Upgrade Express 21.01 to 22.01 User Guide

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1. Introduction

The Aleph integrated library system is constantly under development in order to accommodate ongoing changes in automated library market requirements, respond to Aleph customers' development requests, and adopt and integrate new hardware and software technologies. Ex Libris releases a new version of Aleph annually that includes new features and enhancements to existing features and is compliant with new hardware and software technologies.

The Aleph upgrade process is the process of replacing a version of Aleph with a newer version. The main objective of the Upgrade Express is to perform the upgrade of Aleph versions quickly and efficiently so that the cutover phase will take less than 36 hours (a weekend). It is important to note that during this period, the library's OPAC can function in read-only mode. In other words, activities such as hold requests, photocopy requests, and so on are disabled.

The methodology of Upgrade Express is simple. A copy of the 21.01 **utree** and database is added to the new version, Aleph 22.01. This creates an Aleph 22.01 software environment with 21.01 configuration and data.

It is also possible to upgrade from lower versions, such as v.16 to v.22, without installing v.16, v.17, v.18, v.19 , v.20 and v.21. In this case, a copy of the 16.01 **utree** and database is added to the new version, Aleph 21.01. Minor changes need to be made to allow logging on. After these changes, the upgrade process is executed five times (v.16 to v.17, v.17 to v.18, v.18 to v.19, v.19 to v.20, v.20 to v21 and v21 to v22). It transforms the configuration and data into the Aleph 22.01 format. Such a big jump is only possible if you are not using the Aleph ILL module. If you are using the Aleph ILL module, you need to install and work with v.18 in order to migrate the old ILL data and to setup the new ILL.

Note that when upgrading from a version lower than 22, all the documentation of the previous versions of the Upgrade Express (such as 18 to 19, 19 to 20 and 20 to 21) must be reviewed. One of the main issues to consider is the upgrade of the Oracle version.

This process can be performed several times for testing before the final cutover. We highly recommend performing at least one test.

Although much of the upgrade is performed automatically, some configuration has to be performed manually, for example, the implementation of changes to Web files. Some of these changes may take longer than 36 hours. For this reason, there is a mechanism to store these changes during the test phase and restore them instantly during the cutover phase.

This document explains, step-by-step, how to perform the upgrade from Aleph 21.01 to Aleph 22.01 using Upgrade Express.

2. Upgrade Conventions and Requirements

Conventions

The Upgrade Express documentation refers to the "source" and "target" versions or environments.

The **source version** is the current Aleph version environment that the customer would like to upgrade. In this document, the source version refers to Aleph 21.01.

The **target version** is the new production Aleph version environment that is the target of the upgrade process. In this document, the target version refers to Aleph 22.01

Prerequisites

Installing the Target Version (22.01)

The first step in the actual upgrade process is the preparation of the target environment. The hardware and operating system requirements for version 22.01 and the size of the customer's database must be taken into account. The installation is scheduled with the local Ex Libris representative. You may be required to complete the *Request for Installation* form.

Note: In order to estimate the size of exported data, you can use the "expdp" utility with the "ESTIMATE_ONLY=y" flag, as follows:

```
expdp $ALEPH_ADMIN ESTIMATE_ONLY=y full=y
```

The result is in the following format:

```
Total estimation using BLOCKS method: 4.403 GB

Job "ALEPH_ADMIN"."SYS_EXPORT_FULL_01" successfully completed at
16:50:41
```

Downloading the Upgrade Express Package

The Upgrade Express Package should be downloaded either to the source or target environment, depending on the Upgrade Express method that you choose to use. The standard Upgrade Express method involves downloading the Upgrade Express Kit to the source environment and following the instructions in section [0](#).

Download the Upgrade Express package to the target (22.01) environment. The Upgrade Express package is available for download from the FTP server. The package is a .tar file that can be extracted anywhere, but it is recommended that you extract it to $ALEPH_MOUNT, as follows:

```
ftp ftp.exlibris.co.il

Ver22up/<password to be obtained from a local representative>

bin

get <filename>
```

For example:

```
get upgrade_express_2101_2201.tar.1.01.gz
```

To open the kit:

```
>>gzip -d <filename>
```

For example:

```
gzip -d upgrade_express_2101_2201.tar.1.01.gz
>>tar -xf <filename>
```

3. Using the Upgrade Express Kit

The following is a detailed description of the steps that can be performed using the Upgrade Express Kit. If you are running two upgrade packages (such as when upgrading from 20 to 22), it is recommended that you run the standard final actions (such as UTIL I/6 and others described under the Packaging and Final Steps section) only after running the last upgrade.

To access the Upgrade Express menu, `upgrade_express_2101_2201` directory by typing the following:

```
cd $ALEPH_MOUNT/upgrade_express_2101_2201
```

Open the Upgrade Express menu by entering the following command:

```
source ./upgrade_util.
```

The Upgrade Express utility identifies your current Aleph version. When running the Upgrade Express from the source version, the following menu is displayed:

```
+-----------------------------------------------------------+
| Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Source |
+-----------------------------------------------------------+

   0. Exit
-- 1. Define upgrade parameters
-- 2. Export customer data
-- 3. Transfer customer data to the target location
   4. View logfiles
```

If the Upgrade Express utility identifies your current Aleph version as the Target (such as in option 2 described in section 2 Upgrade Conventions and Requirements) the following menu is displayed:

```
 +-----------------------------------------------------------+
 | Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Target |
 +-----------------------------------------------------------+

    0. Exit
    1. View/Update upgrade parameters
    2. Check environment
    3. Run upgrade express
    4. Perform Post Upgrade Express Actions
    5. View logfiles

    6. Backup/Restore Oracle Tables to be Upgraded
    7. Store/Restore configuration files
    9. Transfer data / configuration files between servers

```

1. Define upgrade parameters

Define your upgrade parameters using the first option displayed above. In this step, you define the libraries that are upgraded and the e-mail address to which you want to send the results of the export, import, and Upgrade Express utility. Note that defining or updating the parameters without using the utility may cause problems when running the Upgrade Express. The proper way to define or update the upgrade parameters is by using the utility.

Note:
Although the illsv is defined as a demo library it is used by ILL customers and it is upgraded. Therefore if your library uses illsv you must include it in the definitions so it can be exported.

After performing each step, the (--) symbols change to (++) symbols.

2. Pack library data and configuration tables

```
+----------------------------------------------------------+
| Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Source |
+----------------------------------------------------------+

   0. Exit
-- 1. Define upgrade parameters
-- 2. Export customer data
-- 3. Transfer customer data to the target location
   4. View logfiles
```

Choose one of the following options to export the data and u-tree.

```
+----------------------------------------------------+
| Export of Oracle data and u-tree from source machine. |
+----------------------------------------------------+
   0. Exit
   1. Export Oracle data
   2. Pack the u-tree
   3. Export Oracle data & pack the u-tree in one step
```

Each of the options suits a different workflow according to which the library can decide to work (depending on the available servers and the amount of data). Before packing the u-tree, reduce the size of the scratch and print directories as much as possible.

There is an option to exclude tables Z97 and Z98 (since their export/import takes a lot of time). If you want to exclude them, run manage_01 after performing the upgrade. The data is downloaded into the `data/ directory` of the Upgrade Express.

The data pump option enables you to extract and upload the data faster.

```
Make  sure  you  have  cleaned  the  u-tree  as  much  as  possible:
scratch, print, files directories as well as Apache logs.

Oracle  Data  Pump  extracts  and  uploads  the  data  faster  the  regular
exp/imp
 Note: It works only on Oracle 10 and up.
 Before running it for the first time, do the following:
   s+ ALEPH_ADMIN
   grant JAVA_ADMIN to aleph_admin WITH ADMIN OPTION;
```

You may also choose to pack the library data and configuration tables manually. In this case make sure that Aleph is down on the target version (run $alephe_root/aleph_shutdown). Copy the complete utree from the source (21.01) to the target (22.01) using the tar command (in order to copy the symbolic links correctly).

Note that the utree delivered with the target installation (22.01) by Ex Libris must be backed up. Some steps in the upgrade process make use of files in this tree.

It is recommended that you clean the copied utree as much as possible. Remove all unnecessary files from all directories (such as scratch, files, print, and so on).

The following are example of the commands that can be used:
```
cd /exlibris/aleph/
Backup u21_1 tree: mv u22_1/ u22_1.orig/
Tar u21_1 tree: tar -cf u21_1.tar u21_1/
Move u21_1 to u22_1: mv u21_1/ u22_1/
Restore u21_1 tree: tar -xvf u21_1.tar
```

3. Transfer data and perform manual changes

```
+----------------------------------------------------------+
| Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Source |
+----------------------------------------------------------+

   0. Exit
-- 1. Define upgrade parameters
-- 2. Export customer data
-- 3. Transfer customer data to the target location
   4. View logfiles
```

If you are performing this step from the target server/slot the following screen is displayed:

```
 +------------------------------------------------------------+
 | Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Target |
 +------------------------------------------------------------+

    0. Exit
    1. View/Update upgrade parameters
    2. Check environment
    3. Run upgrade express
    4. Perform Post Upgrade Express Actions
    5. View logfiles

    6. Backup/Restore Oracle Tables to be Upgraded
    7. Store/Restore configuration files
    9. Transfer data / configuration files between servers
```

Note that option 9 is used in cases where you want to move data/configuration from between 2 servers which are in the same version.

This utility also updates `tab_version`, `license` and `license.www_x` files, and restores `aleph_startup` and `aleph_shutdown` files supplied with the version.

Manually synchronize the new `/alephe/aleph_start` file with the `aleph_start` file supplied with the target installation under the **utree** supplied with the version. It is recommended to merge the files by taking the file supplied with the installation and adding local specifications into the new file.

When the data is uploaded from the target version, the u-tree is unpacked and the following changes are automatically performed:
Apache is restored from alephe.orig. (for detailed explanation regarding this function, see Appendix A – Copying Apache.

- The links under apache/htdocs are rebuilt (using the create_htdocs_links routine)
- License files and tab_system_statuse are restored from alephe.orig/tab.
- The aleph_startup and aleph_shutdown are restored from alephe.orig.
- The alephe/tab/tab_version is updated with the new version number.

All the steps above are performed automatically when using the Upgrade Express utility. For more information, see Appendix A – Copying Apache.

Shutdown Aleph on the target Aleph 22. Install Upgrade Express kit on the target. (There is no need to configure the kit). Transfer the data from the source to the target location (v.22) using Upgrade Express Util/3 on the source server (the third option in the first screen above) and review the log files (Upgrade Express Util/4, the fourth option in the first screen above):

```
Transfer customer data
========================

Do you want to continue Y/N: Y
Enter transfer method to sftp/ftp:

Enter target server I.P./hostname: demo-server

Enter root directory on demo-server
    [/exlibris/aleph/upgrade_express_2101_2201]:

Enter user name on demo-server [aleph]:

sftp'ng aleph@ demo-server
Enter to continue
Connecting to demo-server...
aleph@ demo-server 's password:
sftp>      sftp>      sftp>      Remote      working      directory:
/exlibris/aleph/upgrade_express_2101_2201/data
```

Note that when both versions are on the same machine, there is no need for FTP. You just log on to the server in the target version and run the Upgrade Express from the same location.

> **Note**:
> The location of exported data is under the "data" directory of the Upgrade Express kit.

4. Importing Demo Libraries

This section is only relevant for the cloned database.

> **Important Note**:
> Every installation must have one of the following sets of demo libraries: mab, uni, or usm. This demo data is used as the base library for the util g/3 (Create Initial Library Parameters) and by Ex Libris staff and your staff to reproduce problems occurring with your libraries' tables and data.

At this point, the data of the demo libraries is also in the format of the source database (21.01). To replace this data with the demo data supplied by the installation, run the following commands:

```
1. Download the aleph22 dump file from the ftp:

cd /exlibris/ftp_from_exlibris
wget "ftp://ver22:M0zart21@ftp.exlibris.co.il/dpdump/*"
cat aleph21_demo_libs.dmp.gz_* > aleph22_demo_libs.dmp.gz
gzip -d aleph22_demo_libs.dmp.gz
chmod 777 aleph22_demo_libs.dmp
rm aleph22_demo_libs.dmp.gz_??

2. Recreate Oracle schemas:

dlib usm01
ap
foreach lib ( $DEMO_LIBS )
    create_ora_user_b $lib
end

3. Define dumpdir directory:

sqlplus ALEPH_DBA/ALEPH_DBA as sysdba
create or replace directory dumpdir AS '/exlibris/ftp_from_exlibris';
GRANT READ,WRITE ON DIRECTORY dumpdir TO ALEPH_ADMIN;
exit

4. Execute the import:

set DLIBS=`echo $DEMO_LIBS | sed 's/ /,/g'`
set DD=`date +%y%m%d`
impdp $ALEPH_ADMIN schemas=$DLIBS DIRECTORY=dumpdir
DUMPFILE=aleph22_demo_libs.dmp LOGFILE=aleph22_libs.$DD.log \
>& /tmp/impdp_demo_libs.log &
```

Note that this process can take around 1-2 hours, depending on the capacity of the server.

> **Notes**
> - VIR01 is normally a DEMO library. If the Demo libraries importing is being done on a server where customer data has already been loaded and is in use, then

> Aleph (or at least the `pc_server` and www_server) should be shut down while the importing is running, in order to avoid conflicts in the use of the vir01 tables.
>
> - If your `usr_library` and/or `pw_library` in `aleph_start` is set to USR00, this process will delete your patron and/or password data. (It is our strong recommendation that the USR00 <u>not</u> be used as your `usr_library` or `pw_library`.)

5. View/Update Upgrade Parameters and Check Environment

Before performing "6. Backup/Restore Oracle Tables to be Upgraded" and "3. Run upgrade express" confirm that all of your libraries are specified so that Upgrade Express runs only on the libraries specified there. To specify the libraries, select "5. View/Update upgrade parameters".

6. Back Up the Oracle Tables

```
+-------------------------------------------------------------+
| Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Target  |
+-------------------------------------------------------------+

   0. Exit
   1. View/Update upgrade parameters
   2. Check environment
   3. Run upgrade express
   4. Perform Post Upgrade Express Actions
   5. View logfiles

   6. Backup/Restore Oracle Tables to be Upgraded
   7. Store/Restore configuration files
   9. Transfer data / configuration files between servers
```

You can back up the tables that are modified by the Upgrade Express. Although this step is optional, it is recommended.

To backup the tables:

1. Open the Upgrade Express menu as explained in the previous step.

2. Select **Backup/Restore Oracle Tables to be Upgraded**. The following choices are displayed:

- Backup

- Restore

- List all backed up tables

The **Backup** option enables you to create a backup of the tables that are modified by the upgrade. If you select this option, you are prompted to supply a directory for export and the table name of the tables to be backed up. (ALL can be used for all tables involved in the upgrade.)

If you supplied an e-mail address when defining parameters, a notification e-mail message will be sent when the export is complete.

The following Oracle tables are modified by the 21.01 – 22.01 Upgrade Express process: Z303, Z304, Z308, Z353, Z700 and Z900.

The **List all backed up tables** option enables you to view the list of tables that you have backed up.

The **Restore** option enables you to restore the backed up Oracle tables if something went wrong with the upgrade. As with the **Backup** option, you are prompted to supply the directory of the exported files to be imported and the table name of the tables to be imported. (ALL can be used for all tables involved in the upgrade.)

If you supplied an e-mail address at the parameter stage, a notification e-mail message is sent when the restoration has been completed.

7. Upgrade Express Localization

Note: For most customers this section is not relevant.

The Upgrade Express supports multi-language environments. The localization process includes the translation of the Upgrade Express to other languages other than English. This translation is usually performed by distributors and offices and does not require customer involvement.

The Upgrade Express can be translated into one or more different languages during the same upgrade. While running, each language-related step is performed for each defined language. The languages are defined during the configuration stage. Each language has a separate directory under `upgrade_express_2101_2201/conf` in which all language-related steps are configured. New languages must be added to this location by copying the original `eng` directory and translating all files within this directory.

Non-language-related configuration files (there are usually only a few of these) are located in the `upgrade_express_2101_2201/conf/general` directory.

8. Run the Upgrade Express

All previous steps can be considered prerequisites for the Upgrade Express process. To run the upgrade, open the Upgrade Express menu and select the **Run Upgrade Express** option.

```
Running the Upgrade Express
------------------------------------------

Upgrade Express runs in the background. At the end of the process you
will get an email to the address specified in the parameters.

0. Exit
1. Run all steps
2. Run a specific step
3. Run all steps >999 (Oracle data only)

Please select [0]:
```

The upgrade program runs a number of steps that include conversion of data and setup. Every step is listed in a log file that explains what action is included in the step and whether the step was successful.

The **Run Upgrade Express** option enables you to run a single step, the complete set of steps, or the Oracle data steps only. It is highly recommended that you run the complete set of steps the first time around. The option to run a single step should only be used if you find that a particular step failed and you do not want to rerun the entire process. The option to run all steps > 999 should be used to upgrade the Oracle data but not the configuration tables.

The upgrade program may take several hours to run, depending on the size of the database and server resources.

Note that while the upgrade is running, all menu options are disabled in order to avoid conflicts that may arise as a result of actions performed during this time (for example, if you change the initial parameters while the upgrade is running).

If you supplied an e-mail address during the parameter stage, a notification e-mail message will be sent as soon as the upgrade is complete.

9. Analyzing the Upgrade Express Results

As explained above, the Upgrade Express includes a number of steps and tasks. After running the upgrade, a log file for each of the steps is created in the log directory located under `upgrade_express_2101_2201`. Each task performed has been assigned a numeric identifier and the log file appears in the directory according to the following convention:

`[step_number].log (for example, 198.log)`

The log files contain a description of each task performed as well as information pertaining to the success or failure of each task.

As soon as the Upgrade Express concludes, analyze these log files in order to detect whether problems occurred. In the event of failed steps, you may need to perform certain tasks manually, or rerun steps after making certain changes.

You can view the log file by selecting **View Log Files** from the Upgrade Express menu. This option enables you to view the main log file or the log file for a single step. In addition, you can view the log files of previous upgrade runs.

```
        View Log Files
        ------------------------------------------

        0. Exit
        1. View Main Log
        2. View a Specific Step Log
        3. View Older Logs

        Please select [0]:
```

Examples:

1. A step adds a new form to the `form_eng` directory of the administrative library. While running the upgrade, the program detects that the file already exists in the

target **utree**. In this case, the step's log file states that the file was not added. The user must then decide whether to keep the original file, or manually copy the new file.

2. A step adds changes to a form in the `form_eng` directory. Based on the Upgrade Express methodology, changes to the `form_eng` files are added only if the target file is identical to the source installation's (21.01) demo file. If the files differ, the step's log file contains a message informing the user that the changes could not be made and that they should be implemented manually.

Section 6 Step Descriptions contains a detailed description of the configuration changes performed by the upgrade kit. If the the error message "The file can not be upgraded automatically. Merge manually!"is displayed, see section 6 Step Descriptions to see what change was introduced to the file in v.21.

For information on how to save modified files so that potential subsequent upgrade runs do not override these files, see section 4

4.1 Manual Changes: Store and Restore section.

Implementation Notes

In addition to failed steps, which need to be handled manually, there are a number of configuration files (mainly HTML files) that require manual upgrading. A list of the changes required to these files is included in section 0 6.2 Changes in Configuration Files.

Packaging and Final Steps

The final step of the upgrade includes a set of standard actions. These actions can be performed by selecting **Perform Post Upgrade Express Actions** from the Upgrade Express menu.

```
Perform Post Upgrade Express Actions

------------------------------------------


0. Exit

1. Remove UTF files (util-x-7)

2. Clear VIR sessions (util-x-8)

3. Repack Cataloging tables (util-m-7)

4. Create Print Templates Package for the PC Client (util-i-6)


6. Synchronize pcb files

7. Synchronize error files
```

The following actions should be performed:

- Remove the UTF files.

- Clear the VIR sessions.

- Repack the cataloging tables (UTIL M/7).

- Create a Print Templates Package for the PC Client (UTIL I/6).

- Run Util H/2 and Util H/3 to synchronize headers. (Although this step is not in the menu above, it is required).

After these steps are completed, restart the servers and run the UE processes. The system is then operational.

> **Note**: When upgrading two separate packages, restart the server and run Upgrade Express processes only after the second package upgrade. For example, if you are upgrading from 20.01 to 21.01 and then from 21.01 to 22.01, the **Post Upgrade Express Actions** should be run only after the second upgrade has been performed.

4. Guidelines for the Upgrade Methodology

4.1 Manual Changes: Store and Restore

```
+--------------------------------------------------------------+
| Upgrade Express Utility 21.01 -> 22.01 Version 1.01 Target |
+--------------------------------------------------------------

   0. Exit
   1. View/Update upgrade parameters
   2. Check environment
   3. Run upgrade express
   4. Perform Post Upgrade Express Actions
   5. View logfiles

   6. Backup/Restore Oracle Tables to be Upgraded
   7. Store/Restore configuration files
   9. Transfer data / configuration files between servers
```

All configuration files that are modified during the Upgrade Express process must be saved in a separate location; otherwise, subsequent upgrade runs override them. The Upgrade Express package has a mechanism for storing files that have been modified during the process.

```
Store/View/Restore Configuration Files

-------------------------------------


Storage directory is:
/exlibris/aleph/kit.22.01/upgrade_express_2101_2201/../upgrade_expres
s_2101_2201.store

0. Exit

1. Add files to store
```

```
2. View list of stored files
3. Create a report of differences
4. Restore files from
/exlibris/aleph/kit.22.01/upgrade_express_2101_2201/../upgrade_expres
s_2101_2201.store
```

All saved files can be restored after a subsequent run of the Upgrade Express.

4.2 Aleph 22 and Apache Tomcat 7

Aleph version 22 is working with the new Tomcat 7 (replacing JBoss version 5). The new Tomcat 7 is part of version 22 installation.
During version 22 installation, the old ng tree will be replaced in order to match the new Tomcat.
As a result, External adapters (JAR files) in old "ng" tree (if used), should be copied manually to version 22 ng tree.
If you configured your own vendor's information for the SMSProxy, copy SmsProxyConf.xml file from v.21 "ng" tree to v.22 "ng" tree. (File path is: ./ng/aleph/home/system/conf/).

4.3 Not Included in Upgrade Express

The Upgrade Express upgrades the customer's Aleph system with the aim of maintaining the current setup and functionality. Do not implement new functionality, as this will interfere with the upgrade itself. New functionality should be implemented after the switch to production with the new version. The Upgrade Express does not include automatic setup for implementing new and enhanced functionality, unless it must be implemented to maintain the current functionality. The Upgrade Express from 21.01 to 22.01 does not add new setup files or make changes in setup files unless these changes are mandatory. For instruction regarding changes in setup files that are not mandatory, refer to the Release Notes document.

4.4 Cleanup Utilities

Due to architectural changes in Aleph, and for clarity and upgrade purposes, version 17.01 `pc_b_[lng]` and `error_[lng]` directories are located in the `aleph` directory, which means that they are part of the installation of the product. However, the customer can still configure these files within the `alephe` directory, as in previous versions of Aleph. To avoid duplication and errors, you should clean up these files in `alephe`. The Upgrade Express includes two utilities that can help you clean up the `pc_b_[lng]` and `error_[lng]` directories.

pc_b_[lng] File Cleanup Utility

This utility is available from the main menu of the Upgrade Express:

6. Organize pcb files

It compares the `./aleph/pc_b_[lng]` directory to the customer's `./alephe/pc_b_[lng]` directory. A report, which includes the detailed current

situation of the directory and advice regarding the action that should be taken, is provided.

For example, the following may be provided:

- Similar files in the two compared directories can be deleted from `./alephe/pc_b_[lng]`.

- Files with differences may be customized and should remain under `alephe`.

- Files that appear only under `./alephe/pc_b_[lng]` and not under `./aleph/pc_b_[lng]` are not in use anymore by Aleph and can be deleted.

The **Delete Obsolete Files** menu option deletes all files with a file name identical to the updated file from `./alephe/pc_b_[lng]`.

error_[lng] File Cleanup Utility

This utility is available from the main menu of the Upgrade Express:

7. Organize error files

It compares the `./aleph/error_[lng]` and `./alephe/error_[lng]` directories. A report, which includes the detailed current situation of the directory and advice regarding the action that should be taken, is provided.

For example, the following may be provided

- Similar files in the two compared directories can be deleted from `./alephe/error_[lng]`.

- If files differ in one or more error message lines, the files should be merged.

The **Delete Similar Files** menu option deletes all files that have the same name as the new file. The merge actions should be performed manually by the customer.

5. Installing the New GUI

The 22.01 GUI installation program includes the option of upgrading your current GUI. This means that setup parameters (`*.ini` files) from your older version clients are copied to the new 22.01 clients and synchronized, minimizing the need to customize the new GUI. To apply the upgrade program, install the new GUI in the same directory in which the older version GUI is installed. The old GUI version is automatically saved under the same directory (for example Acq.sav). Install the new GUI in the original or copied directory.

At the end of the installation of the 22.01 GUI, the setup program checks the previous GUI version and prompts you to confirm whether you want to run the upgrade program. The upgrade program synchronizes the 22.01 installation with special changes (for example, formats and names changes) that were done in previous versions.

6. Step Descriptions

6.1 Introduction

This includes steps 1 – 999. The changes are performed in the relevant configuration tables.

The description relates to the following libraries:

adm_libs	Administrative libraries
bib_libs	Bibliographic libraries
hol_libs	Holding libraries
union_catalog_libs	Union Catalog
crs_libs	Course reading libraries
ill_libs	ILL libraries
pw_libs	password libraries

Changes in Oracle tables relate to steps that are greater than 999. The changes are performed in the ORACLE database.

6.2 Changes in Configuration Files

```
****************************************************************
****************************************************************
Step 1 - Description:

Changed XSL / TRN in BIB libraries:

1) In catalog-index.xsl, replace the lines:
   <xsl:call-template name="display-gen">
        <xsl:with-param name="label" select="'Numbers:'"/>
        <xsl:with-param name="value" select="./numbers"/>
     </xsl:call-template>

 with the lines:
   <xsl:for-each select="./numbers">
     <xsl:call-template name="display-gen">
        <xsl:with-param name="label" select="'Numbers:'"/>
        <xsl:with-param name="value" select="."/>
     </xsl:call-template>
   </xsl:for-each>

2) In catalog-records-columnar.xsl:
2) a. After:
     <xsl:template name="section-02">
      <xsl:param name="header"/>
      <xsl:if test="$header!="">
       <xsl:call-template name="start-grid"/>
      </xsl:if>
        <xsl:variable name="v1" select="./data-1"/>
        <xsl:variable name="v2" select="./data-2"/>
        <xsl:variable name="v3" select="./data-3"/>
```

```
              <xsl:variable name="v4" select="./data-4"/>
              <xsl:variable name="v5" select="./data-5"/>
              <xsl:variable name="v6" select="./data-6"/>
          Add:
              <xsl:variable name="v7" select="./data-7"/>
              <xsl:variable name="v8" select="./data-8"/>
              <xsl:variable name="v9" select="./data-9"/>
              <xsl:variable name="v10" select="./data-10"/>
```

2) b.   Change:
```
              <xsl:if test="concat($v1, $v2, $v3, $v4, $v5, $v6) != "">
          To:
              <xsl:if test="concat($v1, $v2, $v3, $v4, $v5, $v6, $v7, $v8, $v9, $v10) != "">
```

2) c.   Change:
```
                  <xsl:call-template name="open-row-cond">
                    <xsl:with-param name="display" select="concat($v1, $v2, $v3, $v4, $v5, $v6)"/>
                    <xsl:with-param name="header" select="$header"/>
          To:
                  <xsl:call-template name="open-row-cond">
                    <xsl:with-param name="display" select="concat($v1, $v2, $v3, $v4, $v5, $v6, $v7,
$v8, $v9, $v10)"/>
                    <xsl:with-param name="header" select="$header"/>
```

2) d   After:
```
                  <xsl:call-template name="display-grid-currency">
                    <xsl:with-param name="label" select="./title-6"/>
                    <xsl:with-param name="value" select="./data-6"/>
                    <xsl:with-param name="display" select="./title-6"/>
                    <xsl:with-param name="header" select="$header"/>
                  </xsl:call-template>
          Add:
                  <xsl:call-template name="display-grid-currency">
                    <xsl:with-param name="label" select="./title-7"/>
                    <xsl:with-param name="value" select="./data-7"/>
                    <xsl:with-param name="display" select="./title-7"/>
                    <xsl:with-param name="header" select="$header"/>
                  </xsl:call-template>
                  <xsl:call-template name="display-grid-currency">
                    <xsl:with-param name="label" select="./title-8"/>
                    <xsl:with-param name="value" select="./data-8"/>
                    <xsl:with-param name="display" select="./title-8"/>
                    <xsl:with-param name="header" select="$header"/>
                  </xsl:call-template>
                  <xsl:call-template name="display-grid-currency">
                    <xsl:with-param name="label" select="./title-9"/>
                    <xsl:with-param name="value" select="./data-9"/>
                    <xsl:with-param name="display" select="./title-9"/>
                    <xsl:with-param name="header" select="$header"/>
                  </xsl:call-template>
                  <xsl:call-template name="display-grid-currency">
                    <xsl:with-param name="label" select="./title-10"/>
                    <xsl:with-param name="value" select="./data-10"/>
                    <xsl:with-param name="display" select="./title-10"/>
                    <xsl:with-param name="header" select="$header"/>
                  </xsl:call-template>
```

2) e.   Change:
```
                  <xsl:call-template name="close-row-cond">
                    <xsl:with-param name="display" select="concat($v1, $v2, $v3, $v4, $v5, $v6)"/>
```

```
                    <xsl:with-param name="header" select="$header"/>
     To:
                    <xsl:call-template name="close-row-cond">
                        <xsl:with-param  name="display"  select="concat($v1, $v2, $v3, $v4, $v5, $v6, $v7,
$v8, $v9, $v10)"/>
                    <xsl:with-param name="header" select="$header"/>
```

****
****

Step 2 - Description:

XSL and TRN files in ADM libraries:

1) The following files are new XSL files in ADM libraries:

./[adm_libs]/form_{lng}/cash-ship-invoice.xsl
./[adm_libs]/form_{lng}/updated-items-report.xsl
./[adm_libs]/form_{lng}/rejected-items-report.xsl
./[adm_libs]/form_{lng}/patron-name-convert.xsl

./[adm_libs]/form_{lng}/edi-inv-preview-report.xsl

2) The expiry dates of the local user accounts have been added to the Library Card printout "bor-card-label".
2) a. In ./[ADM library]/form_lng/bor-card-label.xsl - add lines in the header:

```
            <!--section-02 (GRID)-->
          <xsl:for-each select="//section-02">
            <xsl:call-template name="section-02"/>
           </xsl:for-each>
```

2) b. Add lines in the body:

```
          <!--SECTION-02  (GRID)-->

          <xsl:template name="section-02">
            <xsl:call-template name="display-gen">
               <xsl:with-param name="label" select="'Expiry Date:'"/>
               <xsl:with-param name="value" select="./z305-sub-library"/>
            </xsl:call-template>
          <xsl:call-template name="display-gen">
            <xsl:with-param name="label" select="' :'"/>
            <xsl:with-param name="value" select="./z305-expiry-date"/>
          </xsl:call-template>
          <xsl:call-template name="table-open"/>
          <xsl:call-template name="table-close"/>
          </xsl:template>
```

2) c. In ./[ADM library]/form_lng/global.trn - Add the line:
        z305-sub-library   SUB-LIB   S

3) In the following files change the following lines ./[ADM Library]/form_LNG/bor-sdi-00 ./[ADM Library]/form_LNG/sdi-broadcast-00
./[ADM Library]/form_LNG/sdi-expire-00
./[ADM Library]/form_LNG/sdi-no-results-00
./[ADM Library]/form_LNG/sdi-vacation-00

From:
    $00760   User ID: $00800
To:
    $00700   User ID: $00800

4) Adding overdue items and fines in patron's notice for overdue and lost billing summary letter (cir-51).

4) a. In ./[ADM library]/form_LNG/overdue-summary*.xsl files:

Before lines:
```
   <xsl:call-template name="signature"/>
</xsl:template>
```

Add following lines:
```
   <!--section-03 (FREE)-->

   <xsl:for-each select="//section-03">
     <xsl:call-template name="section-03"/>
   </xsl:for-each>
```

Before lines:
```
<xsl:template name="signature">
   <xsl:call-template name="generic-line">
     <xsl:with-param name="line" select="'####Sincerely,##Circulation Department'"/>
   </xsl:call-template>
</xsl:template>
```

Add following lines:
```
<!--SECTION-03  (FREE)-->
<xsl:template name="section-03">
   <xsl:call-template name="generic-line">
   </xsl:call-template>
   <xsl:call-template name="generic-line">
   </xsl:call-template>
   <xsl:call-template name="table-open"/>
   <xsl:call-template name="display-gen">
     <xsl:with-param name="label" select="'Balance'"/>
     <xsl:with-param name="type" select="'right'"/>
     <xsl:with-param name="value" select="./total-balance"/>
   </xsl:call-template>
   <xsl:call-template name="display-gen">
     <xsl:with-param name="label" select="'Accrued fine'"/>
     <xsl:with-param name="type" select="'right'"/>
     <xsl:with-param name="value" select="./total-fine"/>
   </xsl:call-template>
   <xsl:call-template name="table-close"/>
</xsl:template>
```

4) b. In ./[ADM library]/form_LNG/lost-material-summary.xsl:
Before lines:
```
   <xsl:call-template name="signature"/>

</xsl:template>
```

Add following lines:
```
   <!--section-04 (FREE)-->

   <xsl:for-each select="//section-04">
     <xsl:call-template name="section-04"/>
```

```
    </xsl:for-each>

Before lines:
<xsl:template name="signature">
  <xsl:call-template name="generic-line">
    <xsl:with-param name="line" select="'####Sincerely,##Circulation Department'"/>
  </xsl:call-template>
</xsl:template>

Add following lines:
<!--SECTION-04  (FREE)-->
<xsl:template name="section-04">
  <xsl:call-template name="generic-line">
  </xsl:call-template>
  <xsl:call-template name="generic-line">
  </xsl:call-template>
  <xsl:call-template name="table-open"/>
  <xsl:call-template name="display-gen">
    <xsl:with-param name="label" select="'Balance'"/>
    <xsl:with-param name="type" select="'right'"/>
    <xsl:with-param name="value" select="./total-balance"/>
  </xsl:call-template>
  <xsl:call-template name="display-gen">
    <xsl:with-param name="label" select="'Accrued fine'"/>
    <xsl:with-param name="type" select="'right'"/>
    <xsl:with-param name="value" select="./total-fine"/>
  </xsl:call-template>
  <xsl:call-template name="table-close"/>
</xsl:template>
```

****
****
Step 3 - Description:

1) In plain-funcs-misc.xsl of the ILL library:
   Change:
```
<xsl:template name="close-row">
  <xsl:param name="display"/>
  <xsl:if test="$display !=" ">
    <xsl:text disable-output-escaping="yes">&lt;/td&gt;&lt;/tr&gt;</xsl:text>
  </xsl:if>
</xsl:template>

<xsl:template name="open-row">
  <xsl:text disable-output-escaping="yes">
  </xsl:text>
</xsl:template>
```

 to:
```
<xsl:template name="close-row">
</xsl:template>

<xsl:template name="open-row">
  <xsl:call-template name="new-line"/>
</xsl:template>
```

2) The following XSL and TRN files are new files (ILL libraries):

./[ill_libs]/form_{lng}/ill-patron-letter-h.xsl
./[ill_libs]/form_{lng}/ill-patron-letter-h.trn

****
****
Step 4 - Description:

Update $alephe_tab/user_function.LNG with the following changes:

1) Add the line:
CIRC-DESK-S   L Circulation Desk Services   CIR-84   L CIR-84 Report/ Delete Lost
Loans

2) Add the line:
ITEM-UPDATE-S   L Item Updates Services   MANAGE-63   L MANAGE-63
Advanced update item records

3) Add the lines:
TASK-MANAGER   L Task Manager   DOWNLOAD   L Download files from
server
TASK-MANAGER   L Task Manager   UPLOAD   L Upload files to server

4) Add the line:
PATRON-S   L Patron Services   COM-04   L Com-04 : Convert Patron Name

5) Add the line:
EDI-S   L EDI Services   EDI-12   L EDI-12 Load EDI Invoice - Preview

****
****
Step 5 - Description:

The following lines were added to ./[All libraries]/tab/pc_tab_exp_field.lng:

!!!
UPLOAD-DOWNLOAD   L Print   PRINT
UPLOAD-DOWNLOAD   L Files   FILES
UPLOAD-DOWNLOAD   L Scratch   SCRATCH

****

****
Step 6 - Description:

The following lines were added to ./[ADM libraries]/tab/pc_tab_exp_field.lng:

!!
LOST-PROCESS-STATUS   L Missing   MI
LOST-PROCESS-STATUS   L Lost   MS

P-MANAGE-63   L Sub-library   SUBLI
P-MANAGE-63   L Material type   MATER
P-MANAGE-63   L Item status   STATU
P-MANAGE-63   L Item collection   COLLE
P-MANAGE-63   L Item call no.1   LOC1

P-MANAGE-63	L Item call no.1 type	LOC1T
P-MANAGE-63	L Item call no.2	LOC2
P-MANAGE-63	L Item call no.2 type	LOC2T
P-MANAGE-63	L Order number	ORDNO
P-MANAGE-63	L Subscription number	SUBSN
P-MANAGE-63	L Arrival date	ADATE
P-MANAGE-63	L Item process St.	PSTAT
P-MANAGE-63	L Item year (first level of chronology)	YEAR
P-MANAGE-63	L Remote Storage ID	DEPOS
P-MANAGE-63	L OPAC note	ONOTE
P-MANAGE-63	L CIRC note	CNOTE
P-MANAGE-63	L Internal note	INOTE
P-MANAGE-63	L Item statistic.	ISTAT
P-MANAGE-63	L Description	DESCR
P-MANAGE-63	L Price	PRICE
P-MANAGE-63	L Copy Number	COPYN

```
****************************************************************

****************************************************************
```
Step 7 - Description:

Add the following new files to alephe/www_f_<lng>:
1. sfx-button-data


```
****************************************************************
****************************************************************
```
Step 8 - Description:

This step is for French interface GUI.

1. If the forms opened with Ctrl+F do not have labels, do as follows:

In $data_root/pc_tab/catalog of the library, run the following command (for French files):

perl -pi -e 's/\r\n/\n/g' *.fre

2. If the tag HTML help files are displayed in plain format and French special characters are garbled, add the following line after the "<head>" line in each file ending with "_fre.html" in the directory $data_root/pc_tab/catalog/html:

<meta http-equiv="Content-type" content="text/html; charset=UTF-8">


```
****************************************************************
****************************************************************
```
Step 9 - Description:

Add the following lines to the end of the file ./[ADM Library]/tab/check_circ_override:

!*
!*check_circ_13_a
!*
0803 99 ILL item (Barcode $1) can be renewed only by authorized ILL staff (renew requires supplier's confirmation).
!*

!*check_circ_14_a
!*
0291 00 Patron has already a like item on loan.
!*
!*check_circ_14_b
!*
0292 00 Patron has already a like item on loan (based on enumeration and material type).
!*

```
****************************************************************
****************************************************************
```
Step 10 - Description:

In the file ./[adm_library]/pc_tab/catalog/quarterly_combine.mrc and/or ./[hol_library]/pc_tab/catalog/quarterly_combine.mrc, change "4" to "3" in subfield $$u as follows:

before:

853   L $$av.$$bno.$$u4$$vr$$i(year)$$j(season)$$wq$$ypm01,04,07/10

after:

853   L $$av.$$bno.$$u3$$vr$$i(year)$$j(season)$$wq$$ypm01,04,07/10

```
****************************************************************
****************************************************************
```
Step 11 - Description:

Run the following commands in every local ./[Library]/form_lng directory that contains the course-report.xsl, course-report.trn, course-summary.xsl, and course-summary.trn files:

cp course-report.xsl course-report.xsl.orig
cp course-summary.xsl course-summary.xsl.orig
cp course-report.trn course-report.trn.orig
cp course-summary.trn course-summary.trn.orig
mv course-report.xsl.orig course-summary.xsl
mv course-summary.xsl.orig course-report.xsl
mv course-report.trn.orig course-summary.trn
mv course-summary.trn.orig course-report.trn


```
****************************************************************
****************************************************************
```
Step 12 - Description:

In the file ./alephe/unicode/tab_character_conversion_line, duplicate the line that starts with "WORD-FIX" to a line that start with "HEADING-KEYWORD".

```
****************************************************************
****************************************************************
```
Step 13 - Description:

Change the following in $alephe_error_lng

1. in the check_circ file Change the lines that start with "0241", "0242", from:
0241 L Patron has $1 overdue items.
0242 L Patron has $1 recall overdues.

to :

0241 L Patron exceeded his overdue items limit ($1).
0242 L Patron exceeded his recalled overdue limit ($1).

```
****************************************************************
****************************************************************
```
Step 14 - Description:

In $alephe_root/www_server.conf, change the 'setenv www_ncip_library_(IP)' dots (.) to underscores (_) as follows:
 Before:
      setenv www_ncip_library_001.010.235.011 USM50
 After:
      setenv www_ncip_library_001_010_235_011 USM50

```
****************************************************************
****************************************************************
```
Step 15 - Description:

1) Add the following line to ./[EXT library]/tab/edit_doc_999.lng:

```
!1  2  3    4    5 6 7     8        9 0 11 2 13  4 15 16
!!-!!!!!-!-!!!!!!!!!!!-!-!-!!!!!!!!!!!!!!!!!!!!-!-!-!!!-!-!!!!!-!-!!-!!
## ERR           D LError         Y     E
```


```
****************************************************************
****************************************************************
```
Step 16 - Description:

1) In $alephe_root/tab/853_chrono - replace the following lines (wrong Slovak months entries):

```
  slo M l'ad.
  slo M un.
  slo M brez.
  slo M dub.
  slo M kvet.
  slo M cerv.
  slo M cerven.
  slo M srp.
  slo M zari.
  slo M ruj.
  slo M list.
  slo M pros.
  slo S jar
  slo S leto
  slo S jesen
  slo S zima

  !slo M jan.
  !slo M feb.
  !slo M mar.
  !slo M apr.
  !slo M maj.
  !slo M jun
  !slo M jul
  !slo M aug.
  !slo M sept.
  !slo M okt.
  !slo M nov.
  !slo M dec.
```

With the following lines:

```
slo M jan.
slo M feb.
slo M mar.
slo M apr.
slo M maj.
slo M jun
slo M jul
slo M aug.
slo M sept.
slo M okt.
slo M nov.
slo M dec.
slo S jar
slo S leto
slo S jesen
slo S zima
```

2) server_execute (in error_fre): The French text has been corrected.
   a. Remove the whole header lines (all the lines that start with "!").
   b. Replace the following lines:
     From:
     ## - MESSAGE - MESSAGE
       Votre lettre a été placée dans le fichier $1 dans le répertoire print/$2, et sera traitée prochainement par le programme $2.

     To:
     ## - MESSAGE
      Votre lettre a été placée dans le fichier $1
      dans le répertoire print/$2, et sera traitée
      prochainement par le programme $2.

****

****
Step 17 - Description:

Changed XSL / TRN in all libraries:

1) In plain-funcs-misc.xsl, replace "b/", "i/","u/" with "/b", "/i", and "/u" (BIB libraries).

****
****
Step 18 - Description:

Add the following lines to ./[adm_lib]/tab/tab_circ_log.{lng}:

70 Y Y LHold request created
71 Y Y LHold request created (OPAC)
72 Y Y LHold request deleted
73 Y Y LHold request deleted (OPAC)
74 Y Y LHold request placed on shelf
75 Y Y LHold request filled letter printed
76 Y Y LHold request not filled letter printed
77 Y Y LHold request picked up

****

```
****************************************************************
```
Step 1000 - Description:

Changed the following fields size in Z700 of the PW library:
1. Increase the size of the Z700_REQUEST_PICKUP_LOC field to VARCHAR2(500)
2. Increase the size of the Z700_CIRC_SUB_LIBRARY field to VARCHAR2(500)

```
****************************************************************
****************************************************************
```
Step 1001 - Description:

Changed the following fields size in Z304 of the USR library:
1. Increase the size of the Z304_ADDRESS field to VARCHAR2(1000)
   The Z304-ADDRESS in already existing records of Z304 consists of 5 lines of 50 characters each.
   These records should be updated to have additional 150 spaces between each address line.
   The upgraded Z304 records should have Z304-ADDRESS with 5 lines of 200 each.

```
****************************************************************
****************************************************************
```
Step 1002 - Description:

Added the following fields in Z304 of the USR library:

 1. Add new field: Z303-LAST-NAME VARCHAR2(100)
 2. Add new field: Z303-FIRST-NAME VARCHAR2(100)


```
****************************************************************
****************************************************************
```
Step 1003 - Description:

Changed the following fields size in Z308 of the USR library:
1. Increase the size of the Z308_REC_KEY field to CHAR(262)
   The Z308_REC_KEY in already existing Z308 records should be updated to have additional 235 spaces, between the first 22 characters (Z308-KEY-TYPE + Z308-KEY-DATA from Aleph 21) - and the last 5 characters (Z308-USER-LIBRARY) .
Each Z308 should have:
First 22 characters (Z308-KEY-TYPE (2) + Z308-KEY-DATA (20) from Aleph 21) + 235 Spaces + Z308-USER-LIBRARY (5 characters).
Total: (2+20)+235+5=262


```
****************************************************************
****************************************************************
```
Step 1004 - Description:

Changed the following fields size in Z353 of the USR library:
1. Alter z353 table (in USR Library) - increase the size of Z353_REC_KEY to NOT NULL CHAR(270).
The already existing Z353 records should be updated to have additional 155 spaces at the end of Z353_REC_KEY.
Each Z353_REC_KEY should have:
First 115 characters (Z353-LIBRARY(5) + Z353-USER-LIBRARY(5) + Z353-KEY-TYPE(5) + Z353-KEY-DATA(100) from Aleph 21)
 + 155 Spaces
Total: (115)+155=270

```
****************************************************************
****************************************************************
```
Step 1005 - Description:

Changed the following field size in Z900 of the BIB, ADM and USR library:
1) Z900 table (exists under BIB, ADM and USR) - Z900-REC-KEY was extended from 100 characters to 262 characters.

IMPORTANT NOTE - FOR ARC USERS ONLY:
All ARC Z900 triggers must be disabled before the change and then enabled, or Re-Compiled after the change.
THIS CAN BE DONE BY THE UPGRADE STEP: trigger1

****
****
Step trigger1 - Description:

Update Z900 triggers.
Must be run after step 1005 – FOR ARC USERS ONLY.

****

7. OPAC Implementation Notes

Abstract

This section lists the changes that you must apply to the revision in order to be able to work with it.

In order not to override the customization that you may have added to previous releases, the HTML pages and tables that were customized from the previous release are used. The list of changes you must make to these pages and tables is listed below.

The following table summarizes the new/removed and modified files. It also provides a list of changes made to the modified files.

New files:	Deleted Files:	Modified Files:
Files under www_f_eng	**Files under www_f_eng**	**Files under www_f_eng**
		bor-info
sfx-button-data (**mandatory**)		**bor-info-single-adm**
		patron-notice
		full-set-tail
		direct-tail
		bor-new
		full-head-media
		exlibris.css
		fx-record-ver-1.0
		find-b
		item-photo-request-tail-an
		myshelf-short-head-2
		myshelf-short-head-2-no-course
		item-photo-request-tail-an
		popcalendar-js
		short-refine

New files:	Deleted Files:	Modified Files:
		bor-loan-head
		bor-hold-head
		booking-req-list-head
		bib-request-verify
		bypass-passwd
		login
		login-acq-session
		login-ill
		login-item
		login-request
		login-session
		bor-note-new
		bor-new
		copyright

Updated Files

The following files under `$alephe_root`/www_f_lng were changed to allow for new features or bug fixes. The detailed changes are listed for each file. The string to change appears in red.

File changes can be related to:

- Extend Patron's account
- Retain the functionality of the SFX button (Mandatory)
- Patron First and Second Names
- Extending Patron Address
- Increase Z308 patron ID identification to 255 characters
- Miscellaneous

Extend Patron's account

 bor-info

After:

```
<p>
<a name="messages">
  <span class=tr1 id=bold>There are $0800 Messages for you.</span>
<br>
```

Add:

</p>

<p name=expiry style="display: $7500">

Your account will expire on $7600.Click here to extend it.
**
</p>

bor-info-single-adm

After:

```
<p>
<a name="messages">
  <span class=tr1 id=bold>There are $0800 Messages for you.</span>
<br>
```

Add:

</p>

<p name=expiry style="display: $7500">
  Your account will expire on $7600.Click here to extend it.
  **
</p>

patron-notice

After:

```
<!-- patron notice overdue -->
<p class="text1" style="display: $3000">
You have overdue items currently on loan in library $3100.
</p>
```

Add:

<!-- patron notice expiration date -->
<p class="text1" style="display: $3300">
Please note that your account will expire on $3400.
You can extend it in your library card.
</p>

<u>Retain the functionality of the SFX button</u>
Note! This change is mandatory.

full-set-tail, direct-tail

Before:

```
</body>
</html>
```

Add:

```
<script>
// Function to process SFX buttons
function ProcessSFX(SFX_String) {
    var sfx_elem;
    sfx_elem = document.getElementById("sfx_button");
    sfx_elem.innerHTML = SFX_String;
}
</script>
<script src="&server_f?func=load-sfx-data&doc_number=$0900"></script>
```

Patron First and Second Names

Should be applied only by customers that want to activate Patron's first and last name fields (Modified file which can be copied to bor-new: ./a22_4/alephe/www_f_eng/ bor-new-last-first-name).

bor-new
In my_reset function:

Change:
```
    if (document.form1.elements[i].name == "M_Z303_NAME" ||
```

To:
```
    if (document.form1.elements[i].name == "M_Z303_LAST_NAME" ||
        document.form1.elements[i].name == "N_Z303_FIRST_NAME" ||
```

Add:

```
<tr>
 <td class=td2 width=20% nowrap><label for="last_name">Last Name: </label></td>
 <td class=td2 width=1%>
    <span class=text2 title="Mandatory">*</span>
 </td>
 <td class=td2>
    <input id="last_name" size=30 maxlength=200 name=M_Z303_LAST_NAME value="$3000"></td>
 </tr>
 <tr>
```

<td class=td2 width=20% nowrap><label for="first_name">First Name: </label></td>
<td class=td2>&nbsp;</td>
<td class=td2>
<input id="first_name" size=30 maxlength=200 name=N_Z303_FIRST_NAME value="$3100"></td>
</tr>

Remove:

<tr>
<td class=td2 width=20% nowrap><label for="name">Name: </label></td>
<td class=td2 width=1%>
***
</td>
<td class=td2>
<input id="name" size=30 maxlength=200 name=M_Z303_NAME value="$0100"></td>
</tr>

Change:
<body topmargin="0"
    onload="window.document.form1.reset();
window.document.form1.N_Z303_NAME.focus()">

To:
<body topmargin="0"
onload="window.document.form1.reset();
window.document.form1.M_Z303_LAST_NAME.focus()">

Extending Patron Address

bor-new

Change:
        <input id="addr_line_1" name=M_Z304_ADDRESS2 size=30 maxlength=50 value="$0800">

 To:
        <input id="addr_line_1" name=M_Z304_ADDRESS2 size=30 maxlength=200 value="$0800">

Change:
        <input id="addr_line_2" name=N_Z304_ADDRESS3 size=30 maxlength=50 value="$0900">

    To:
        <input id="addr_line_2" name=N_Z304_ADDRESS3 size=30 maxlength=200 value="$0900">

Change:

```
        <input id="addr_line_3" name=N_Z304_ADDRESS4 size=30 maxlength=50
value="$1000">
```

    To:

*<input id="addr_line_3" name=N_Z304_ADDRESS4 size=30
maxlength=200 value="$1000">*

Change:

```
        <input id="addr_line_4" name=N_Z304_ADDRESS5 size=30 maxlength=50
value="$1100">
```

To:

*<input id="addr_line_4" name=N_Z304_ADDRESS5 size=30
maxlength=200 value="$1100">*

Increase Z308 patron ID identification to 255 characters

bib-request-verify

Change:

```
    <tr>
     <td class="td2" id="middle" nowrap><label for="user">
        User ID/Barcode:
     </label></td>
     <td class="td2">
        <input id="user"
            size=21
            maxlength=20
            name="bor_id"
            value=$0300>
     </td>
    </tr>
```

To:

<tr>
 <td class="td2" id="middle" nowrap><label for="user">
    User ID/Barcode:
 </label></td>
 <td class="td2">
    <input id="user"
        size=21
        maxlength=255
        name="bor_id"
        value=$0300>
 </td>
</tr>

bypass-passwd

Change:

```
<tr>
 <td class=td2 nowrap><label for="barcode">User ID/ Barcode:</label></td>
 <td class=td2>
   <input id ="barcode"
     size=21
     maxlength=20
     name=bor_id
     value="$0200">
 </td>
</tr>
```

To:

```
<tr>
 <td class=td2 nowrap><label for="barcode">User ID/
Barcode:</label></td>
   <td class=td2>
    <input id ="barcode"
      size=21
      maxlength=255
      name=bor_id
      value="$0200">
   </td>
  </tr>
```

login, login-request, login-session

Change:
```
<tr>
 <td class=td2 nowrap><label for="pat_id">User ID/ Barcode:</label></td>
 <td class=td2>
   <input id="pat_id"
     size=21
     maxlength=20
     name=bor_id
     value="$0200">
 </td>
</tr>
```

To:

```
<tr>
 <td class=td2 nowrap><label for="pat_id">User ID/ Barcode:</label></td>
 <td class=td2>
   <input id="pat_id"
     size=21
```

```
        maxlength=255
        name=bor_id
        value="$0200">
     </td>
     </tr>
```

login-acq-session, login-ill

Change:

```
<tr>
 <td class=td2 nowrap>User ID/ Barcode:</td>
 <td class=td2>
   <input size=21
      maxlength=20
      name=bor_id
      value="$0200">
 </td>
 </tr>
```

To:

```
<tr>
 <td class=td2 nowrap>User ID/ Barcode:</td>
 <td class=td2>
   <input size=21
      maxlength=255
      name=bor_id
      value="$0200">
 </td>
 </tr>
```

login-item

Change:

```
<tr>
  <td class="td2" id="middle" nowrap><label for="pat_id">
     User ID/Barcode:
  </label></td>
  <td class="td2">
     <input id="pat_id"
         size=21
         maxlength=20
         name="bor_id"
         value=$0700>
  </td>
</tr>
```

To:

```
    <tr>
      <td class="td2" id="middle" nowrap><label for="pat_id">
        User ID/Barcode:
      </label></td>
      <td class="td2">
        <input id="pat_id"
            size=21
            maxlength=255
            name="bor_id"
            value=$0700>
      </td>
    </tr>
```

bor-note-new

Change:

```
<tr>
  <td width=15% class=td2 nowrap><label for="patron_id">
    Borrower ID/Barcode :
  </label></td class=td2>
  <td class=td2>
    <span class=text2 title="Mandatory">*</span>
  </td>
  <td class=td2>
    <input id="patron_id" size=30 name=id maxlength=20 value="$0100">
  </td>
 </tr>
<tr>
```

To:

```
  <td width=15% class=td2 nowrap><label for="patron_id">
    Borrower ID/Barcode :
  </label></td class=td2>
  <td class=td2>
    <span class=text2 title="Mandatory">*</span>
  </td>
  <td class=td2>
    <input id="patron_id" size=30 name=id maxlength=255 value="$0100">
  </td>
 </tr>
```

bor-new

Change:

```
 </tr>
```

```
<tr>
 <td class=td2 width=20% nowrap><label for="additional_id">Additional
ID:</label></td>
 <td class=td2> </td>
 <td class=td2>
    <input id="additional_id" name=N_ADDITIONAL_ID_DATA
    size=30 maxlength=20 value="$6800">
 </td>
</tr>
<tr>
 <td class=td2 width=20% nowrap><label for="ver_additional_id">Additional ID
Ver:</label></td>
 <td class=td2> </td>
 <td class=td2>
    <input id="ver_additional_id" type=password name=N_ADDITIONAL_ID_VER
    size=30 maxlength=20>
 </td>
</tr>
```

To:

```
 </tr>
 <tr>
 <td class=td2 width=20% nowrap><label for="additional_id">Additional
ID:</label></td>
 <td class=td2> </td>
 <td class=td2>
    <input id="additional_id" name=N_ADDITIONAL_ID_DATA
    size=30 maxlength=255 value="$6800">
 </td>
 </tr>
 <tr>
 <td class=td2 width=20% nowrap><label for="ver_additional_id">Additional ID
Ver:</label></td>
 <td class=td2> </td>
 <td class=td2>
    <input id="ver_additional_id" type=password name=N_ADDITIONAL_ID_VER
    size=30 maxlength=255>
 </td>
 </tr>
```

Miscellaneous

full-head-media

Change:

```
    <td align="center" valign="top" style="padding-top: 8px;">
```

To:

<td align="center" valign="top" style="padding-top: 8px;" id="adam_images">

exlibris.css

Add (at the end):

#adam_images a {
 display: block;
}

sfx-record-ver-1.0

Change:

    url += 'rft.dat=DocNumber=$0400$0200&';

To:

    url += 'rft_dat=DocNumber=$0400$0200&';

find-d

Change:

    <a href="javascript:my_reset();">

To:

    <a href="&server_f?func=find-d-0&clear_level=2">

item-photo-request-tail-an:
Change:

  <td class=td2>
    <input readonly size=30 maxlength=50 name="author" value="$3000" style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>

To:

  <td class=td2>$3000</td>

Change:

  <td class=td2>

```
            <input readonly size=30 maxlength=100 name="title" value="$3100"
style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>
```

To:

<td class=td2>$3100</td>

Change:
```
  <td class=td2> <span class=text2> * </span> </td>
  <td class=td2>
      <input readonly size=30 maxlength=30 name="pages" value="$3200"
style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>
```

To:

<td class=td2></td>
<td class=td2>$3200</td>

After:

`</table>`

Add:

<input type="hidden" name="author" value="$3000">
<input type="hidden" name="title" value="$3100">
<input type="hidden" name="pages" value="$3200">

myshelf-short-head-2

Change:

```
<p>
<div class=title>
  Documents in My e-Shelf
<img src="&icon_path/f-check-mark-1.gif"
      border=0 alt="Submitted a hold request">
submitted a hold request

</div>
```

to:

<p>
<div class=title>
 Documents in My e-Shelf
</div>

<div class=title>
Requested titles are marked with
<img src="&icon_path/f-check-mark-1.gif"
*   border=0 alt="Requested titles">*
</div>

myshelf-short-head-2-no-course

Change:

```
<p>
<div class=title>
  Documents in My e-Shelf:
 <img src="&icon_path/f-check-mark-1.gif"
      border=0 alt="Submitted a hold request">
submitted a hold request
</div>
```

To:

<p>
<div class=title>
* Documents in My e-Shelf:*
</div>

<div class=title>
Requested titles are marked with
<img src="&icon_path/f-check-mark-1.gif"
*   border=0 alt="Requested titles">*
</div>

item-photo-request-tail-an

Change:

```
  <td class=td2>
     <input readonly size=30 maxlength=50 name="author" value="$3000"
style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>
```

To:

* <td class=td2>$3000</td>*

Change:
```
 <td class=td2>
     <input readonly size=30 maxlength=100 name="title" value="$3100"
style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>
```

To:

<td class=td2>$3100</td>

Change:
  <td class=td2> * </td>
  <td class=td2>
     <input readonly size=30 maxlength=30 name="pages" value="$3200"
style="color:#000000; font-family:Verdana; background-color:#C0C0C0;" ></td>

To:

<td class=td2></td>
<td class=td2>$3200</td>

Add the following lines:

<input type="hidden" name="author" value="$3000">
<input type="hidden" name="title" value="$3100">
<input type="hidden" name="pages" value="$3200">

popcalendar-js
Change:

var yearNow=today.getYear()

To:

var yearNow=today.getFullYear()

Delete the following line:

        if (!ie) { yearNow += 1900   }

short-refine

After:

    <td class="td2" id="small" nowrap>Type word or phrase

       <input size=45 name="request" value="$0400">
    </td>
  </tr>

Add:

 <tr>
 <td class="td2" id="small" nowrap>

Words adjacent?
</td>
<td class="td2" id="small" nowrap>
<input Type="radio" name="adjacent" $$1000-C"N" value="N"> No (with bi-gram)
<input type="radio" name="adjacent" $$1000-C"Y" value="Y"> Yes (with morpheme)
<input Type="radio" name="adjacent" $$1000-C"M" value="M"> No (with morpheme)
<input type="radio" name="adjacent" $$1000-C"B" value="B"> Yes (with bi-gram)
</td>
</tr>

bor-loan-head, **bor-hold-head**, **booking-req-list-head**

Add:

<include>include-window

copyright
Change the year to *2014*

8. General Implementation Notes

This section contains a list of changes related to miscellaneous functions of the system. These changes should be performed manually after running Upgrade Express 21.01 – 22.01. The list does not include changes to Web OPAC files.

ARC Users

Customers who use ARC must manually run the trigger1 step:

To run the trigger 1 step:

From the upgrade_util menu, select 3 Run upgrade express.
Select 2. Run a specific step.
Type trigger1 as the step to run.

9. Upgrade Express Checklist after Upgrade

This checklist is intended to help you test the conversion of data and configuration tables by checking basic functionality in the various modules of the system. After the upgrade process has been completed, (including the manual parts of the upgrade), go through the following list and test the specified functions.

General	Confirmed by	Date
Test that jobs run correctly in job_list.		

Cataloging and Items	Confirmed by	Date
Create new record using File → New Record / create a new record using a pre-defined template		
Search for created record in Web and confirm that it is retrieved		
Scan the indexes listed in "find" in the cataloging module and make sure they work		
Search for each of the accesses listed in "scan" in the cataloging module and make sure it works		
Load record from server → modify it →send to server		
Ensure character display of foreign characters and diacritics is correct		
Check authority control functionality		
Check that library can download records from its usual supplier. This will test Z39.50 configuration		
Push the above created record to items		
Add new item.		
In item form, confirm that the drop-down boxes appear correctly		

Acquisitions and Serials	Confirmed by	Date
Open module and do a search and scan		
Search Budget file		
Search Vendors file		
Search Budget transactions per active budget		
Confirm that users can view and modify budgets		
Test EDI functionality		
Push record to Serials module from other modules		
Compare subscription information		
Compare publication schedule forms		
Do "arrive" on an expected issue and confirm that it opens		
View serial items in the Web OPAC		

ILL	Confirmed by	Date
Check borrowing/lending requests summary tree – compare requests from previous ILL to new ILL		

(numbers, status, bib info, etc).		
Check ILL-Admin-Partner list, potential suppliers, customer ID, APDU Exceptions (number of records, record info, etc)		
Check borrowing requests basic flow for returnable material (request creation, send to supplier, register arrival, return to supplier)		
Check lending requests basic flow for returnable material (request creation, supply material, check-in material)		
Check OPAC-Library card-ILL info (compare previous ILL to new ILL		

Circulation	Confirmed by	Date
Search for borrowers		
On lower version server create a Loan report (cir-04) or Overdue and lost billing notices (cir-50) report. Compare these results with searches in the Circulation module. A recent report may already exist		
Open new borrower and inform library of number		
Loan the new item you entered to the new borrower		
Test renewal, renew all, return, whatever fine regime is used		
Test overdue/courtesy notice generation		
Compare cash transactions between test server data and production server data of the previous version.		
Activate and check self-check server transactions		
Run p_cir_60 and p_cir_65 in order to check advanced booking function. (Only on test server)		

Web OPAC	Confirmed by	Date
Sign in as the user you entered above		
Confirm that your loan appears correctly as "user" in Web		
Confirm that your information appears in "user" correctly		
Search for the record you created, then click "items" and confirm that you see that it is on loan		
Try keyword and browse searches, in full and in logical bases		
Use basket and e-shelf, e-mail results to yourself		
Check customization generally, menus and navigation links		
Connect to a remote link		
Verify that Course Reading works		
Ensure character display of foreign characters and diacritics is correct		
Verify that related searches (tab_service) are working		
Verify that 'limit' functionality works OK		
Check the sorting of records		
Check analytical records for connections between main analytical records and locations		
Test interaction between the Web OPAC and staff client; create an ILL request on the Web OPAC and check the data fed into the GUI, place a hold request, check display of Advanced Booking slots.		

Course Reading	Confirmed by	Date
Open the module and see that the data appears: courses, reading lists, items.		
Make sure that course that had a proxy have the proxy's course number on the course note.		
Compare the existence of courses in the old CR and new CR- use course-06.		
Test Course Management basic flow (new course, update, delete, etc.)		
Compare reading lists in old CR and new CR – use course-01.		
Add document to reading list (by search, catalog new, load file), make sure that it appears in the list.		
Test reading list management basic flow (suppress, remove, edit notes, etc.).		
Connect to OPAC, Course Reading base. Compare Search results to results in old CR: the results should be the same BUT not duplicated.		

Search in GUI Modules	Confirmed by	Date
Search for records via various fields		
Browse for records via various fields		
Add records to navigation map and send to different modules		
Ensure character display of foreign characters and diacritics is correct: Font.ini must have appropriate settings		
Verify that related searches (tab_service) are working		

Z39.50	Confirmed by	Date
Check all Z39.50 targets for standard searches		
Do tables cater correctly for translation of diacritics and foreign characters?		

MetaLib/SFX	Confirmed by	Date
Need to check that ALEPH resource in MetaLib works. Need to check interactions between ALEPH/SFX/MetaLib. Do deep links work correctly? ALEPH as an SFX source. ALEPH as an SFX target.		

X-server	Confirmed by	Date
If library is using X-server, verify that links via X-server are OK		
When all is complete		
Cleanup / Delete data added for testing		
Ask installation team to switch Web port to new version (production server only)		
Verify that archiving is on when going live with version 6 (production server only)		
Verify that library knows how to do backup and that it is working properly.		
Send official letter to library that version 16 data has been uploaded and indexed		

Customers that used Publishing in the former version should check the following:

Publishing	Confirmed by	Date
Configure new set in xxx01/tab/tab_publish		
Run p_publish_04 with the new set.		
Run p_publish_05 on part of the new set		
Run p_publish_06 on new set		

10. Appendix A – Copying Apache

The utility copies the Apache directory supplied with the version (under the backed up **utree**) to the new **utree** that is to be upgraded.

You may choose to copy apache manually:

1. Copy the directory by using the `tar` command to preserve the links. Avoid copying the links as directories. Note that the links might point to locations that do not exist. In this case, it is necessary to recreate the links.

   To locate the `tar` Apache directory in the original `u21_1/` tree:

   ```
   cd /exlibris/aleph/u22_1.orig/alephe
   tar -cf apache.tar apache/
   ```

2. Move `apache.tar` to the "real" ver 22 tree:

   ```
   mv apache.tar /exlibris/aleph/u22_1/alephe
   cd /exlibris/aleph/u22_1/alephe
   ```

3. "Untar" using the following command:

   ```
   tar -xvf apache.tar
   ```

4. After copying the Apache directory, perform the following:

   a) If necessary, add any local configuration (such as local files) that was a part of your previous Apache configuration.

   b) Clean up the `logs` directory (`./alephe/apache/logs`) by removing all files (`rm *`).

   c) Recreate the Apache links by running the following command from the `apm` directory (get to this directory by typing `apm` at the command line):

   d) `create_htdocs_links`

   e) Restart the Apache server.

11.   Appendix B – JBoss to Tomcat upgrade

Aleph 22 is delivered with Apache Tomcat - the Servlet and Java Server Pages container, as a replacement to JBoss.

The configuration files under "$alephe_root/jboss_conf" are still relevant and used for Tomcat - in the same way as it was in JBoss.

For backing up and restoring the configuration files, see the instructions below.

A new location for Java classes:

Aleph 22 is installed with new Java WAR files:

`rest-dlf.war`, `aleph-api.war`, `core-sms-proxy.war`.

These files are located in the new Aleph 22 "`jdeploy`" directory:

 $aleph_dev/ng/aleph/home/system/thirdparty/tomcat/aleph-webapps

For manual deployment - you should copy the files:

`rest-dlf.war`, `aleph-api.war`, `core-sms-proxy.war`

- from the v. 21 "`jdeploy`" directory:

```
$aleph_dev/ng/aleph/home/system/thirdparty/openserver/ser
ver/default/deploy
```

- into V. 22 "`jdeploy`" directory:

```
 $aleph_dev/ng/aleph/home/system/thirdparty/tomcat/aleph-
webapps .
```

12. Appendix C – Backup and Restore of jboss_conf

Before starting the Upgrade Express process, save the `$alephe_root/jboss_conf/` configuration files manually in a separate location since subsequent upgrade runs override them.

Run the following on the target server before the upgrade:

```
mkdir $alephe_root/jboss_conf.before.ue

cp -pR $alephe_root/jboss_conf/*
$alephe_root/jboss_conf.before.ue/
```

After the upgrade, restore the `$alephe_root/jboss_conf/` directory:

```
cp -pR $alephe_root/jboss_conf.before.ue/*
$alephe_root/jboss_conf/
```

After restoring, make any necessary changes in the *properties files.