# Migration System Deployment Procedure.

# Prerequisites

* Migration deployment material, agreed to be obtained from LFMigration TFS folder (please, refer to [“MIGR\_INST\_DIR” - Deployment directory and its contents](file:///C:\Users\rz935gx\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\XI1TNEOS\MIGR_INST_DIR#_) for details)
* ORACLE SYS password
* Access to SQLPLUS
* MIGG2 directory path (Please, refer to [*“MIGG2 directory”*](#_MIGG2_directory) section, for details)
* ORACLE data files directory path (Please, refer to [*“Oracle datafiles directory”*](#_Oracle_data_files) section, for details)
* Sections pertinent to RAC installations are highlighted.

# Deployment process steps

## Place all necessary files for installation in deployment directory.

Ensure that there is a valid OS folder accessible by Oracle, where all required batch, sql and parameter files will reside. Details on the necessary files can be found under [*“MIGR\_INST\_DIR” - Deployment directory and its contents*](file:///C:\Users\rz935gx\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\XI1TNEOS\MIGR_INST_DIR#_) section of current document. Hereinafter, this directory will be called the “deployment directory”.

## Execute deployment process

### 2.1 Windows deployment

1. Open Windows command line
2. Move to the deployment directory, where Migration material resides (please, refer to step 1)
3. Run INSTALL\_MIGRATION.bat from within the Deployment directory. The Deployment process will verify that ALL required files are present within deployment directory and then proceed to actual deployment.

### 2.2 Linux deployment

1. Open Terminal session.
2. Move to the deployment directory, where Migration material resides (please, refer to step 1)
3. Make file install\_migration.sh executable ( chmod 777 install\_migration.sh ).

Run install\_migration.sh (./install\_migration.sh) from within the Deployment directory. The Deployment process will verify that ALL required files are present within deployment directory and then proceed to actual deployment.

### 2.3 Continue regardless of OS.

1. User is prompted to enter the following:
   1. DB instance - SID (e.g. DEVMIG, DEVSYT)
   2. DB IP (e.g. 10.200.37.11)
   3. DB Port (e.g. 1521)
   4. Target schema (default: INSIS\_MIGRATION\_LF)
   5. Target schema password (default: INSIS\_MIGRATION\_LF)
   6. Archive schema (default: INSIS\_MIGRATION\_LF\_ARCHIVE)
   7. Archive schema password (default: INSIS\_MIGRATION\_LF\_ARCHIVE)
   8. ORACLE SYS password
   9. Migration mode (1 for Full Deployment / 2 for Configuration data replacement / 3 for Code replacement ONLY ) (default: 1)
      1. If user enters 1, then Full deployment will be executed (i.e. DDL, code and data)
      2. If user enters 2, then configuration data will be truncated from corresponding tables and will be replaced, as per the relative dmp file which resides in Deployment folder at the moment (i.e. DEVMIG-ETLHST\_DATA.dmp)
      3. If user enters 3, then existent code in Migration schema will be replaced, as per the relative sql file which resides in Deployment folder at the moment (i.e. INSIS\_MIGRATION\_LF\_\_SourceCode\_Backup.sql)

**NB: If Migration Mode is ‘Configuration data replacement’ or ‘Code replacement’, deployment process goes directly to step F**

* 1. MIGG directory path, under which a file system will be created (i.e. Actual and Archive Bolags directories for Mutual data, mapping excel directory). Please, refer to [*“MIGG2 directory”*](#_MIGG2_directory) section, for relative details.

1. Migration system checks whether both Migration system default tablespaces (i.e. INSIS\_MIGR\_LF and TEMPMIG01) exist.
   1. If both exist, then user is prompted to answer whether to drop the existing environment (i.e. users and tablespaces)
      1. If user enters ‘Y’, then is prompted to choose the directory path, where the Oracle datafiles (specific to the Migration tablespaces), will be created. Please, refer to [*“Oracle datafiles directory”*](#_Oracle_data_files) section, for relative details.
      2. If user enters ‘N’, deployment starts in existing environment
   2. If not, user is prompted to enter the directory path, where the Oracle datafiles (specific to the Migration tablespaces), will be created. Upon insertion of a valid directory, environment is recreated and deployment starts. Please, refer to [*“Oracle datafiles directory”*](#_Oracle_data_files) section, for relative details.
2. Deployment executes according to the inserted parameters. In case of a Full deployment, a sanity check is performed, upon deployment completion (Please, refer [*“Sanity Check”*](#_Sanity_Check) section, for relative details.

# Deployment details

## Sanity Check

In order to validate that Migration System deployment was successful, a sanity check is performed upon completion of deployment. The checking outcome is included at the end of the abovementioned deployment log (i.e. spool.txt) and appears as follows:

|  |  |
| --- | --- |
| **Status** | **Message** |
| Successful | Migration System deployment was successful! |
| Not successful | Migration System deployment was not successful. |
| Please, send the log to NyttSakSystem. |

## “MIGR\_INST\_DIR” - Deployment directory and its contents

The deployment folder must contain all the following files with the following exact names:

|  |  |
| --- | --- |
| Filename | Description |
| INSTALL\_MIGRATION.bat | Batch file which executes migration system Windows deployment. |
| Install\_migration.sh | Batch file which executes migration system Linux deployment. |
| DEVMIG\_SPECS.sql | Contains table specs, synonyms and sequences. |
| INSIS\_MIGRATION\_LF\_\_SourceCode\_Backup.sql | Contains packages code |
| GRANTS.sql | Contains all necessary grants. |
| DEVMIG-ETLHST\_DATA.dmp | Dump file containing configuration data. |
| Create\_Install\_dir.sql | Script executed by INSTALL\_MIGRATION.bat  Creates (or replaces) “MIGR\_INST\_DIR” directory and grants privileges on that to new schema |
| check\_for\_existing\_data.sql | Script executed by INSTALL\_MIGRATION.bat Checks ETL\_SETUP\_INFO for existing data and if not empty ETL/HST data restoration process aborts. |
| restore\_ETL\_HST\_data\_default.par | Parameter file used by INSTALL\_MIGRATION.bat in the process of ETL/HST data restoration |
| Create\_INSIS\_MIGRATION\_LF.sql | Script executed by INSTALL\_MIGRATION.bat Creates new schema and tablespaces |
| drop\_tables\_views\_packages.sql | Script executed by INSTALL\_MIGRATION.bat All objects of potentially subsistent deployment are dropped before new deployment is executed |
| xxx\_configuration\_data.sql | Script executed by INSTALL\_MIGRATION.bat **only** in xxx environment.  Updates ETL\_SETUP\_INFO, ETL\_EMAIL\_LIST, and ETL\_MIGRATION\_CONDITIONS with environment-specific configuration data |
| environment\_check.sql | Script executed by INSTALL\_MIGRATION.bat Checks whether INSIS\_MIGR\_LF, TEMPMIG01 tablespaces and Migration users exist. |
| Archive\_schema\_code.sql | Script executed by INSTALL\_MIGRATION.bat Installs all necessary code in Archive schema of Migration system |
| Drop\_archive\_objects.sql | Script executed by INSTALL\_MIGRATION.bat Drops all DB objects in Archive schema |
| Sanity\_check\_migration.sql | Script executed by INSTALL\_MIGRATION.bat Performs Migration System sanity ckeck and prints status (i.e. success or failure) to Spool\_log.log |
| MIGG.xlsx | Excel workbook which contains metadata of a number of Migration system tables. It is used during Migration System Setup |
| Sanity\_check\_migration.sql | Script executed by INSTALL\_MIGRATION.bat Performs Migration System sanity ckeck and prints status (i.e. success or failure) to Spool\_log.log |
| Check\_ConnectionString.sql | Script executed by INSTALL\_MIGRATION.bat Verifies that Connection String to Migration schemas (Migration and Archive) are valid. |

During the deployment process, the relative folder is given the oracle alias “MIGR\_INST\_DIR”.

For **RAC** installations, the physical location of the deployment folder should be on the node that will be used to run the deployment. If the deployment will run from node1, the user should copy the required files to the deployment folder on node1 and use node1 ip.

## Installed objects (Full deployment)

* ETL\_\* , HST\_\* , IA\_\*, MIGR\_SRV\_EVENT\_LIST, MIG\* and RLG\_LOCK\_TBL tables metadata ( corresponding indexes, synonyms and comments are included)
* ETL\_\* , MIGR\_SRV\_EVENT\_LIST, RLG\_LOCK\_TBL and HST\_\* tables data
* Packages code
* Sequences
* Synonyms

## Replacement of Migration code (i.e. packages, procedures, functions) in existing Migration schema

## Migration code can be replaced by a new set, by:

* Instructing the installer to opt for ‘Code replacement’ mode, when asked for the relative parameter (step 2.D.8)

The only requirement is the new sql file, which carries the new code, to be present in the deployment folder. Sanity check will not be performed, however relative logs can be found in spool.txt, as described in [*“Deployment Logging”*](#_Deployment_Logging)section*.*

## Replacement of configuration data (i.e. ETL, HST tables data) in existing Migration schema

## Configuration data in existing Migration schema can be truncated and then replaced by a new set, by:

* Instructing the installer to opt for ‘Configuration data replacement’ mode, when asked for the relative parameter (step 2.D.8)

The only requirement is the new dmp file which carries the new data to be present in the deployment folder. Sanity check will not be performed, however relative logs can be found in spool.txt, as described in [*“Deployment Logging”*](#_Deployment_Logging)section*.*

## MIGG2 directory

When Deployment process is directed to execute in Full deployment mode, the user will be prompted to enter the path of the **MIGG2** directory (step 2.D.9 in ‘Deployment process steps’ section). This is a predefined directory location (with this exact name) on the Oracle server, which hosts the Oracle Database and the INSIS application.

**Default value for Windows is F:\MIGG2**.

**Default value for Linux is /migg/MIGG2**.

It is assumed that this directory is created **before** Migration deployment process starts and is communicated to the user, who is responsible for the deployment. Deployment process will attempt to access this directory, so as to ensure that underneath this location the following exist:

* a separate subdirectory for each Bolag, where their extracted data files are to be stored.
* A separate subdirectory for each Bolag, where their extracted data files are to be archived, upon migration completion
* A subdirectory, supposed to carry an excel workbook with metadata of Bolags’ data files (i.e. MIGG.xlsx) and the actual MIGG.xlsx

If all abovementioned entities are in place, then the process continues to the next step. Otherwise, it creates any subdirectory which does not exist and/or copies MIGG.xlsx to the corresponding folder.

**NB 1: If the user enters a wrong directory and not the mutually agreed one, then the process will act as described above and will create the necessary file system under the given path. However, the upcoming migration process will not be able to start, as there will be an inconsistency between what the Bolags and the Migration process consider to be the directory to extract their files to and load these from, respectively.**

**NB 2: This folder is also accessed by the FTP server through which MIGG downloads the legacy files for Migration.**

**NB 3: Pertinent to RAC installations – Since Migration subsystem runs from all available Nodes, the MIGG2 directory must be a Shared folder accessible by all available Nodes, as well as the ftp server serving MIGG downloads.**

## Oracle data files directory

If the deployment process reaches the steps 2.E.1.i or 2.E.2, it prompts the user to choose the appropriate storage area for the Oracle database tablespaces (\*.dbf files) ie

1 –Use folder specified by Oracle HOME

2 – Use specific folder

3 –Use ASM

The tablespace files (\*.dbf) will be created under this location. If one or both exist under this location they will be dropped and recreated. This storage area should be known to the user before Migration deployment starts.

## Deployment Logging

In order to keep track of deployment performed actions outcome, a logfile (i.e. **spool.txt**) is created in the deployment folder. Upon deployment completion, this file contains sqlplus logs of all executed scripts as well as messages describing the status of all performed actions (e.g. sql scripts, impdp, vbs, cmd commands).

# Deployment screen-by-screen example

|  |  |  |
| --- | --- | --- |
|  | Windows | Linux |
| Step 1 | C:\Users\vasileios.alexopoulo\Desktop\screens\1.PNG |  |
|  |  |  |
| Step 2 A-B | C:\Users\vasileios.alexopoulo\Desktop\screens\2.PNG |  |
|  |  |  |
| Step 2C | C:\Users\vasileios.alexopoulo\Desktop\screens\3.PNG |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Step 2.D.1 – 2.D.8 | C:\Users\vasileios.alexopoulo\Desktop\screens\6.PNG |  |
|  |  |  |
| Step 2.D.9 | C:\Users\vasileios.alexopoulo\Desktop\screens\7.PNG |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| Step 2.D.10 | C:\Users\vasileios.alexopoulo\Desktop\screens\8.PNG |  |
|  |  |  |
| Step 2.E.1 | C:\Users\vasileios.alexopoulo\Desktop\screens\9.PNG |  |
|  |  |  |
| Steps 2.E.1.i or 2.E.2 |  |  |