator packages. A record is local if it has been updated locally or if it has an attribute record.
- e-Constituents of aggregator packages are deleted even if they are active.
- Deleted e-products are saved in the history table.

Cleaning Up Duplicate Records

Periodically, when duplicate Verde e-constituents/SFX portfolios are discovered, it is necessary for Ex Libris to delete duplicate data in order to improve the e-constituent's/portfolio's representation in the SFX and Verde KnowledgeBase.

Cleanup is performed as part of LKB update process and typically includes the following stages:

Action	LKB Update Stage
Downloading of cleanup file	LKB wizard – step 2: "Download Import Files from the FTP server"
Transferring of local data from duplicate (deleted) e-constituents to their corresponding e-constituents	LKB update – Pre-execution
Removal of duplicate e-constituents	LKB update – Deletion stage

Solution Description

The cleanup file provides pairs of e-constituents. The first e-constituent in the pair is the one that is to be removed (referred to as the deleted e-constituent). The second e-constituent in the pair is the one that is to remain (referred to as the target e-constituent).

Local data is transferred from deleted to target e-constituents as follows:

- e-Product field values are copied from the deleted e-constituents and transferred to the target e-constituents.
- Attributes are transferred.

The cleanup fix begins running when the LKB update process is launched. The fix checks each pair of e-constituents. If a deleted e-constituent contains no local data, the program proceeds to the following pair. If a deleted e-constituent contains local data, the program checks whether the target e-constituent contains local data and proceeds as follows:

- If the target e-constituent contains no local data, the local data is transferred from the deleted e-constituent to the target e-constituent.
- If the target e-constituent contains local data, the program checks each e-product field and each attribute of both the deleted and target e-constituents, one by one, and proceeds as follows:
  - If the same attribute or e-product field exists for both e-constituents, data transfer is rejected.

Example 1: If both the deleted and target e-products contain acquisition records, the acquisition records will not be transferred.

Example 2: If both e-constituents have a sponsoring library, the data for the sponsoring library will not be transferred.

- If both e-products contain local data, but in different fields, the data is transferred. For example, if a deleted e-constituent has a selection status and a target e-constituent has an acquisition record, the selection status will be transferred.

The following table summarizes the algorithm that is used:

Deleted e-Product	Target e-Product	Result
Value exists	Empty	Local data transferred from deleted e-constituent to target e-constituent
Empty	Value exists	None
Value exists	Value exists	Data transfer rejected

Copied Data

e-Product Fields:

- Selection status
- e-Product status
- Activation from date
- Expiration date
- Concurrent number of users
- Sponsoring library
- Library contact
- Public note
- Internal note
- Holdings note
- ILS holdings ID
- Free
- Libraries

Transferred Data

- Libraries
- Local coverage
- Local embargo

Attributes:

- Acquisition
- License
- Access
- Admin
- Breach
- Incident
- Cost
- Usage

Non-Transferred Data

- MetaLib ID
- Additional ID: ID Number
- Additional ID: ID Source
- Title key
- Suppress
- Workflow attribute
- Local fields of e-product

Possible Errors

- A value was not copied because there is an existing value in the target e-product.

  Example: Both the deleted and target e-products contain a selection status.
- An attribute was not copied because there is an existing attribute in the target e-product.

  Example: Both the deleted and target e-products contain acquisition records.
- A value was not copied due to a conflict with the e-package's data.

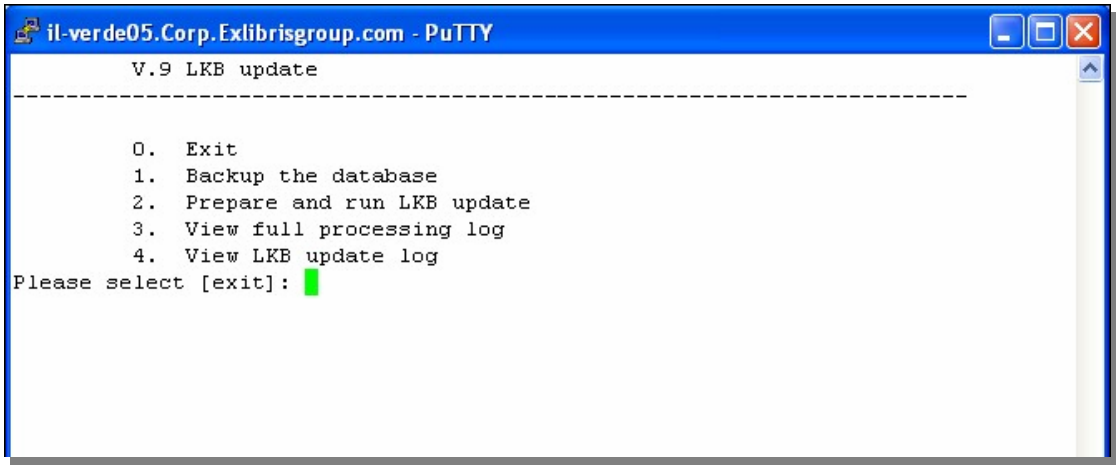
  This error occurs if:

- The e-constituent is active while the e-package is inactive.
- The activation date of the e-constituent is before the activation date of the e-package.
- The expiration date of the e-constituent is after the expiration date of the e-package.

2

The KnowledgeBase Update Wizard

The KnowledgeBase update wizard guides you through the different steps necessary to apply a Verde KB update. The wizard is available through the **UTIL** menu, option **V/9 – LKB update**:

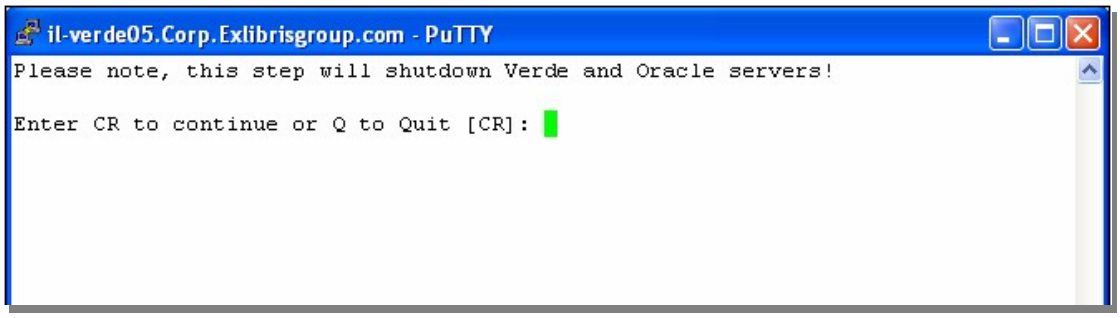


The main menu includes the following:

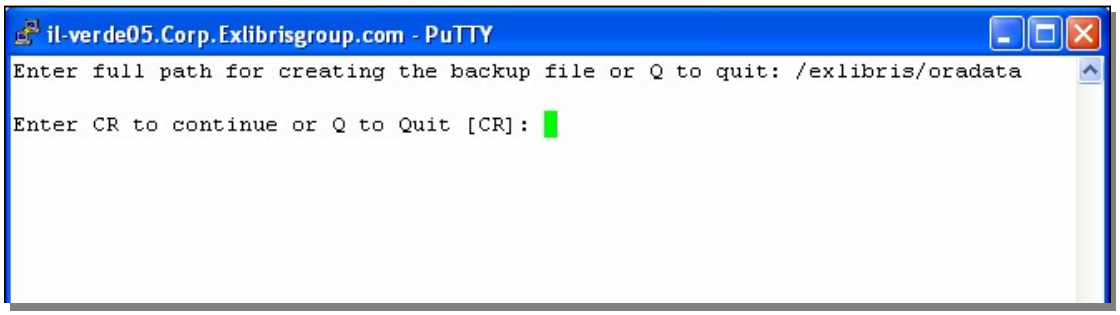
1. Back up the database
2. Prepare and run the LKB update – going through the preliminary steps and finally running the process
3. View full processing log – viewing the log that tracks the LKB update wizard execution (`LKBupdatePreprocessing.log`)
4. View LKB update log – viewing the log that tracks the LKB update execution (`LKBUpdate.log`).

Backing Up the Database

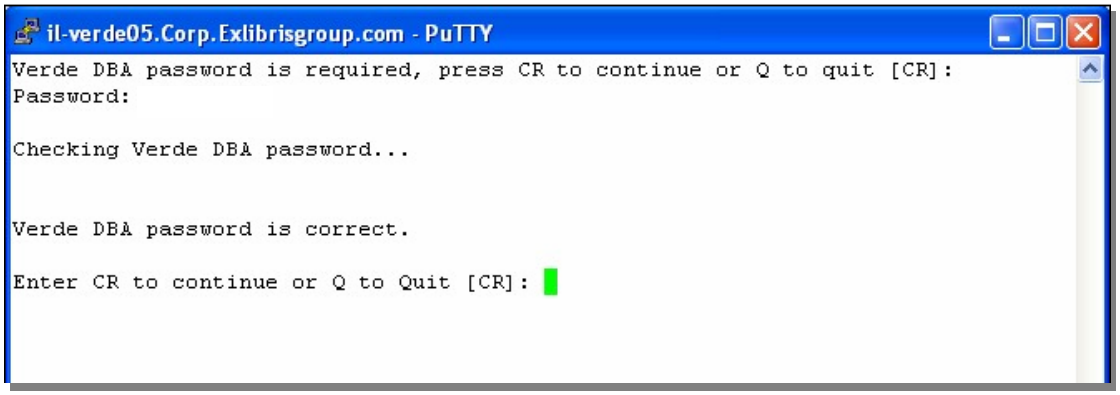
To back up the database, select option **1**. You are notified that both Verde and Oracle will be shut down during the process.



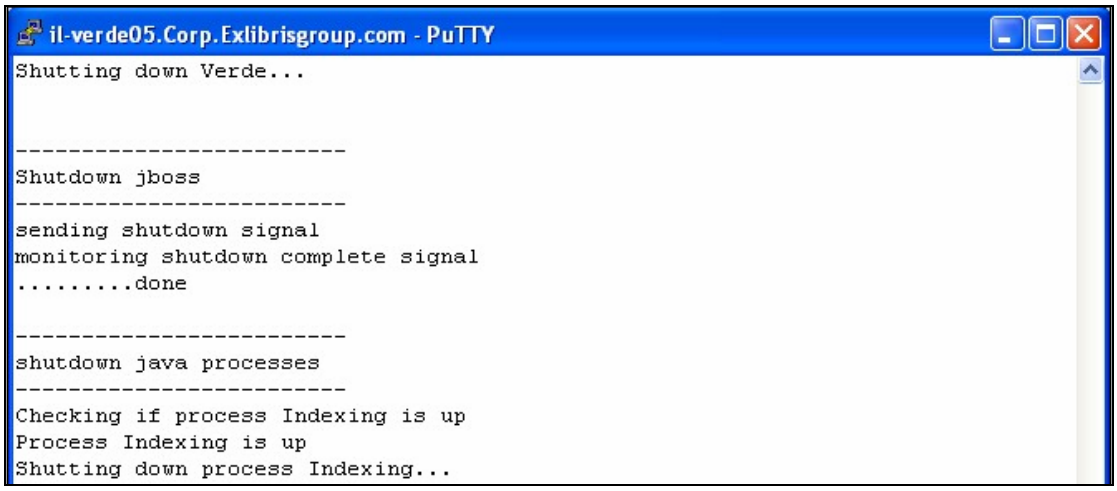
In the next step of the backup process, you are asked to enter the full path for creating the backup file. This directory must have oracle user permissions. In this example, the selected directory is `/exlibris/oradata`:



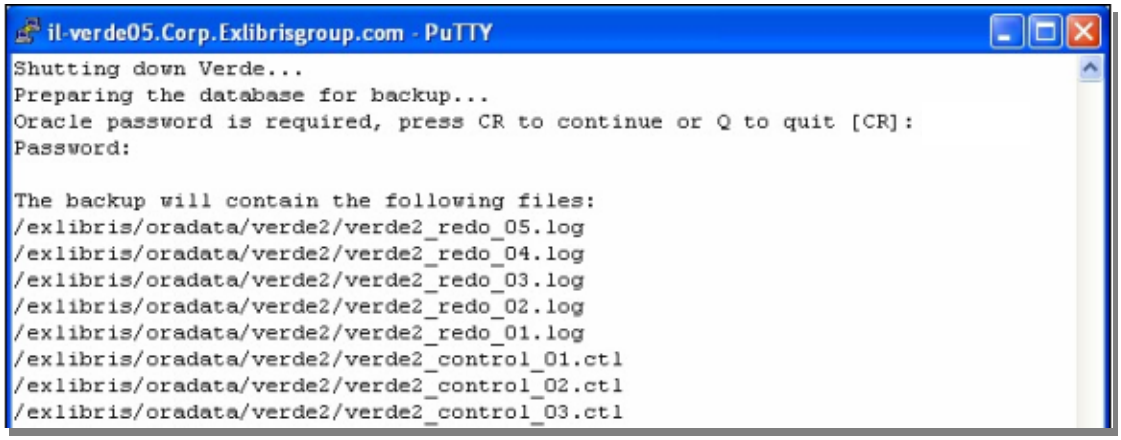
The system asks you to enter the Verde DBA password:



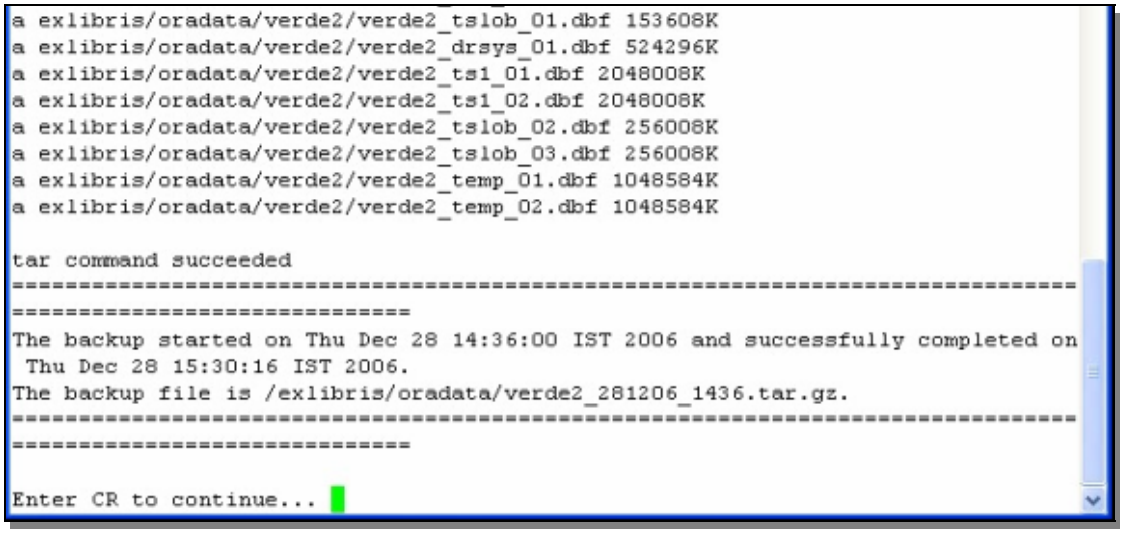
Verde processes are shut down first. Following that, the database is dismounted and the system is prepared for backup. When the preparation process is complete, the system displays the following message: **Database is ready for backup.**



In the next step, you are asked to enter the UNIX Oracle user password in order to start the backup. The wizard displays the list of files that will be backed up:



At the end of the process, the wizard displays the following results: start date and time, end date and time, and the backup file name. The database and application will then be restarted.



Restoring the Database

To restore the backed-up database:

1. Shut down Verde using Verde UTIL V/2.
2. Log on as an `oracle` user (su - oracle).
3. Set the `ORACLE_SID` environment variable to hold the appropriate Oracle instance:
   `setenv ORACLE_SID verde`**`X`**
4. Shut down Oracle using the following commands:
   ```
   sqlplus '/ as sysdba'
   shutdown immediate
   quit
   ```
5. Open the backup file from the root directory:
   ```
   cd /
   ```
   `tar -xzf <full path to the tar.gz file>` (On Linux machines)

   `gnu_tar -xzf <full path to the tar.gz file>` (On SUN machines)
6. Start the Oracle database using the following commands:
   ```
   sqlplus '/ as sysdba'
   startup
   quit
   ```
7. Log out as the `oracle` user using the following command:
   ```
   logout
   ```
8. Start Verde using Verde UTIL V/1.

Note: If the backup was created prior to the service pack installation, the implementation scripts related to the latest service pack must be re-applied. If the implementation scripts were applied during the service pack installation but after the recovery, the database changes were overwritten with the previous database state. In order to apply the implementation scripts, refer to the section 5.2, "Run Implementation Scripts," in the *Verde Service Pack Installation Instructions* document.

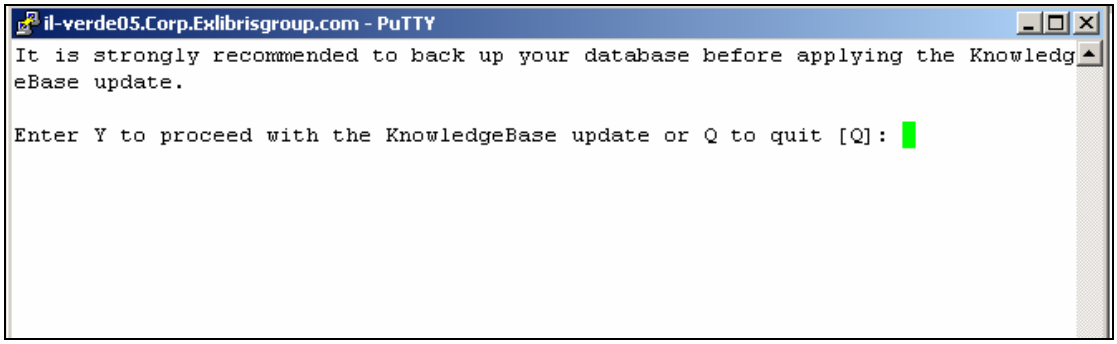
The Update File Format

The KnowledgeBase input files include a footer with the following details, which are used for the different calculations in the process.

<EProduct_new>...</EProduct_new>
<EProduct_update>...</EProduct_update>
<EProduct_delete>...</EProduct_delete>
<WorkExpression_new>...</WorkExpression_new>
<WorkExpression_update>...</WorkExpression_update>

Running the KB Update Using the Wizard

It is strongly recommended that you back up your database before applying the KB update. Verde displays a reminder when the wizard starts:

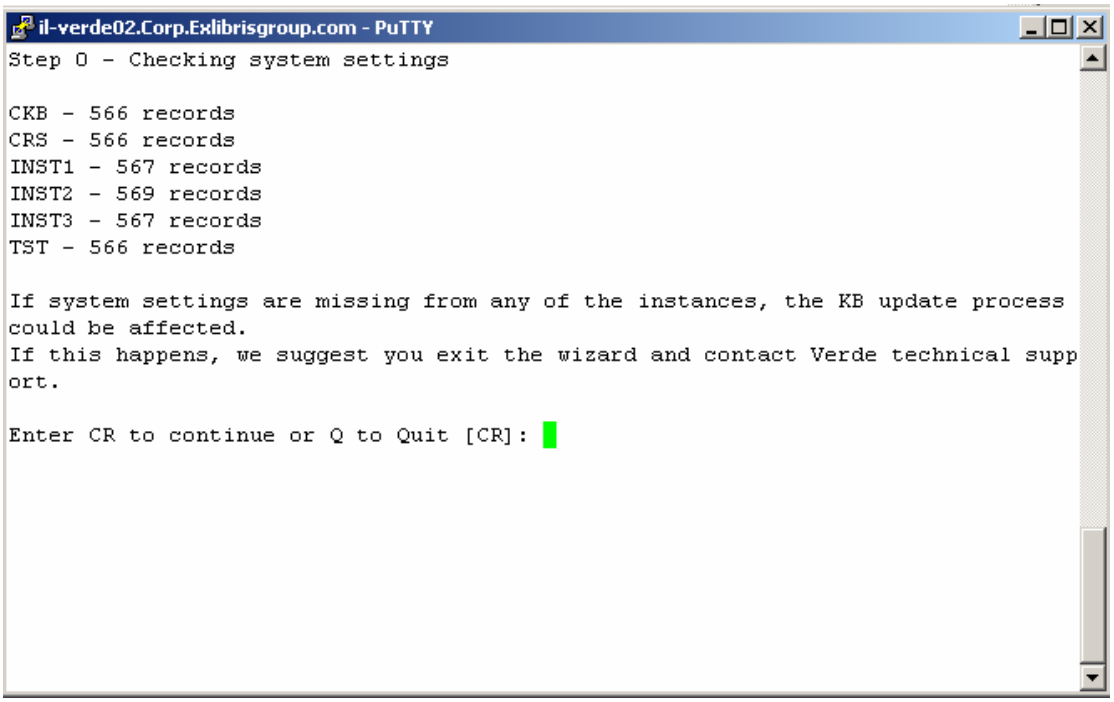


If the process fails for any unexpected reason, having the backup will help revert the database back to the previous stage.

You can enter `Y` to proceed with the KnowledgeBase update or `Q` to quit and create the backup before proceeding to the next step.

Note: Before starting the LKB update process, check the cron jobs that shut down Verde and/or Oracle (for example, cold backup). Make sure that the jobs do not run during the LKB update. Otherwise, the KB update process stops and you have to recover the database from the backup and re-run the KB update.

Step 0 – Checking System Settings

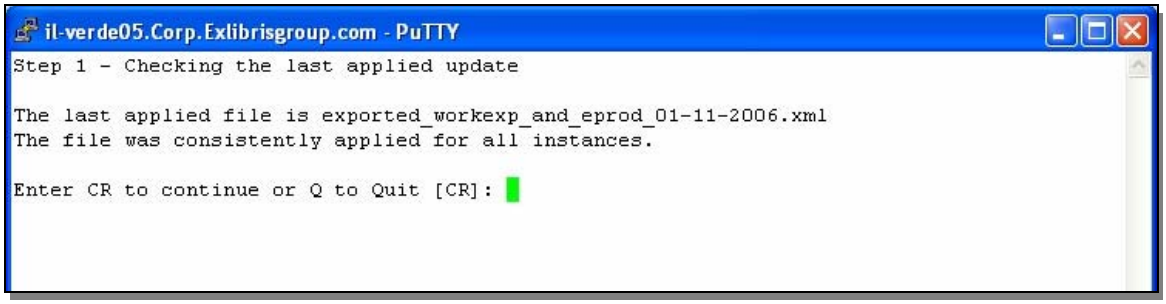


The mandatory condition for a KB update is that the database is running. In step 0, the system checks whether the database is running. If the system is not running, the following message is displayed: **The database is down. Please connect to the database. Enter CR to continue...**

One of the prerequisites for running a KB update is to properly configure the system settings in all the instances to ensure that the KB update process loads and indexes e-product and work records correctly.

The number of different system settings can differ from one instance to another due to local setup changes (see image). If the difference between the numbers displayed is significant (such as a very low number of system settings in any of the instances), Verde technical support should be contacted to remedy the situation before proceeding to the next step.

Step 1 - Checking the Last Applied Update



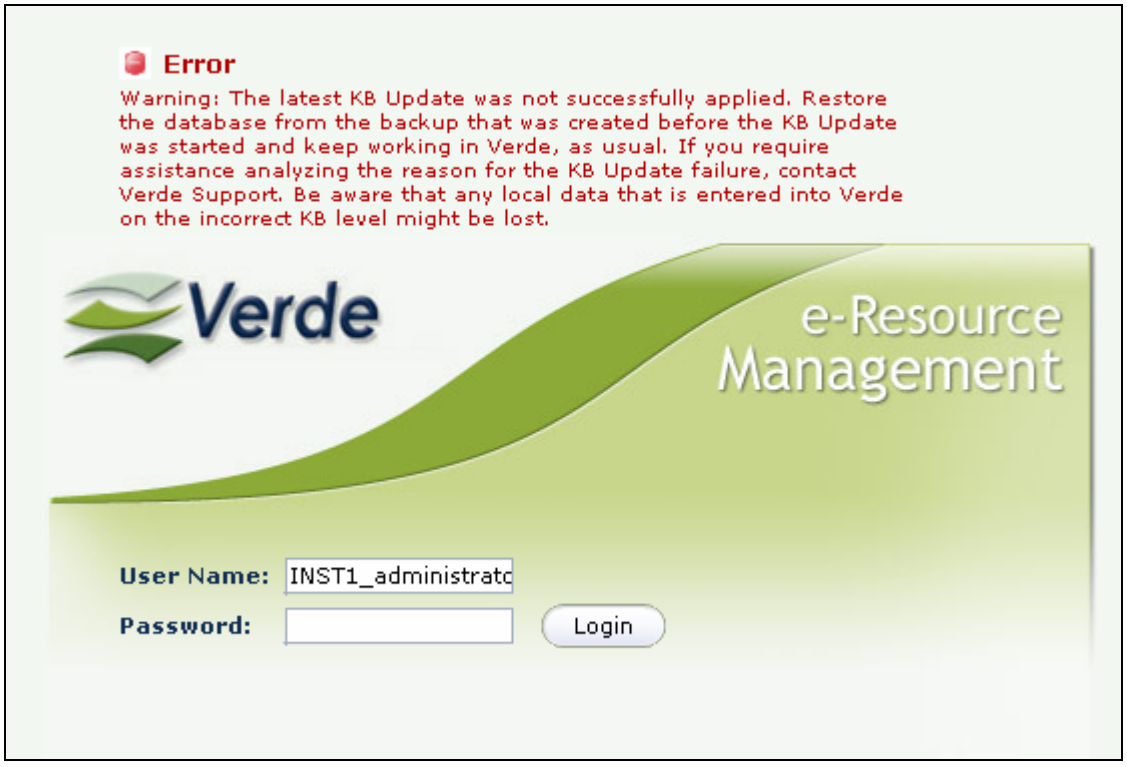
Verde checks the last update that was applied.

If all the instances are on the same update level, the system displays the following message: **The last applied file is <file name>. The file was consistently applied for all the instances.**

The following is a list of possible errors that can occur:

- If not all instances are on the same KB level, Verde displays the following message: **Error: ambiguity in last applied file. Please contact Verde support.**
- If none of the previous imports succeeded, the system displays the following message: **No updates were (successfully) applied.**
- If the list of instances updated in the previous KB update is different from the instance list in the installation, the process stops and the following message displays: **Error: instance codes mismatch. Please contact Verde support.**

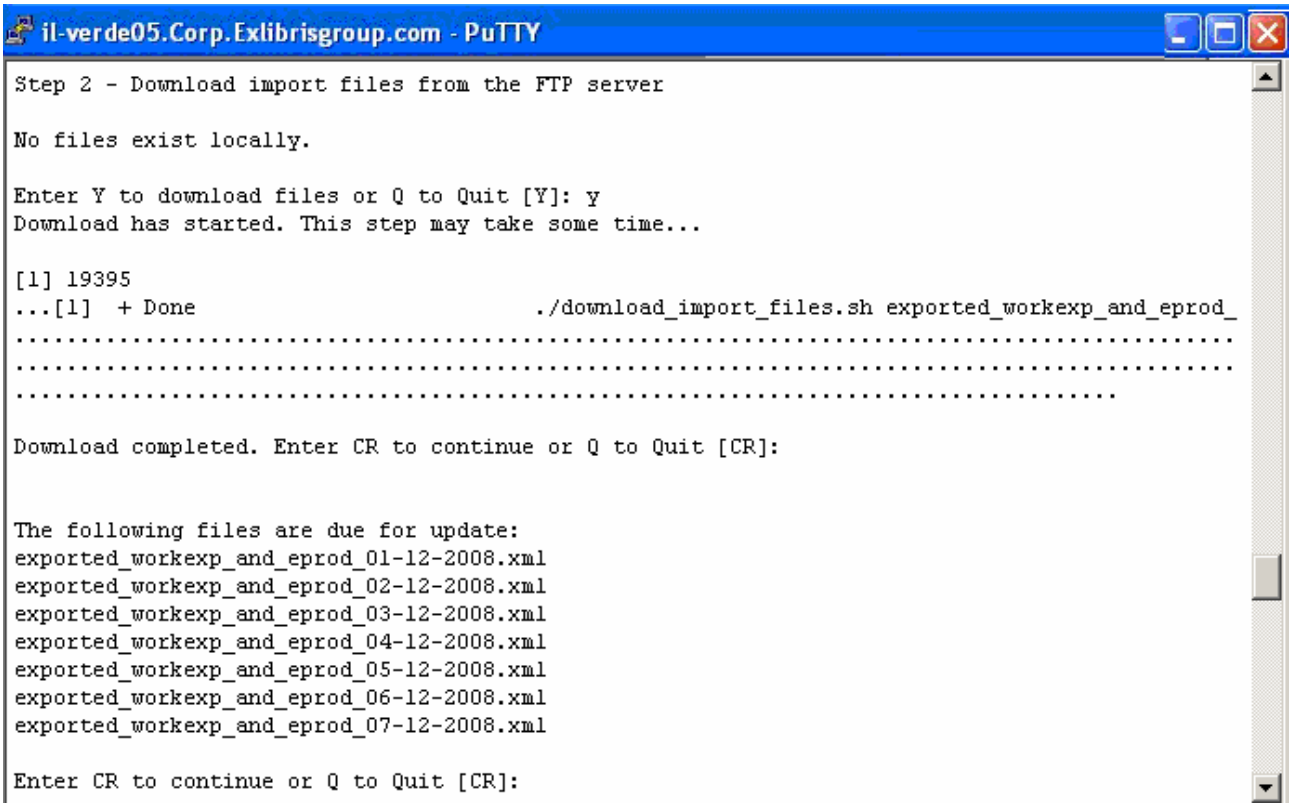
If one of the above errors occurs, the LKB update wizard stops and an error message appears on the Verde logon page:



It is possible to continue to work with Verde, but it is strongly recommended that you first restore the database from the backup that was created before the KB update was started. Be aware that any local data that is entered into Verde on the incorrect KB level may be lost.

For assistance in analyzing the reason for the KB update failure, contact your Verde support representative.

Step 2 - Download Import Files from the FTP Server



Verde checks the list of update files in the import directory that are newer than the last applied update.

Note: If the current LKB update includes cleanup, the cleanup file will be downloaded at this stage.

- If there are newer files, the system gives you two options: download the new files from the FTP server or use the existing local files only.
- If no local files are found in the import directory, the **No files exist locally** message is displayed. In this case, you must download the files from the FTP server.

If the system downloads the files successfully, the list of files to be updated is displayed. If there are no files to be updated, the **No files exist, nothing to update** message is displayed.

Note: The system downloads only files related to one month (the month after the month of the last applied file).

If the downloading process fails, Verde alerts you as follows: **Error: download failed. Please contact Verde support.**

Note: It is impossible to run the LKB update for more than one month at a time. Due to the large size of the KB, you must run each month separately.

Step 3 - Calculating Oracle Table Space

Verde calculates the required Oracle table space for the update and increases it if required.

First, the system checks if all the database files related to `TS0`, `TS1`, and `TSLOB` are installed on the same disk. If not, the system reports **Error: the database is installed on several disks. Please contact Verde support** and the process stops.

Next, the system retrieves the numbers of entities from the input file and uses these numbers to calculate the required disk space for:

- `TS0` – used for data
- `TS1` – used for indexing
- `TSLOB` – used for other purposes

If the current size is enough (greater than or equal to the required), the **There is enough table space** message is reported. If not, the missing disk space is calculated and the number of extents that should be added is displayed. In this case, the **Need to increase <table space name> (current size is …) by … extents** message is displayed.

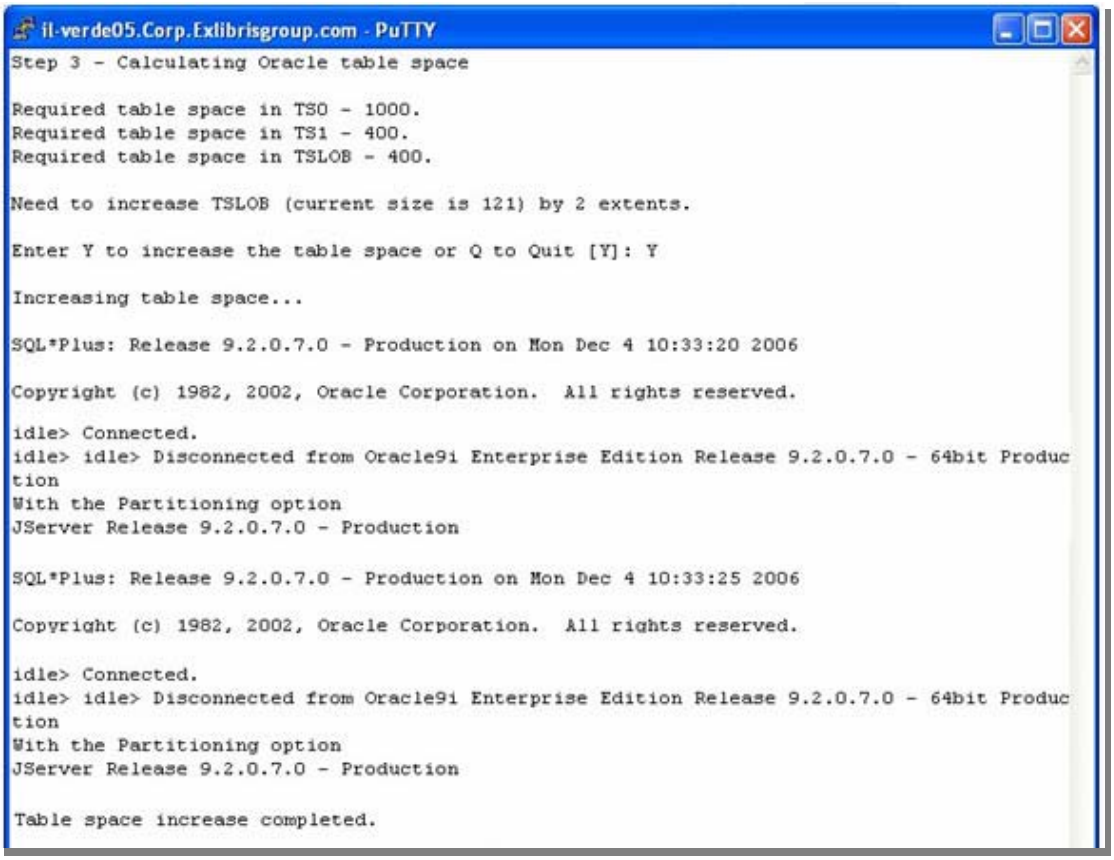
If the free space is smaller than 10% of the total space, the system adds 500 MB.

When an increase in the table space is needed, the system calculates the required space and compares the result to the available disk space (in megabytes) on the disk where the database files are installed. The required disk space is calculated as follows:

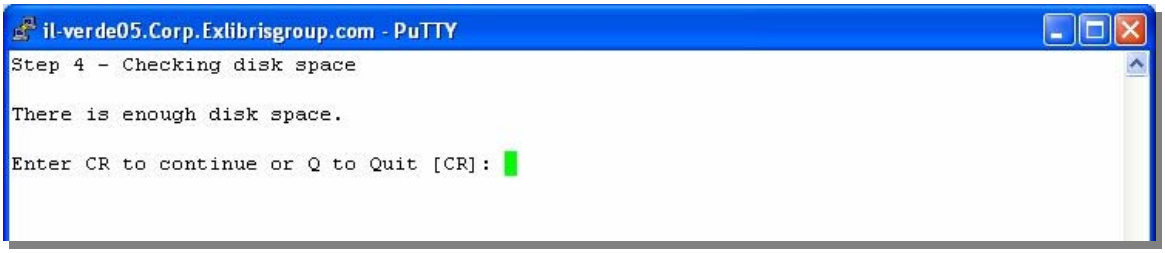
(Number of extents to add in TS0 * TS0 extent size) + (number of extents to add in TS1 * TS1 extent size) + (number of extents to add in TSLOB * TSLOB extent size + 5000)

If the available table space is smaller than that required, the system reports **Error: insufficient disk space for adding table space (…M available, …M required). Please contact Verde support** and the process is stopped.

When the system receives your confirmation to increase the table space, the **Increasing table space** message is displayed, and the required database files for the relevant table space segments are added. The end of the increasing process is indicated by the **Table space increase completed** message (see the following image).



Step 4 - Checking Disk Space



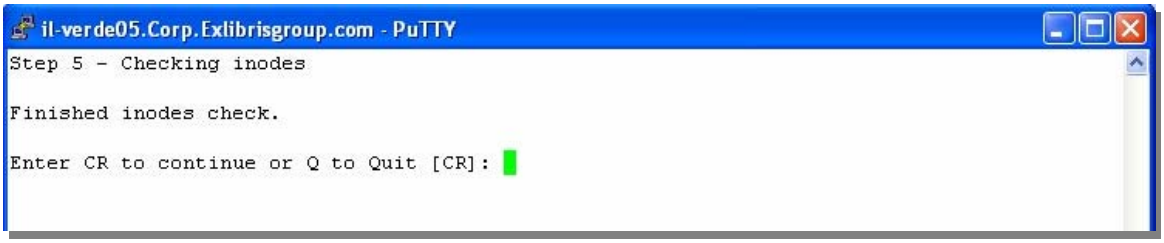
Verde calculates the required disk space according to the number of resources that must be indexed/re-indexed:

- Indexed: new resources (multiplied by the number of instances)
- Re-indexed: existing resources (that will potentially be updated)

If the available disk space is sufficient for all the relevant records, Verde displays the following message: **There is enough disk space.**

If the available disk space is less than that required, the process stops and the user receives the following message: **Error: insufficient disk space (…available, … required). Please contact Verde support.**

Step 5 - Checking Inodes



In this step, the system retrieves the number of free inodes (open file entries in the file system).

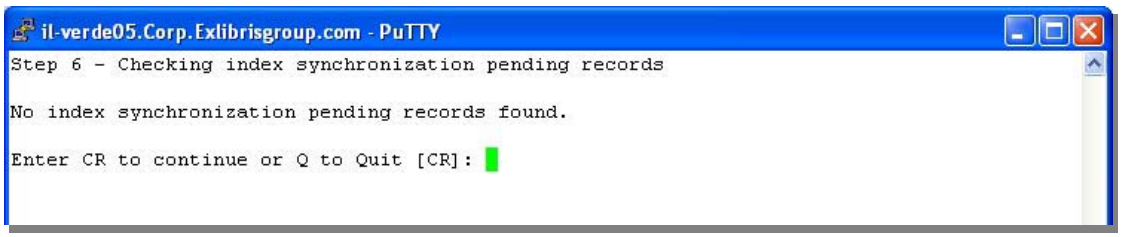
If the system fails to retrieve the number of free inodes, which may happen in exceptional system configurations, the following message is displayed: **Error: unable to retrieve free inodes. Please check manually and report to Verde support if this error is incorrect.** You are then allowed to proceed to the next step.

If the number of free inodes is sufficient, the **There are enough free inodes** message appears. If this number is less than the number of index files to be created during the KB update, the following message is displayed to the user: **Error: insufficient free inodes (… available, … required). Please check manually and report to Verde support if this error is incorrect.** In this case as well, the system allows the user to continue the process.

Step 6 - Checking Index Synchronization Pending Records

Verde retrieves the number of records waiting for indexing to ensure that no indexing jobs interfere with the update.

If no records are found, the **No index synchronization pending records found** message is displayed. If the table is not empty, index synchronization is performed by the system. The following message is displayed while synchronization is running: **Manual index synchronization has started. This step can take some time....**



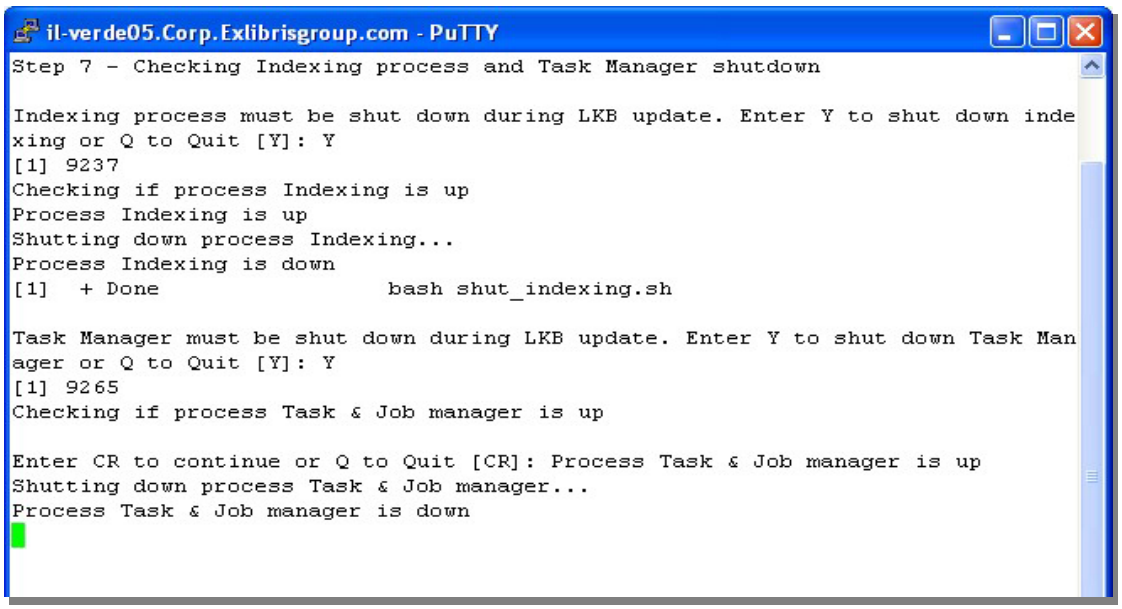
When the process is finished, the system reports: **Manual index synchronization completed.**

The number of records waiting for indexing is checked again after manual synchronization. If such records are found again, Verde displays the following message: **Error: after manual index synchronization, there are still pending records. Please contact Verde support.**

Step 7 - Checking Indexing Process and Task & Job Manager Shutdown

Both the indexing process and the Task and Job Manager must be shut down before the KB update process starts. If these processes are running, Verde asks for permission to shut them down.

Before shutting down the processes, the wizard verifies that the application server required for running the KB update is working. If it is not, the wizard will start it.



If you want to view the currently running jobs and tasks and decide whether to shut both processes down accordingly, they can be found under UTIL V/5/7 (List running tasks) and UTIL V/5/8 (List running jobs).

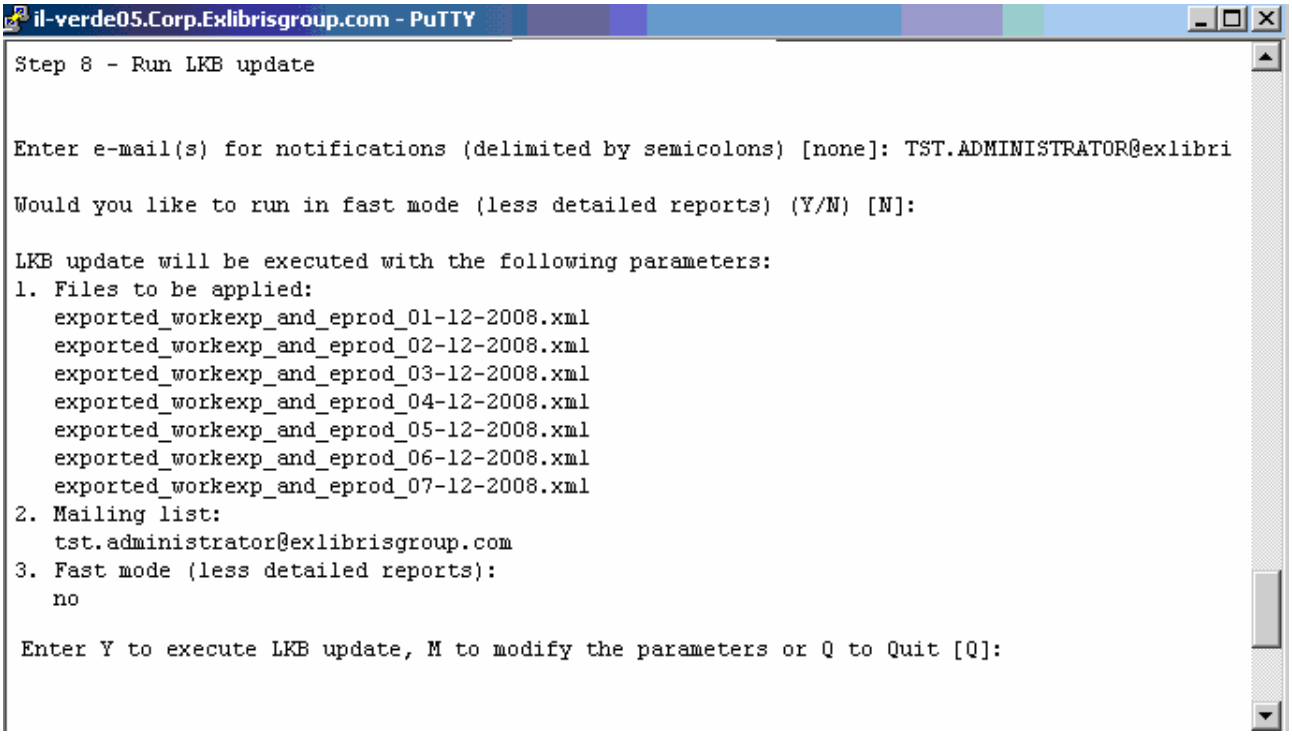
Step 8 - Run LKB Update

In this step, you are asked to enter the following additional parameters for the KB update:

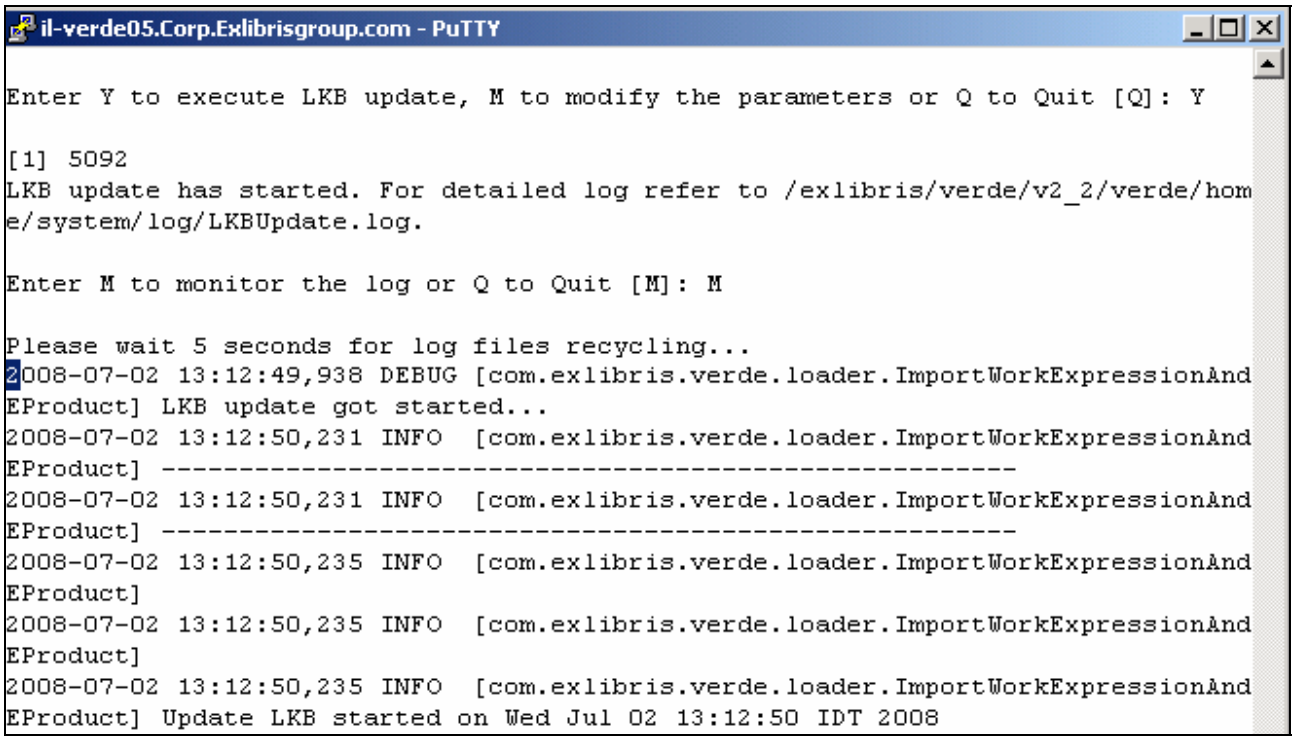
- E-mail addresses for notifications
- LKB update mode – There are two possible modes: **Fast** and **Full**. The default option is Full mode. If Fast mode is chosen, the process produces fewer detailed reports and, as a result, requires less disk space and runtime. For details, see Verde KnowledgeBase Update Reports on page 32.

After entering these parameters, the system displays the following summary:

- Files to be applied (list of files to process)
- Mailing list (e-mails for notifications)
- Fast mode (yes/no)



The system offers to modify these parameters or start the process. When the process starts, you can select whether to monitor the LKB update log:



Pre-Executions

At the beginning of the process, the system performs the following pre-execution validations:

- The system checks what service pack is installed. If the SP level requested for the current KB update is not applied, the KB update is aborted. You need to apply the requested SP before the LKB update. The information about the current and requested SP appears in log file:

```
 [SP CHECK]: Pre execution of SPCheck has started.
2009-03-22 11:24:20,314 ERROR [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct]
 [SP CHECK]: Current SP is 646.  SP requested is at least 676 . LKB Update aborted
2009-03-22 11:24:20,314 ERROR [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct]
 Process failed on Pre Execution
```

- If the current LKB update includes cleanup as well, the system checks whether the cleanup file exists and if so, cleanup begins. After the completion of the cleanup process, the LKB process continues. If the cleanup file does not exist or is incorrect, the LKB update is aborted.

```
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: Pre execution of SaveData4KBCleanup has started.
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: For more details please see specific log: saveDataForKBCleanup.log
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: Changes report will be created in the directory of LKB Update reports
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: After completion LKB Update process will continue...
```

Note: If you want to apply the Verde KB update in portions, after downloading the Verde files (using the wizard) to `$VERDE_BASE/home/data/import`, you can exclude some of them from the first portion of the KB update. To do that, quit the wizard and use UNIX commands to rename the files you do not want to apply yet.

To apply a monthly KB update in portions, do the following:

1 Using the KB update wizard, download all the input files to the import directory. In the following example, there are 14 input files in the June 2009 KB update:

```
-rw-r--r--  1 verde exlibris  13858995 Jun  8 18:06
exported_workexp_and_eprod_01-06-2009.xml

-rw-r--r--  1 verde exlibris  77781933 Jun  8 18:06
exported_workexp_and_eprod_02-06-2009.xml

-rw-r--r--  1 verde exlibris  77993721 Jun  8 18:06
exported_workexp_and_eprod_03-06-2009.xml

-rw-r--r--  1 verde exlibris  66020568 Jun  8 18:06
exported_workexp_and_eprod_04-06-2009.xml

-rw-r--r--  1 verde exlibris  67045373 Jun  8 18:06
exported_workexp_and_eprod_05-06-2009.xml

-rw-r--r--  1 verde exlibris  52942167 Jun  8 18:06
exported_workexp_and_eprod_06-06-2009.xml

-rw-r--r--  1 verde exlibris   1515543 Jun  8 18:06
exported_workexp_and_eprod_07-06-2009.xml
```

```
-rw-r--r--  1 verde exlibris    467125 Jun  8 18:06
exported_workexp_and_eprod_08-06-2009.xml

-rw-r--r--  1 verde exlibris  51848939 Jun  8 18:06
exported_workexp_and_eprod_09-06-2009.xml

-rw-r--r--  1 verde exlibris  47744283 Jun  8 18:06
exported_workexp_and_eprod_10-06-2009.xml

-rw-r--r--  1 verde exlibris  40491206 Jun  8 18:07
exported_workexp_and_eprod_11-06-2009.xml

-rw-r--r--  1 verde exlibris  47445286 Jun  8 18:07
exported_workexp_and_eprod_12-06-2009.xml

-rw-r--r--  1 verde exlibris  38417926 Jun  8 18:07
exported_workexp_and_eprod_13-06-2009.xml

-rw-r--r--  1 verde exlibris    387224 Jun  8 18:07
exported_workexp_and_eprod_14-06-2009.xml
```

2 To apply only the first 7 files, add an extension to the names of files 7-14 (for example, .phase2), so that the wizard will not recognize these files as potential input files for the upcoming run:

```
>>mv exported_workexp_and_eprod_08-06-2009.xml
exported_workexp_and_eprod_08-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_09-06-2009.xml
exported_workexp_and_eprod_09-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_10-06-2009.xml
exported_workexp_and_eprod_10-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_11-06-2009.xml
exported_workexp_and_eprod_11-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_12-06-2009.xml
exported_workexp_and_eprod_12-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_13-06-2009.xml
exported_workexp_and_eprod_13-06-2009.xml.phase2

>>mv exported_workexp_and_eprod_14-06-2009.xml
exported_workexp_and_eprod_14-06-2009.xml.phase2
```

3 Run the KB wizard for June. The wizard will only recognize files 1 to 7 as a potential input and will ignore the remaining files 7-14 because they do not have the conventional filename mask (which is *exported_workexp_and_eprod_dd-mm-yyyy.xml*):

```
-rw-r--r--  1 verde exlibris  13858995 Jun  8 18:06
exported_workexp_and_eprod_01-06-2009.xml

-rw-r--r--  1 verde exlibris  77781933 Jun  8 18:06
exported_workexp_and_eprod_02-06-2009.xml

-rw-r--r--  1 verde exlibris  77993721 Jun  8 18:06
exported_workexp_and_eprod_03-06-2009.xml

-rw-r--r--  1 verde exlibris  66020568 Jun  8 18:06
exported_workexp_and_eprod_04-06-2009.xml

-rw-r--r--  1 verde exlibris  67045373 Jun  8 18:06
exported_workexp_and_eprod_05-06-2009.xml
```

```
-rw-r--r--  1 verde exlibris  52942167 Jun  8 18:06
exported_workexp_and_eprod_06-06-2009.xml

-rw-r--r--  1 verde exlibris   1515543 Jun  8 18:06
exported_workexp_and_eprod_07-06-2009.xml
```

4 After the KB update for files 1-7 finishes, verify the successful completion. To do so, either run the **ver** command on Unix or click the Verde log in the top left corner of the Verde UI. The KnowledgeBase update level should display June 7, 2009.

5 Back up the database in order to have an intermediate database point to restore to in case the next KB update portion is not completed successfully.

6 Go to $VERDE_BASE/home/data/import directory (you can use the alias **vimport**) and rename the .phase2 files back to their original names:

```
>>mv exported_workexp_and_eprod_08-06-2009.xml.phase2
exported_workexp_and_eprod_08-06-2009.xml

>>mv exported_workexp_and_eprod_09-06-2009.xml.phase2
exported_workexp_and_eprod_09-06-2009.xml

>>mv exported_workexp_and_eprod_10-06-2009.xml.phase2
exported_workexp_and_eprod_10-06-2009.xml

>>mv exported_workexp_and_eprod_11-06-2009.xml.phase2
exported_workexp_and_eprod_11-06-2009.xml

>>mv exported_workexp_and_eprod_12-06-2009.xml.phase2
exported_workexp_and_eprod_12-06-2009.xml

>>mv exported_workexp_and_eprod_13-06-2009.xml.phase2
exported_workexp_and_eprod_13-06-2009.xml

>>mv exported_workexp_and_eprod_14-06-2009.xml.phase2
exported_workexp_and_eprod_14-06-2009.xml
```

7 Run the KB update wizard for June again. Now the wizard will recognize the files 8 to 14 as potential input files for KB update.

8 Verify that the second portion of the June KB update has been applied successfully. To do so, either run the **ver** command on Unix or click the Verde log in the top left corner of the Verde UI. The KnowledgeBase update level should display June 14, 2009.

Note: If the current LKB update includes a cleanup file, the file must be a part of the first update portion and should not be moved.

3

KB Update Monitoring

Monitoring the KnowledgeBase Update Procedure Log

You can monitor the KnowlegeBase update log from the wizard (see step 8 of the wizard for a detailed description), or view it directly from:
`$VERDE_BASE/home/system/log/LKBUpdate.log`

You can also check the progress of the report file creation under `$VERDE_BASE /home/data/reports/import_<date>`.

Determining Whether the KnowledgeBase Update Is Complete

You will receive an e-mail (if your address was entered properly before starting the process). The e-mail indicates whether the process ended successfully, or aborted due to an error. If an error occurs, please notify your Ex Libris representative.

You will see the following message in the `LKBUpdate.log`: **LKB Update process has finished.**

The `$VERDE_BASE/home/data/reports/import_<date> summary.txt` file is created with the statistical results of the load.

Ensuring That All Instances Were Updated Properly

Verify that the database was updated using the following command:

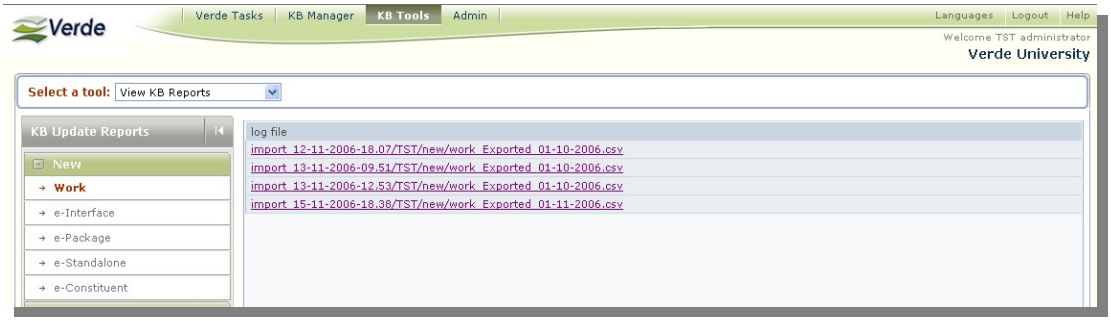
```
ver
```

The system displays the level of the database update. For example:

```
LINUX, il-verde02.corp.exlibrisgroup.com, Verde 2 revision 00 copy 4 15-Mar-2007
Oracle 920
Service Pack: 278
KnowledgeBase update level: November 1, 2007 (update started on: January 23, 2007)
```

Checking the KnowledgeBase Update Results

Review the reports in the **KB Tools** module, **View KB Reports**.



Test the load results online by searching for updated, new, and deleted e-products.

Cleanup Monitoring

If the LKB update includes cleanup, a special fix that transfers local data from e-constituents that should be deleted to their corresponding e-constituents in the LKB is started before the LKB update process is launched. When this fix begins running, the following lines appear in the `LKBUpdate.log` file:

```
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: Pre execution of SaveData4KBCleanup has started.
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: For more details please see specific log: saveDataForKBCleanup.log
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: Changes report will be created in the directory of LKB Update reports
2009-06-21 12:05:03,608 INFO  [com.exlibris.verde.loader.ImportWorkExpressionAndEProduct] [PreExecution
 - HANDLE LOCAL DATA]: After completion LKB Update process will continue...
```

saveDataForKBCleanup.log

The `saveDataForKBCleanup.log` is created in the `vclog` directory (under `$VERDE_BASE/home/system/log/`).

```
2009-06-21 12:05:03,656 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Start running on Sun Jun 2
1 12:05:03 IDT 2009
2009-06-21 12:05:03,663 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Run in update mode...
2009-06-21 12:05:03,698 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Created new reports folder
 /exlibris/verde/v2_3/verde/home/data/reports//cleanup_21-06-2009-12.05
2009-06-21 12:05:03,699 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Loading input file ...
2009-06-21 12:05:03,715 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Input file loaded successf
ully with 1336 valid entries and 0 invalid entries
2009-06-21 12:05:03,715 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Run for all instances
```

In this log file, you can find information about every pair of e-constituents. You can determine whether local data exists for an e-constituent and view the data transfer status for each e-constituent.

At the end of the log file, you can view the statistics:

```
2009-06-21 12:07:29,095 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] ~~~~~~~~~ Statistics for TST~~~
~~~~~~
2009-06-21 12:07:29,095 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Input       : 1335
2009-06-21 12:07:29,095 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Passed      : 1245
2009-06-21 12:07:29,095 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Failed      : 90
2009-06-21 12:07:41,056 INFO  [com.exlibris.verde.loader.SaveData4KBCleanup] Complete running at Sun Jun 21
12:07:41 IDT 2009
```

Example 1: No Data Exists for a Deleted e-Product

```
TST ( 59691 ): Title NO VALUE --> Title NO VALUE / SFX id 111005242983205 -
-> SFX id 111004366338246
TST: No e-product's fields copied
TST: No attributes in the deleted e-product
```

Example 2: Local Data Exists for a Deleted e-Product and Is Successfully Transferred

```
     TST ( 57922 ): Title NO VALUE --> Title NO VALUE / SFX id
111090512822689 --> SFX id 111090862599140

     TST: ******* Local data *******
     TST: e-Product status --- Value copied: IMPL_1
     TST: Activation from date --- Value copied: 04/11/2008
     TST: Activation to date --- Value copied: 30/11/2008
     TST: Selection status --- Value copied: APPROVED
     TST: Private note --- Value copied: Internal note:
    TST: Public note --- Value copied: Public note:
    TST: Sponsoring Library --- Value copied: TST
    TST: Main contact --- Value copied: ORGC_1226911166809_1
    TST: Concurrent number of users --- Value copied: 12
    TST: Holdings in ILS --- Value copied: 68684
    TST: Holdings note --- Value copied: Holdings note:

    TST: ******* Attributes *******
    TST: Acquisition --- 1 records copied
    TST: License --- 1 records copied
    TST: Access --- 4 records copied
    TST: Admin --- 1 records copied
    TST: Cost --- 1 records copied
    TST: Usage --- 1 records copied
```

```
    TST: Incident --- 1 records copied
    TST: Breach --- 1 records copied
    TST: Libraries --- 1 records copied
    TST: Local Coverage --- 2 records copied
TST: Local Embargo --- 1 records copied
```

Example 3: Local Data Exists for Both Deleted and Target e-Constituents and Data Transfer Is Rejected for Part of the Local Data Because This Data Exists in the Target e-Product

```
      TST ( 54878 ): Title NO VALUE --> Title The Official Patient's
Sourcebook on Blastocystosis /
 SFX id 111056490989885 --> SFX id 111056491053841
      TST: No e-product's fields copied

       TST: ******* Attributes *******
       TST: Acquisition --- Attributes was not copied due to existing
attributes in the target e-product
       TST: License --- Attributes was not copied due to existing
attributes in the target e-product
       TST: Access --- Attributes was not copied due to existing attributes
in the target e-product
       TST: Admin --- Attributes was not copied due to existing attributes
in the target e-product
       TST: Cost --- Attributes was not copied due to existing attributes
in the target e-product
       TST: Usage --- Attributes was not copied due to existing attributes
in the target e-product
       TST: Incident --- 1 records copied
       TST: Breach --- Attributes was not copied due to existing attributes
in the target e-product
```

Output Files

Output files of the data transfer process can be found under `$VERDE_BASE/home/data/reports`, in the directory named `cleanup_dd-mm-yyyy-min.sec`. One report is created for each instance in your environment.

The report contains the following information about all pairs in which the deleted e-constituent contains local data:

- Basic information about deleted and target e-constituents:
  - Deleted title – the title of the deleted e-constituent
  - Deleted SFX ID – the SFX ID of the deleted e-constituent
  - Deleted code – the e-product code of the deleted e-constituent
  - Target title – the title of e-constituent to which local data from the deleted e-constituent should be transferred

    - Target SFX ID – the SFX ID of the e-constituent to which local data from the deleted e-constituent should be transferred
    - Target code – the e-product code of the e-constituent to which local data should be transferred
- Copied e-product fields – If the value is not copied, **No change** appears in the output file. For a list of e-product fields, see page 8.
- Transferred attributes – the number of records, if attributes were transferred. If no attributes were transferred, **No change** appears in the output file. For a list of attributes, see page 9.

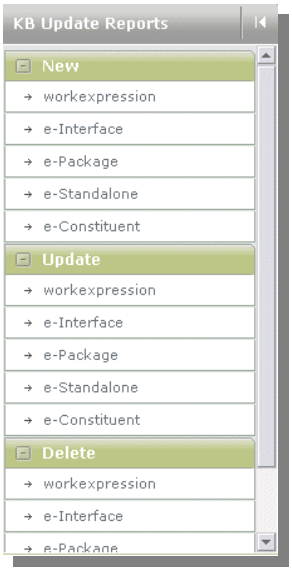
4

Verde KnowledgeBase Update Reports

Each instance has its own set of reports. Fifteen (15) different reports can be generated per instance and per update, and can be found in the **KB Tools** module, under **View KB Reports**.

There are reports of new, updated, and deleted work records, e-interfaces, e-packages, e-standalones, and e-constituents. Reports can be downloaded and viewed through the KB Tools interface by selecting the option **View KB Reports**.

The KnowledgeBase update reports have a standard structure. Not all columns are relevant for all e-product types. This document lists the columns relevant for each e-product type only.



Working with the New Work Records and e-Product Reports

New Work Records

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Title	Title	Empty
SFX ID	SFX ID	SFX ID
Identifier	Identifier	Empty
Categories	Categories	Empty
Work Expression Code	Work expression code	Work expression code

Recommended Action: None

New Interfaces

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
e-Product Type	e-Interface	e-Interface
e-Product Title	e-Product title	Empty
e-Product Code	e-Product code	e-Product code
Update Target	SFX	Empty

Recommended Action: Review

New Packages

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
e-Product Type	e-Package	e-Package
e-Product Title	e-Product title	Empty
Up Code	e-product code of the e-interface	e-product code of the e-interface
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
Package Type	Package type	Package type
Update Target	SFX	SFX

Recommended Action: Review, as you may be interested in the new materials. You may also need to know about a new platform/package/target for titles to which you already subscribe.

New Standalones

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
e-Product Type	e-Standalone	e-Standalone
e-Product Title	e-Product title	Empty
Up Code	e-product code of the e-interface	e-product code of the e-interface
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
JKEY	JKEY	JKEY
Update Target	SFX	SFX
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage

Column	Full Mode – Value	Fast Mode – Value
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review, as you may be interested in the new materials.

New e-Constituents

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
e-Product Type	e-Constituent	e-Constituent
e-Product Title	e-Product title	Empty
Up Code	e-product code of the e-package	e-product code of the e-package
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
e-Product Status	e-Product status	Empty
Package e-Product Status	Package e-product status	Package e-product status
Activation From	Activation from	Empty
JKEY	JKEY	JKEY
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review in the following way:

- New e-constituents added to active **selective complete** or **aggregator** packages – The KB update activates new e-constituents added to active selective complete or aggregator packages. The constituents inherit the e-product status from the package (see the e-Product

Status column), and their **Activation date** is equal to the date on which the KB update process ran.

Obtain the list of the new e-constituents added to the active selective complete or aggregator packages by sorting the Excel report according to **e-Product status**. The new constituents can be identified by an existing status in the **Package e-product status**.

- New e-constituents added to active **selective partial** packages – Obtain the list of the new e-constituents added to the active selective partial packages by sorting the Excel report according to **Package e-product status** (descending).

  The new e-constituents added to active **selective partial** packages can be identified in the following way:

  - The package e-product status is not blank.
  - The e-product status is blank.

  New e-constituents added to selective partial packages are inactive. Their **e-Product status** and **Activation date** fields will be blank.

- Review the rest of the new titles. You may be interested in the new e-products.

  Suggested workflow: Sort the Excel document by package. To do so, sort by the **Up code** (e-product code of the package). See what new e-constituents the packages have.

Working with the Updated Work Records and e-Product Reports

Verde handles e-product updates differently from SFX. In Verde, there is a clear distinction between global and local information. The Verde KB update impacts globally managed work record and e-product fields only. Thus, all global records will always be updated.

Updated Work Records

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Action	Before update/After update	After update
Title	Title	Empty
SFX ID	SFX ID	SFX ID
Identifier	Identifier	Empty

Column	Full Mode – Value	Fast Mode – Value
Categories	Categories	Empty
Work Expression Code	Work expression code	Work expression code

Recommended Action: None

Updated Interfaces

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Position	Before update/After update	After update
e-Product Type	e-Interface	e-Interface
e-Product Title	e-Product title	Empty
e-Product Code	e-Product code	e-Product code
Update Target	SFX	SFX

Recommended Action: Review, as you may be interested in the changes.

Updated Packages

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Position	Before update/After update	After update
e-Product Type	e-Package	e-Package
e-Product Title	e-Product title	Empty
Up Code	e-Product code of the e-interface	e-Product code of the e-interface
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
Package Type	Package type	Package type
Update Target	SFX	SFX

Recommended Action: Review, as you may be interested in the changes.

Updated Standalones

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Position	Before update/After update	After update
e-Product Type	e-Standalone	e-Standalone
e-Product Title	e-Product title	Empty
Up Code	e-Product code of the e-interface	e-Product code of the e-interface
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
JKEY	JKEY	JKEY
Update Target	SFX	SFX
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review

Updated e-Constituents

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Position	Before update/After update	After update
e-Product Type	e-Constituent	e-Constituent
e-Product Title	e-Product title	Empty

Column	Full Mode – Value	Fast Mode – Value
Package Title	Package title	Package title
Up Code	e-Product code of the e-package	e-Product code of the e-package
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
Selection Status	Selection status	Selection status
e-Product Status	e-Product status	Empty
Package e-Product Status	Package e-product status	Empty
Package Type	Package type	Package type
Activation From	Activation from date	Empty
Free	Free	Free
JKEY	JKEY	JKEY
Update Target	Update target	Update target
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review and watch for changes in coverage.

Suggested workflow: Sort by package (Up code). In this way, you can view coverage changes within specific packages.

Working with the Deleted Work Records and e-Product Reports

Deleted Work Records

The KnowledgeBase update does not delete work records.

Deleted Interfaces

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Action	Delete/Remove	Delete/Remove
e-Product Type	e-Interface	e-Interface
e-Product Title	e-Product title	Empty
e-Product Code	e-Product code	e-Product code
Update Target	SFX	SFX

Recommended Action: Review and pay special attention to the interfaces that appear with the action **Remove** in the first column. These interfaces were either active (see the e-Product Status column) or localized. Localized interfaces are not deleted by the KB update process. They get the selection status **Withdrawn by Publisher** and an expiration date that equals the KB update date. Thus, the interface will be inactive and a deactivation message will be sent to SFX.

Deleted Packages

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Action	Delete/Remove	Delete/Remove
e-Product Type	e-Package	e-Package
e-Product Title	e-Product title	Empty
Up Code	e-Product code of the e-interface	e-Product code of the e-interface
SFX ID	SFX ID	SFX ID

Column	Full Mode – Value	Fast Mode – Value
e-Product Code	e-Product code	e-Product code
Package Type	Package type	Package type
Update Target	SFX	SFX

Recommended Action: Review and pay special attention to the packages that appear with the action **Remove** in the first column. These packages were either active (see the e-Product Status column) or localized. Localized packages are not deleted by the KB update process. They get the selection status **Withdrawn by Publisher** and an expiration date that equals the KB update date. Thus, the package will be inactive and a deactivation message will be sent to SFX.

Deleted Standalones

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Action	Delete/Remove	Delete/Remove
e-Product Type	e-Standalone	e-Standalone
e-Product Title	e-Product title	Empty
Up Code	e-Product code of the e-interface	e-Product code of the e-interface
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
JKEY	JKEY	JKEY
Update Target	SFX	SFX
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review and pay special attention to the e-standalones that appear with the action **Remove** in the first column. These e-standalones were either active (see the e-Product Status column) or localized. Localized e-standalones are not deleted by the KB update process. They get the selection status **Withdrawn by Publisher** and an expiration date that equals the KB update date. Thus, the standalones will be inactive and a deactivation message will be sent to SFX.

Deleted e-Constituents

The following columns are included in this report:

Column	Full Mode – Value	Fast Mode – Value
Action	Delete/Remove	Delete/Remove
e-Product Type	e-Constituent	e-Constituent
e-Product Title	e-Product title	Empty
Up Code	e-Product code of the e-package	e-Product code of the e-package
SFX ID	SFX ID	SFX ID
e-Product Code	e-Product code	e-Product code
e-Product Status	e-Product status	Empty
Package e-Product Status	Package e-product status	Empty
Activation From	Activation from date	Empty
JKEY	JKEY	JKEY
From Year/month/day/volume/issue	Global coverage	Global coverage
To Year/month/day/volume/issue	Global coverage	Global coverage
Embargo	Embargo global number of months / Embargo global operator	Embargo global number of months / Embargo global operator

Recommended Action: Review and pay special attention to the e-constituents that appear with the action **Remove** in the first column. These are either active (see the e-Product Status column) or localized e-constituents belonging to the selective packages. Localized e-constituents belonging to the selective packages are not deleted by the KB update process. They get the

selection status **Withdrawn by Publisher** and an expiration date that equals the KB update date. Thus, the e-constituents will be inactive and a deactivation message will be sent to SFX.

Suggested workflow: Sort the spreadsheet by package. To do so, sort by the Up code (e-product code of the package), and sub-sort by the action in descending order. See which e-constituents were **Withdrawn by Publisher** from your active selective packages.

Note that localized or active e-constituents belonging to the aggregator packages are deleted by the KB update process.

5

Reflecting Post-KB Update Actions in Verde in the SFX KB

All manual data adjustments (activation, deactivation, local coverage, and embargo changes) performed as a result of reviewing Verde KB update reports are reflected in the SFX KnowledgeBase.

We recommend reviewing the SFX reports with an emphasis on the e-products that were not automatically changed or deleted. Verde has no information about PARSER, PARSE_PARAM, and some other changes performed in SFX. In order to bring the latest updates to these types of data, SFX KB update reports must be consulted.

Appendix

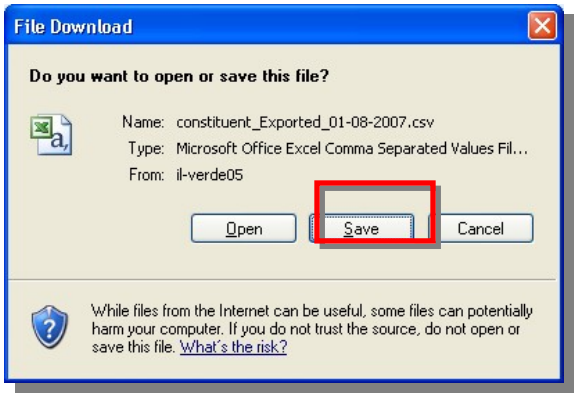
How to Best Format Reports

Unfortunately, due to known limitations in Excel, the **SFX ID** field in the KB update reports is corrupted when the files are opened directly in Excel from the Verde UI. (http://support.microsoft.com/kb/q78113/)

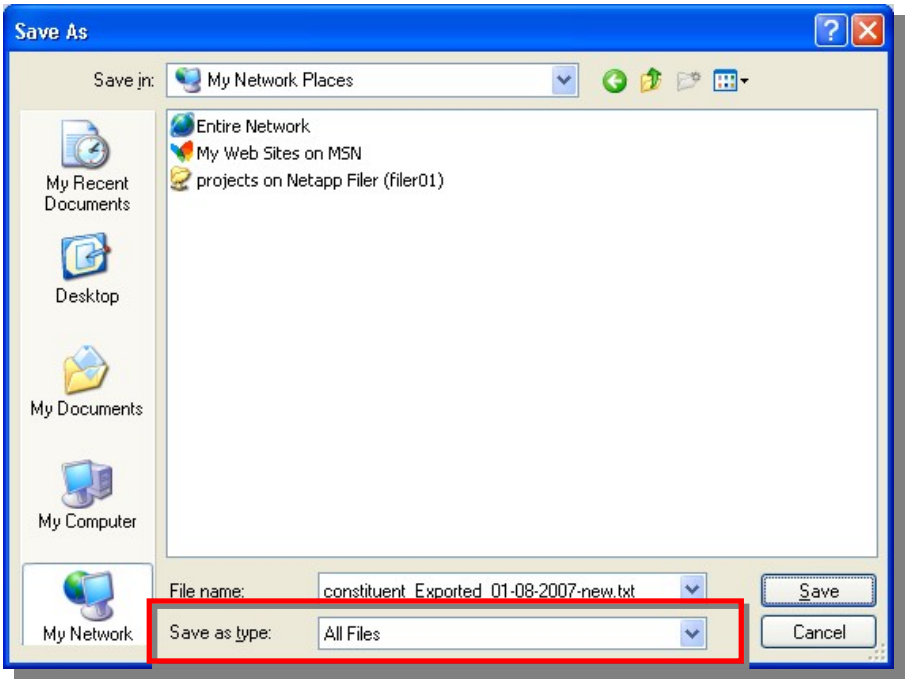
Any number larger than 15 digits must be formatted as text in order to display properly in Excel. When Excel has read the data into a number-formatted column, it is too late to reformat the column and maintain all of the data. Reformatting should be done when the file is opened using the **Text Import Wizard**. The recommended instructions in this appendix will guide you through the necessary steps to achieve this.

Step 1 - Save the Report as a Text File

1 Click the link to the desired KB update report.



2 Click **Save**.



3 In the Save As window that opens, set the name and folder for the desired file. The file should be saved as a `.txt` file.

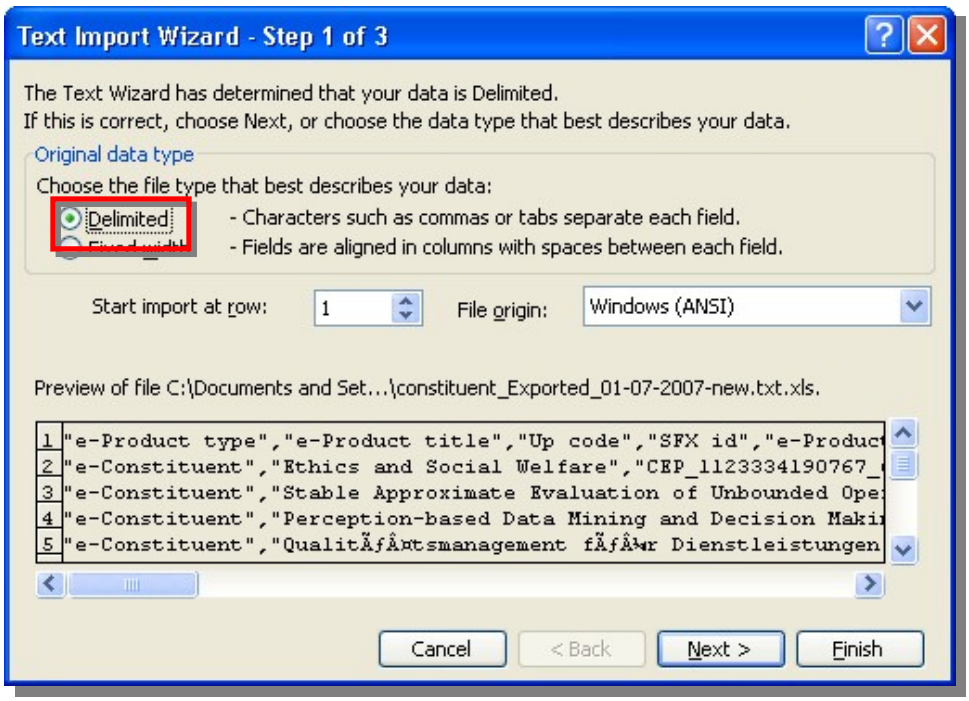
4 Set **Save as Type** to **All Files**. We recommend adding the suffix `-new` / `-updated` / `-deleted` to the saved file name in order to easily distinguish between the three different report types.

Step 2 - Open the Saved File Using Excel

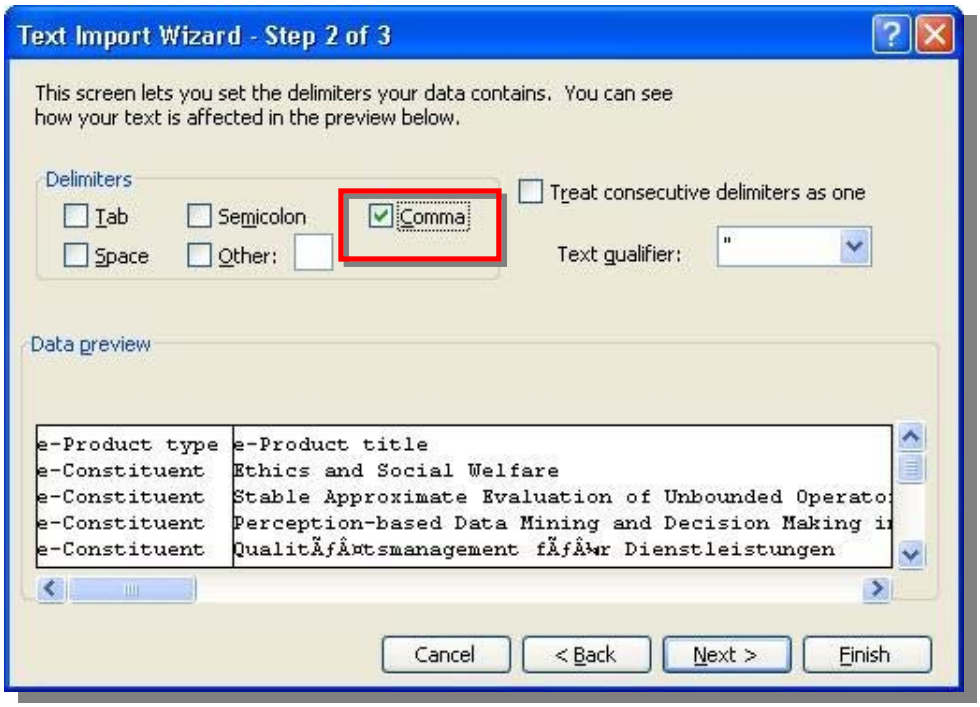
1 Open Excel, then select **File > Open.**

2 Set **Files of Type** to **All Files** and select the report you saved in the previous step.

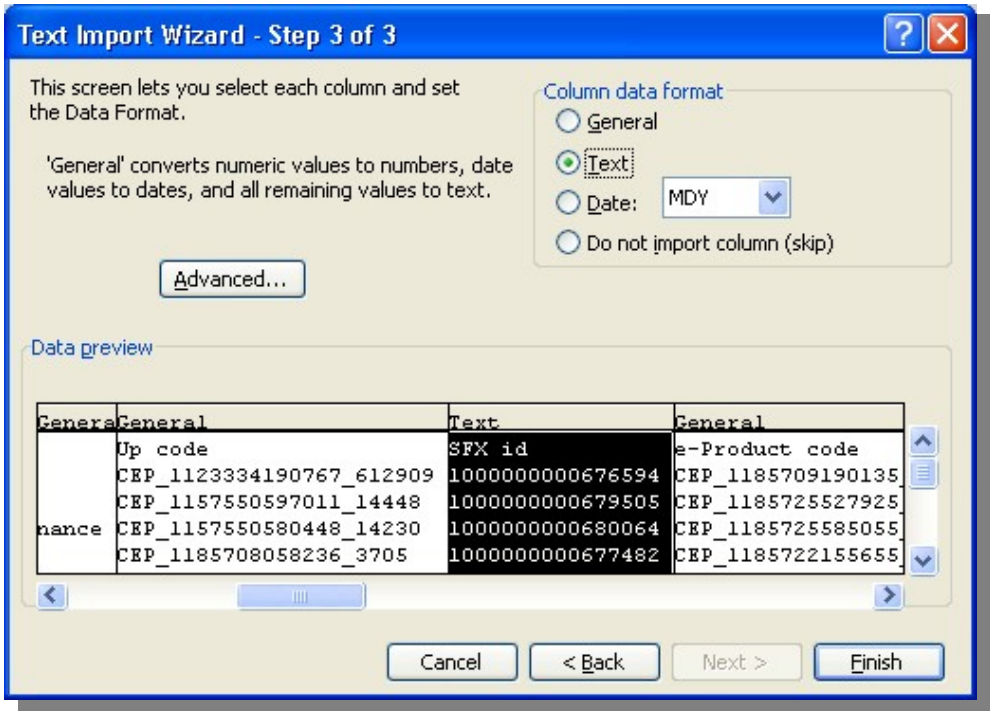
3 The Text Import Wizard opens. Select **Delimited** as the file type and click **Next**.



4 In step 2 of the wizard, select **Comma** as the delimiter type and click **Next**.



5 In step 3 of the wizard, find the **SFX id** column, select it, and specify that its format is text. Then click **Finish**.



The SFX IDs now display properly.

	A	B	C	D	E
1	e-Product	e-Product title	Up code	SFX id	e-Product code
2	e-Constitu	Ethics and Social Welfare	CEP_1123334190767_612909	1000000000676594	CEP_1185709190135_3905
3	e-Constitu	Stable Approximate Evaluation of Unbounded Operators	CEP_1157550597011_14448	1000000000679505	CEP_1185725527925_8350
4	e-Constitu	Perception-based Data Mining and Decision Making in Economics and Finance	CEP_1157550580448_14230	1000000000680064	CEP_1185725585055_8909
5	e-Constitu	QualitÃƒÂ¤tsmanagement fÃƒÂ¼r Dienstleistungen	CEP_1185708058236_3705	1000000000677482	CEP_1185722155655_5275
6	e-Constitu	IET Computers and Digital Techniques	CEP_1137339366820_24	1000000000676502	CEP_1185722968549_6018
7	e-Constitu	Retinal Physician	CEP_1185707087802_3689	1000000000676374	CEP_1185725148713_6145
8	e-Constitu	The Fortnightly law journal	CEP_1123334181672_612345	1000000000672840	CEP_1185719516508_4601