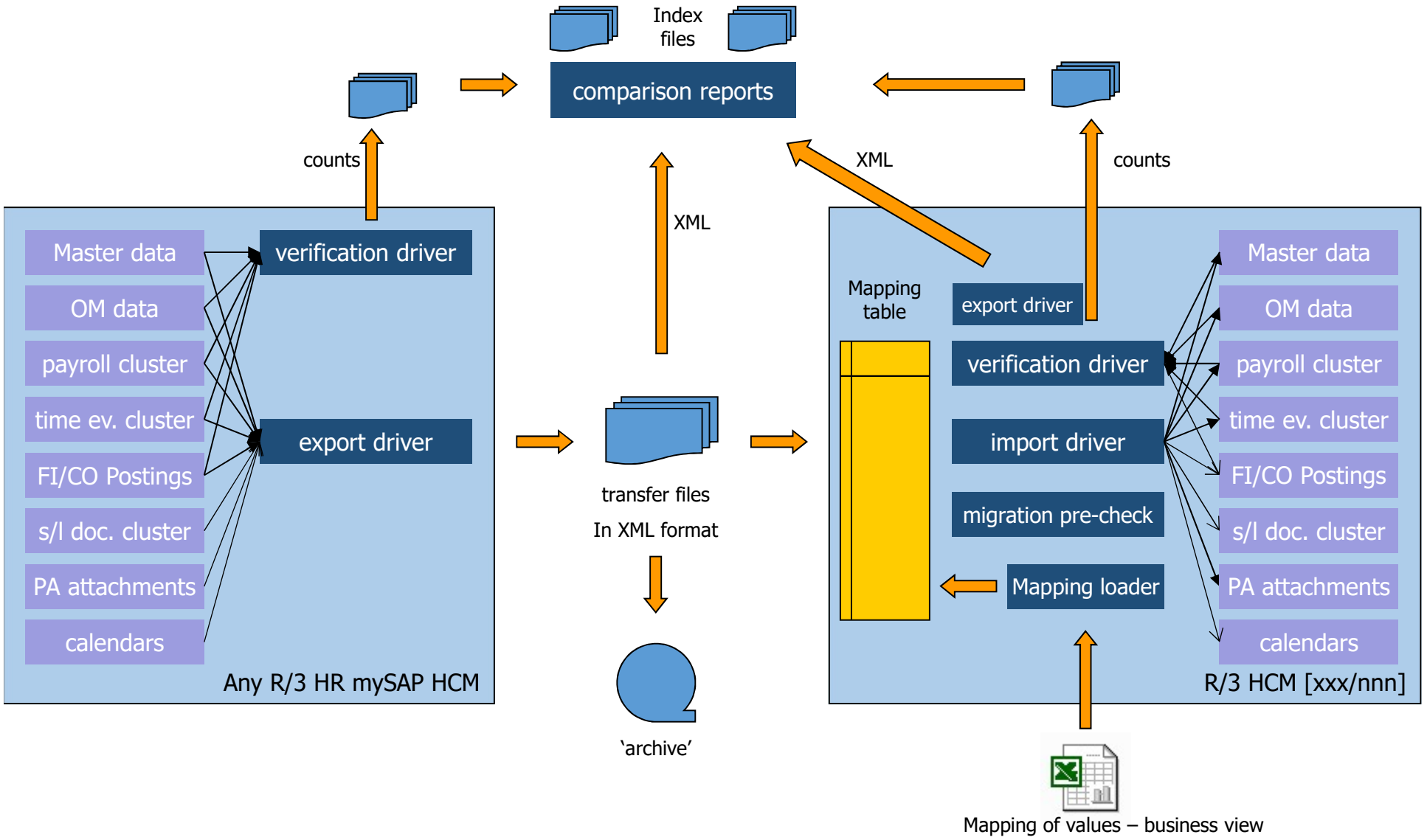
The NLS SAP HCM migration toolset

Summary of ***customer usable*** functionality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payroll cluster
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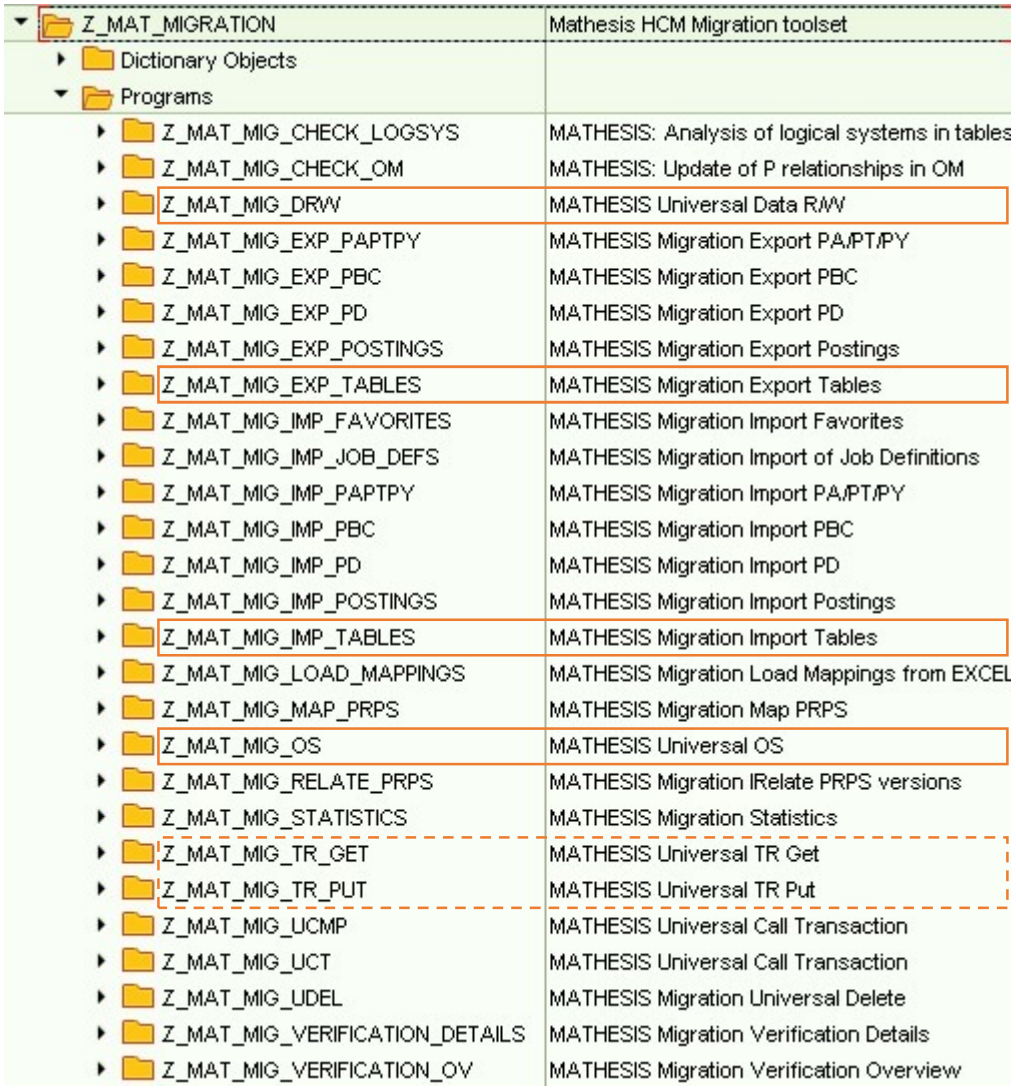
R/3 HCM [xxx/nnn]
Mapping of values – business view

Overview of the migration toolset on the ‚target' side



Z_MAT_MIGRATION	Mathesis HCM Migration toolset
Dictionary Objects	
Programs	
Z_MAT_MIG_CHECK_LOGSYS	MATHESIS: Analysis of logical systems in tables
Z_MAT_MIG_CHECK_OM	MATHESIS: Update of P relationships in OM
Z_MAT_MIG_DRW	MATHESIS Universal Data R/W
Z_MAT_MIG_EXP_PAPTPY	MATHESIS Migration Export PA/PT/PY
Z_MAT_MIG_EXP_PBC	MATHESIS Migration Export PBC
Z_MAT_MIG_EXP_PD	MATHESIS Migration Export PD
Z_MAT_MIG_EXP_POSTINGS	MATHESIS Migration Export Postings
Z_MAT_MIG_EXP_TABLES	MATHESIS Migration Export Tables
Z_MAT_MIG_IMP_FAVORITES	MATHESIS Migration Import Favorites
Z_MAT_MIG_IMP_JOB_DEFS	MATHESIS Migration Import of Job Definitions
Z_MAT_MIG_IMP_PAPTPY	MATHESIS Migration Import PA/PT/PY
Z_MAT_MIG_IMP_PBC	MATHESIS Migration Import PBC
Z_MAT_MIG_IMP_PD	MATHESIS Migration Import PD
Z_MAT_MIG_IMP_POSTINGS	MATHESIS Migration Import Postings
Z_MAT_MIG_IMP_TABLES	MATHESIS Migration Import Tables
Z_MAT_MIG_LOAD_MAPPINGS	MATHESIS Migration Load Mappings from EXCEL
Z_MAT_MIG_MAP_PRPS	MATHESIS Migration Map PRPS
Z_MAT_MIG_OS	MATHESIS Universal OS
Z_MAT_MIG_RELATE_PRPS	MATHESIS Migration IRelate PRPS versions
Z_MAT_MIG_STATISTICS	MATHESIS Migration Statistics
Z_MAT_MIG_TR_GET	MATHESIS Universal TR Get
Z_MAT_MIG_TR_PUT	MATHESIS Universal TR Put
Z_MAT_MIG_UCMP	MATHESIS Universal Call Transaction
Z_MAT_MIG_UCT	MATHESIS Universal Call Transaction
Z_MAT_MIG_UDEL	MATHESIS Migration Universal Delete
Z_MAT_MIG_VERIFICATION_DETAILS	MATHESIS Migration Verification Details
Z_MAT_MIG_VERIFICATION_OV	MATHESIS Migration Verification Overview

Export of data from tables to application server or local files

`Z_MAT_MIG_EXP_TABLES`

File(s) to application server or local PC

XML-formatted (do not use)

Large file mode (use whenever not local)

List of tables (multiple selections and wildcards)

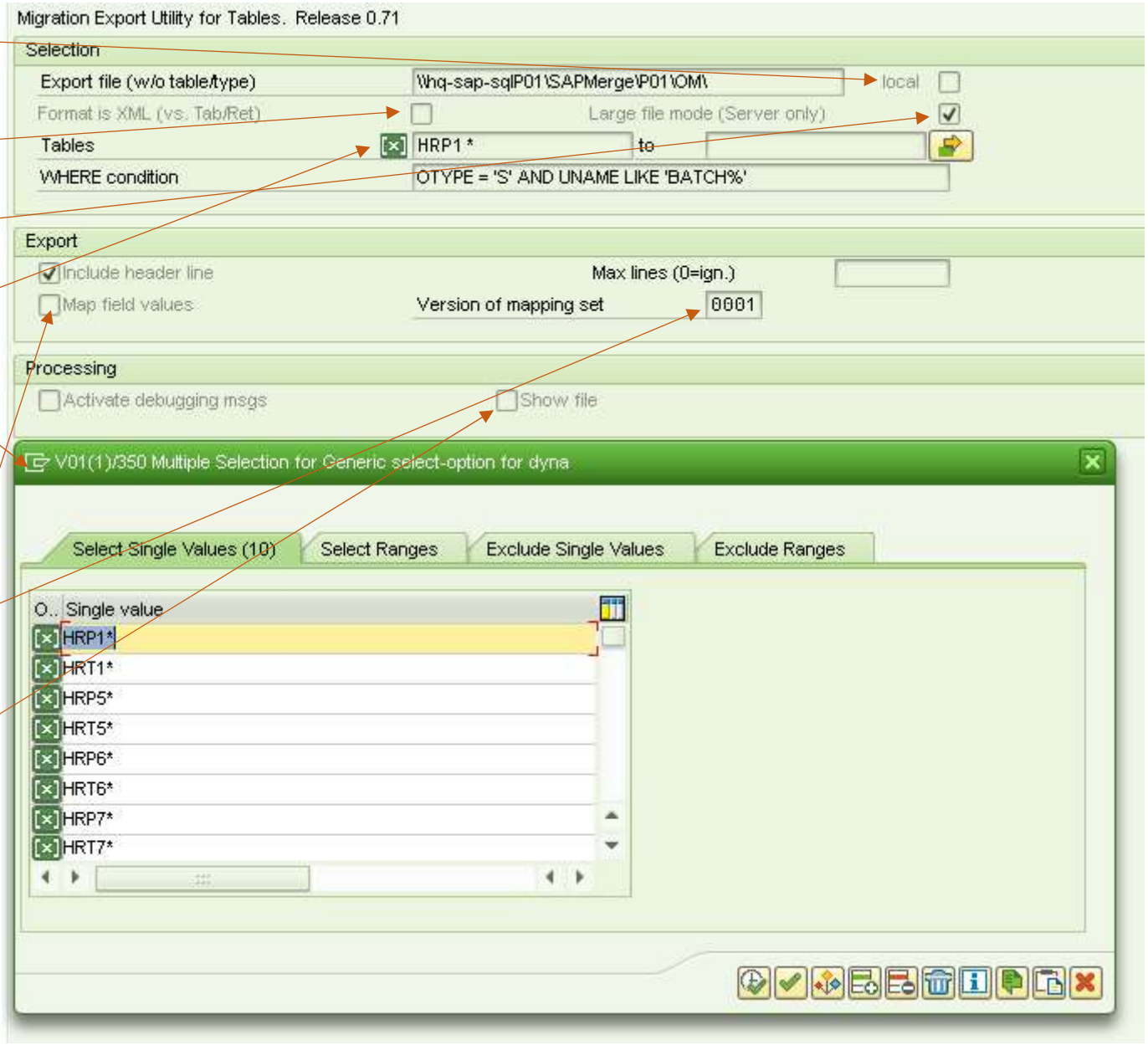
SQL ‚WHERE' condition

Limit number of rows

Mapping of values according to mapping table (e.g. WBS elements)

Output file content to screen (mostly used together with limiting # of rows)

For larger or multiple tables and if file on application server, may run as job (F9).



Import of data into tables from application server or local files

`Z_MAT_MIG_IMP_TABLES`

Directory/file to import from

File(s) from application server or local PC

Depends on UNIX vs. Windows OS

List of tables (multiple selections)

‚Import' : always; ‚Short' : if from SE11/16; ‚Export' : if from Export tool.

Whether to commit or rollback; after how many rows (memory issues)

Skip and/or Limit number of rows

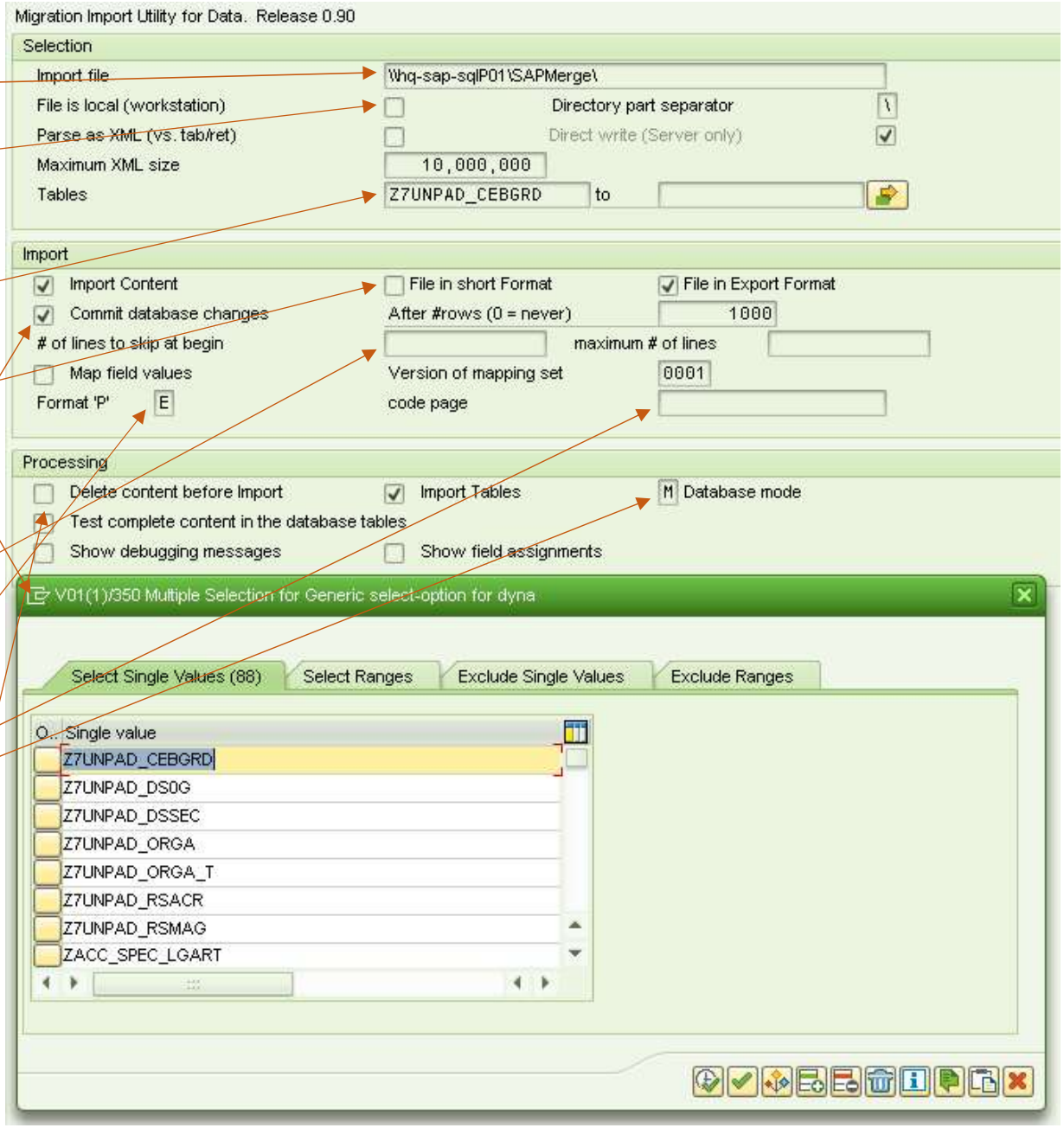
Format of date and f.p. : ‚E' = english

Leave empty for UNICODE (usual)

M)odify; I)nsert; U)pdate

Delete complete table(s) before import

For larger or multiple tables and if file on application server, may run as job (F9).

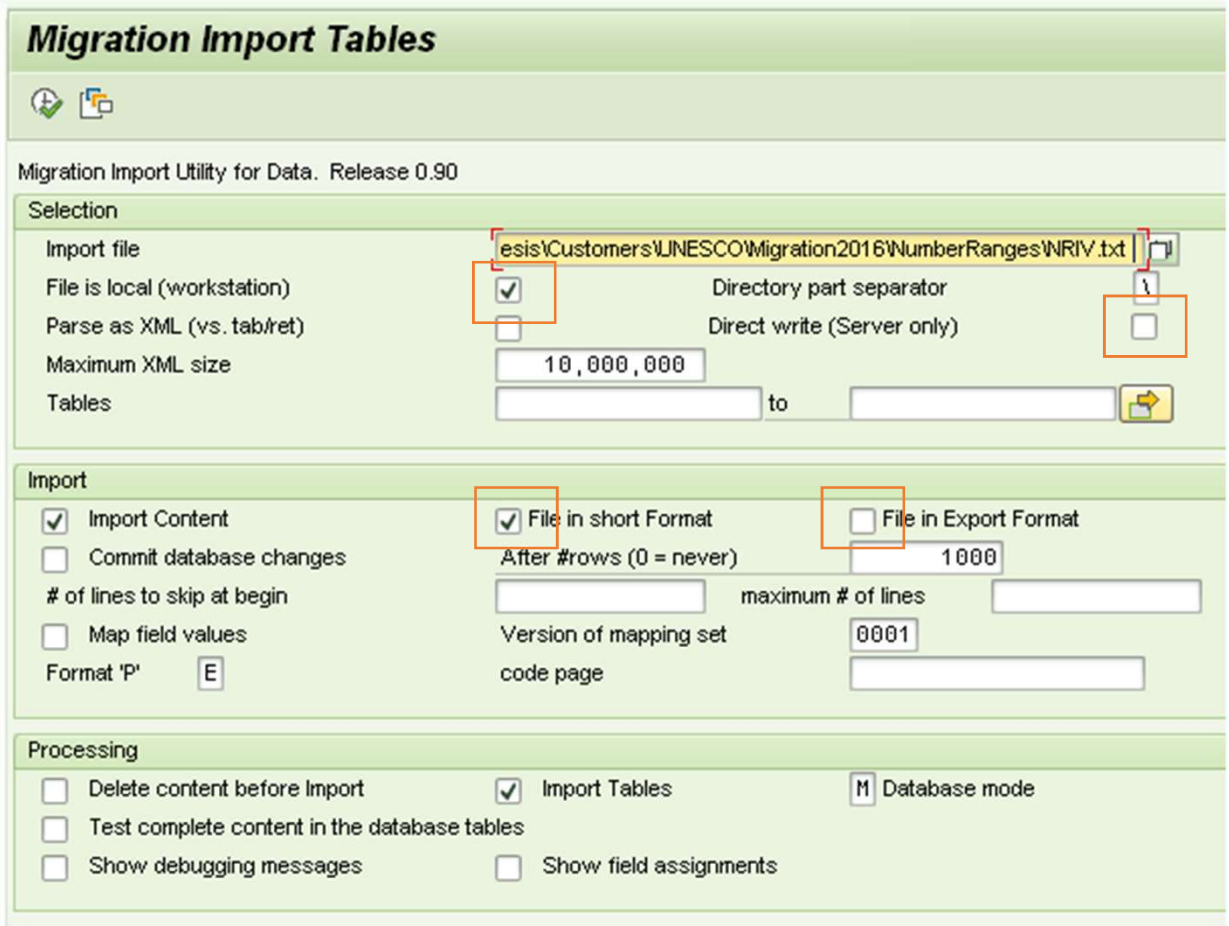


Import of data into tables from application server or local files

`Z_MAT_MIG_IMP_TABLES`

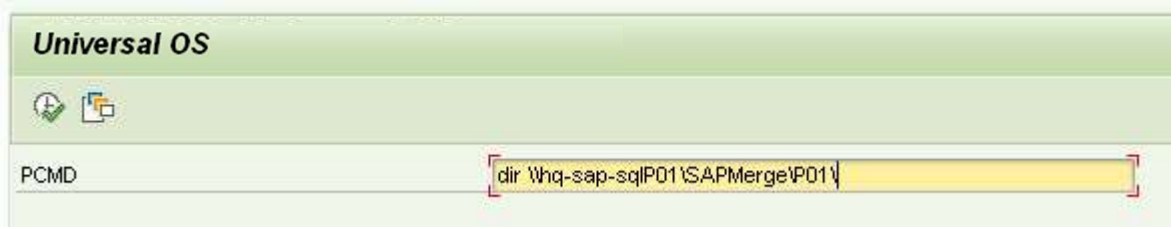
Configuration of application server vs. local PC based files

Configuration dependent of source was the EXPORT tool or an SE11 / SE16 download.



Executing commands on operating system level of the application server

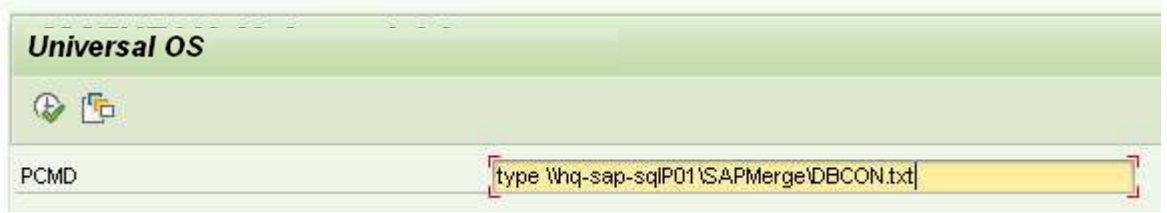
`Z_MAT_MIG_OS`

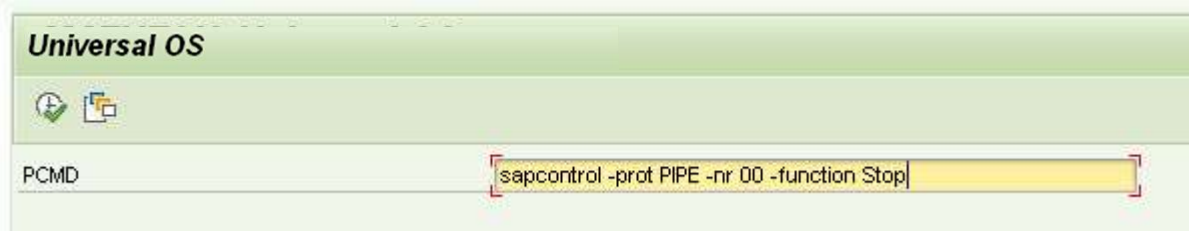


Execution of a command on the application server.

May be a single command, e.g. ‚ls‘ or ‚dir‘; or a batch/script or any executable.

Runs with the authorization of the SAP service!

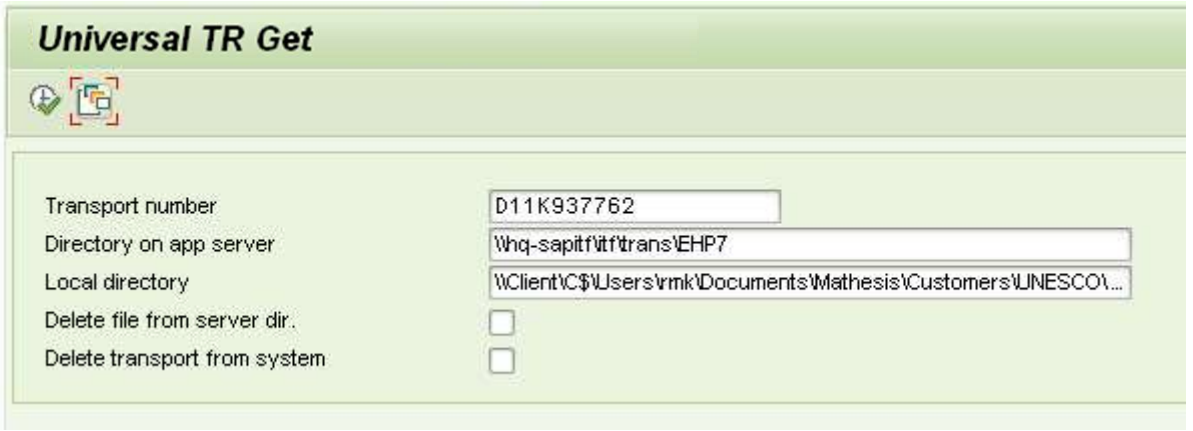




Uploading and downloading of transports from/to local files

```
Z_MAT_MIG_TR_GET
Z_MAT_MIG_TR_PUT
```

Download an existing released transport request to local files (always two files).



Upload the file representation (always two files) of a released transport into the directory of the import queue. Via STMS the transport can then be added to the queue and imported.

Only required if transports are not located on the same shared directory

DRW: Executing SQL / ABAP statements online

`Z_MAT_MIG_DRW`

8 lines for ABAP and/or SQL statements

Create CNT variable for counting purposes (seldom used)

Create ERG (‚result') ITAB and an accoring output loop (seldom used)

Whether to rollback or committ after the execution of the command

Fetch the code from a local file instead of the above lines (‚F4' to select file).

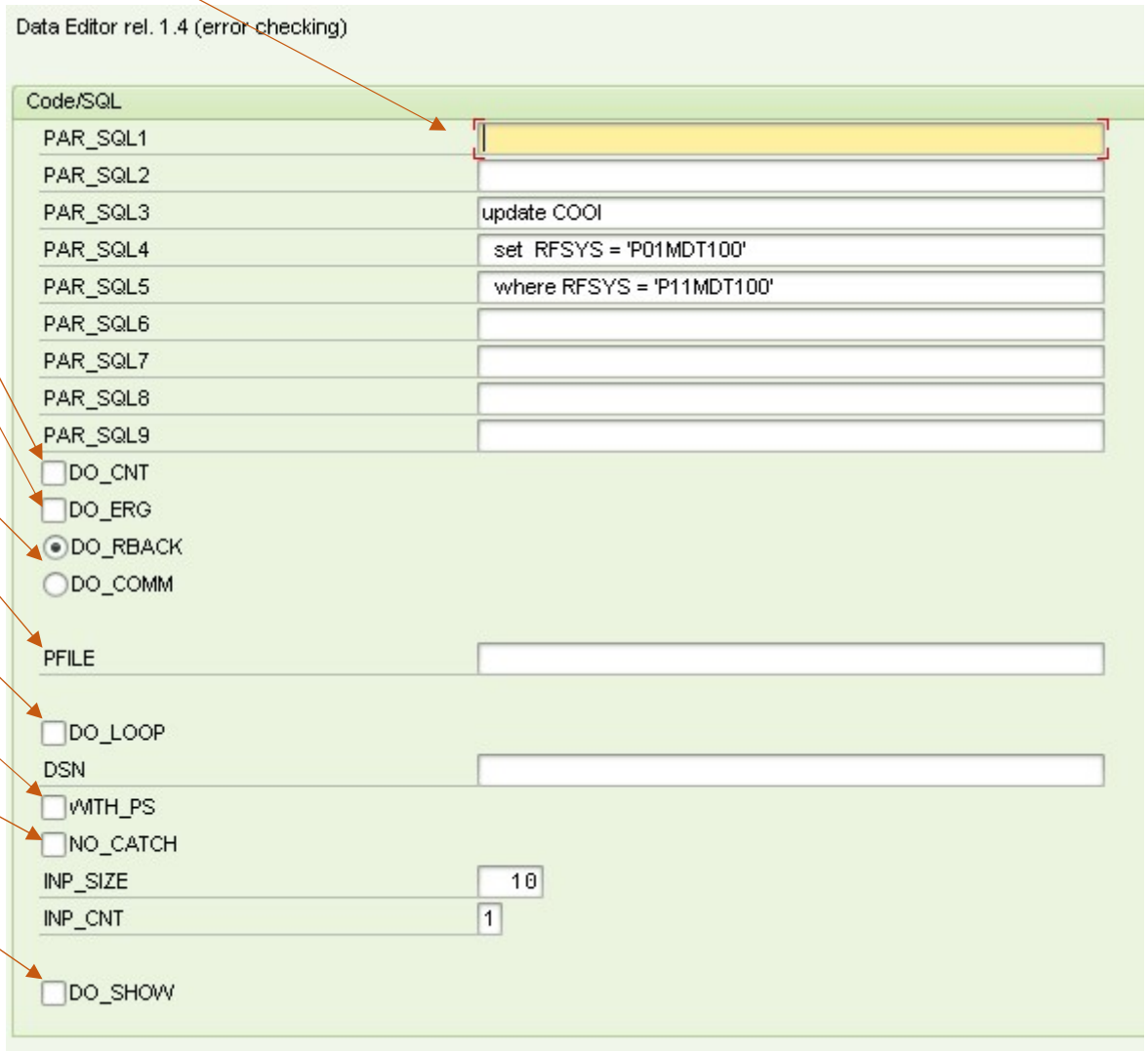
Create code to loop over an import file (seldom used)

Show a selection screen (usually with the file option)

Do not create the try/catch frame (required if already provided in the code)

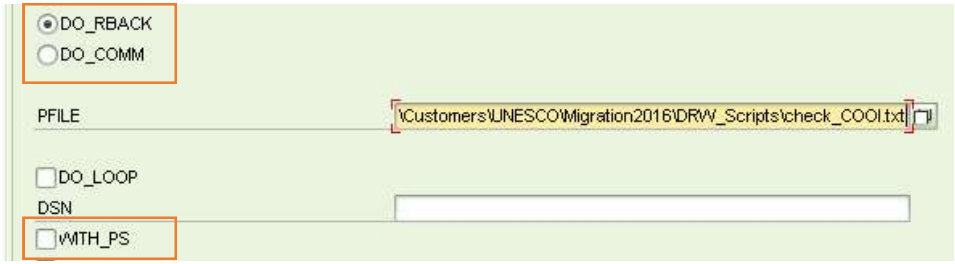
Instead of execution, show gen. code.

For long running tasks, to prevent a timeout, may run as job (F9).



DRW: Executing ABAP code from a local file

Z_MAT_MIG_DRW



The code to be executed is read from a local file and has to be formatted like any ABAP report.

If the code contains parameters and the option ‚WITH_PS' is set; then the selection screen of the program is displayed; otherwise the code runs with the default values.

In case of errors the error description and line number is displayed

Commit/Rollback has to be handled at the program level; the radio buttons of DRW are ignored here !

```
report z.
data: t_cooi   type table of COOI,
      l_cooi_1 type COOI,
      l_cooi_2 type COOI,
      ind      type i,
      ident(1) type C.

select * from COOI into table t_cooi
  where rfsys = 'P11MDT100'.

clear: ind.
loop at t_cooi into l_cooi_1.
  add 1 to ind.
  if ind > 1000000.
    exit.
  endif.
  select single * from cooi into l_cooi_2
    where refbt = l_cooi_1-refbt
      and refbn = l_cooi_1-refbn
      and rfpos = l_cooi_1-rfpos
      and rfknt = l_cooi_1-rfknt
      and rftrm = l_cooi_1-rftrm
      and lifnr = l_cooi_1-lifnr
      and lednr = l_cooi_1-lednr
      and objnr = l_cooi_1-objnr
      and hrkft = l_cooi_1-hrkft
      and rforg = l_cooi_1-rforg
      and rftyp = l_cooi_1-rftyp
      and rfsys = 'P01MDT350'.
  if sy-subrc is initial.
                  l_cooi_2-rfsys    = l_cooi_1-rfsys.
                  l_cooi_2-timestmp = l_cooi_1-timestmp.
                  if l_cooi_1 = l_cooi_2.
                    ident = 'I'.
                  else.
                    ident = 'N'.
                  endif.
                  delete cooi from l_cooi_2.
                  write: / 'D1:', l_cooi_1-refbn, ':', sy-subrc, sy-dbcnt, ide
                else.
                  delete cooi from l_cooi_1.
                  write: / 'S1:', l_cooi_1-refbn, ':', sy-subrc, sy-dbcnt.
    l_cooi_1-rfsys = 'P01MDT350'.
                  insert cooi from l_cooi_1.
                  write: / 'S2:', l_cooi_1-refbn, ':', sy-subrc, sy-dbcnt.
                endif.
endloop.
```

```
if 1 = 1.
  rollback work.
  write: / 'Rolled back'.
else.
  commit work.
  write: / 'Committed'.
endif.
```

Recommendations

Decide whether / which parts you want to obtain
Copy those programs into new ones
Delete complete NLS toolset package (‘Z_MAT_MIGRATION’)
Transport the deletion request into verification/production systems

Notice

NLS has provided you with the strong recommendation to remove its toolset from your production systems as they are a security and data integrity risk.
NLS does not support the programs of the toolset nor guarantees a certain behavior.
NLS is not responsible for any damage you‘ll create by using the toolset.