

Guide Upgrade Datasul 12.1.20

TOTVS S.A.



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1 Update Console



1.1 1. Introduction

The environments management console contains all the objects you need to use the console itself. You can use the same console to run all the updates needed in the database of the product. In some situations, the Console also enables updates of binaries. In this manual, refer to Update Workflow for further details.

1.1.1 1.1. Structure of the Environments Management Console

Folders **cvp**, **dat**, **image**, **plug-ins** and **util** are objects of the Environments Management Console itself. Other directories are called "Data Directories" and contain the objects you need to run your updates. Directories starting with prefix "log" contain the log files of the processes executed. The download folder contains the temporary update files of the Console, which you may occasionally delete.

Each data directory can contain the following objects:

Directory	Content
cax	Files with the image of default definitions from source databases
conf atzconf actconf	Data checking programs
conv atz acerto	Data update programs
dat	Update control files
dfcorr	Dictionary correction deltas
dfprep	Dictionary preparation deltas
Environment	It stores all environment information registered by the Environments Management Console
logs	Log files created by the console
char64	Programs compiled in 64 bits
cvp	Console programs directory

plug-ins	Directory of programs that enhance routines related to the conversion or updating of products
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The root where the Environments Management Console was decompressed has a **char64** subdirectory, which contains programs compiled in 64 bits. Data directory programs are also updated in this folder for use in servers with 64 bit Progress OpenEdge installed. You must manually copy the objects to the server.

1.1.2 1.2. Download of the Environments Management Console

The 5.1.11 console which should be used for conversion is available for download at <https://cat.totvs.com.br/TrocaArquivos/download.aspx?id=1576>

1.1.3 1.3. Running the Environments Management Console

In the directory where the package of the Environments Management Console was decompressed, find the alias for its execution. In the properties of this alias, find parameter "-param" which you may set with the following values:

Arguments transferred in parameter -param:

-param "Language file ,Reserved,Debug Mode,Update Mode"

Ex.1: -param "en"

Ex.2: -param "pt-br,,debug"

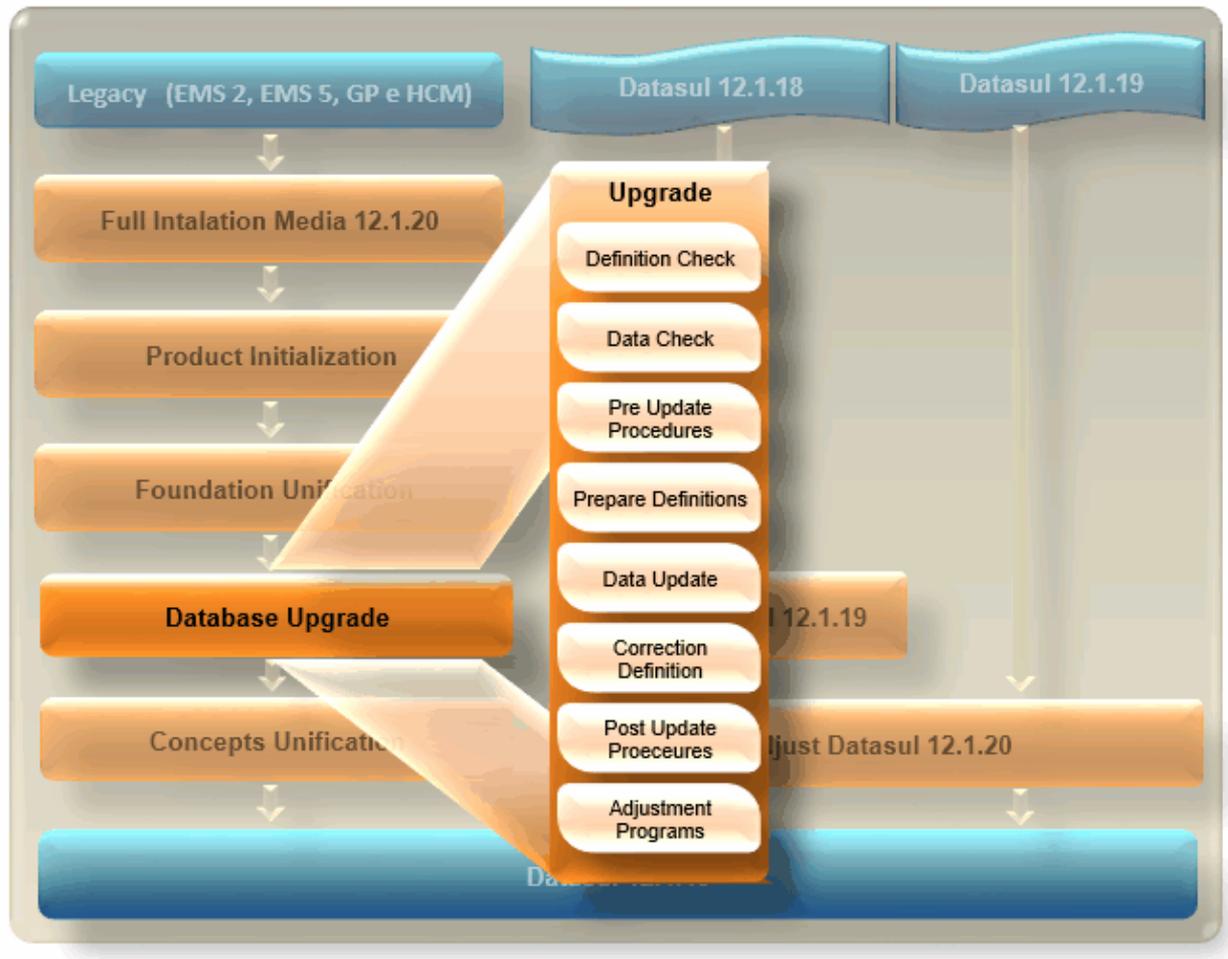
Ex.3: -param "pt-br,,,NOUPDATE"

- ✓ Language file: By default, and if not specified, the Console supposes the language is Brazilian Portuguese, expressed in the code "pt-br".
- ✓ Debug mode: When specified, parameter "debug" is activated. In this mode, the Console creates additional logs to be analyzed in case of problems.
- ✓ NOUpdate Mode: Deactivates the updating of the Console and of data directories.

You must not configure any database connection to run the Console, without specifying any alias information. This information is configured on the Environments Management Console screen.

The Environments Management Console itself runs the processes of upgrade, adjustments and unification of concepts. It automatically adjusts itself to the requirements of each process, as soon as you select the data directory.

Then you can view the update flow of each source system supported.



1.2 2. Screens of the Environments Management Console

The Datasul product update process has evolved with the Console, with the premise that it must be simple for simple environments and scalable for complex environments. Given this premise, the Console offers some features not used on a day-to-day basis, though they are useful for escalating complex environments.

Given the need to accelerate the process, besides converting or updating the environment, the console also unifies concepts and applies packages for clients in Datasul 12. You can configure the connection with the database, APPSERVER service and the other parameters of the process. Once the

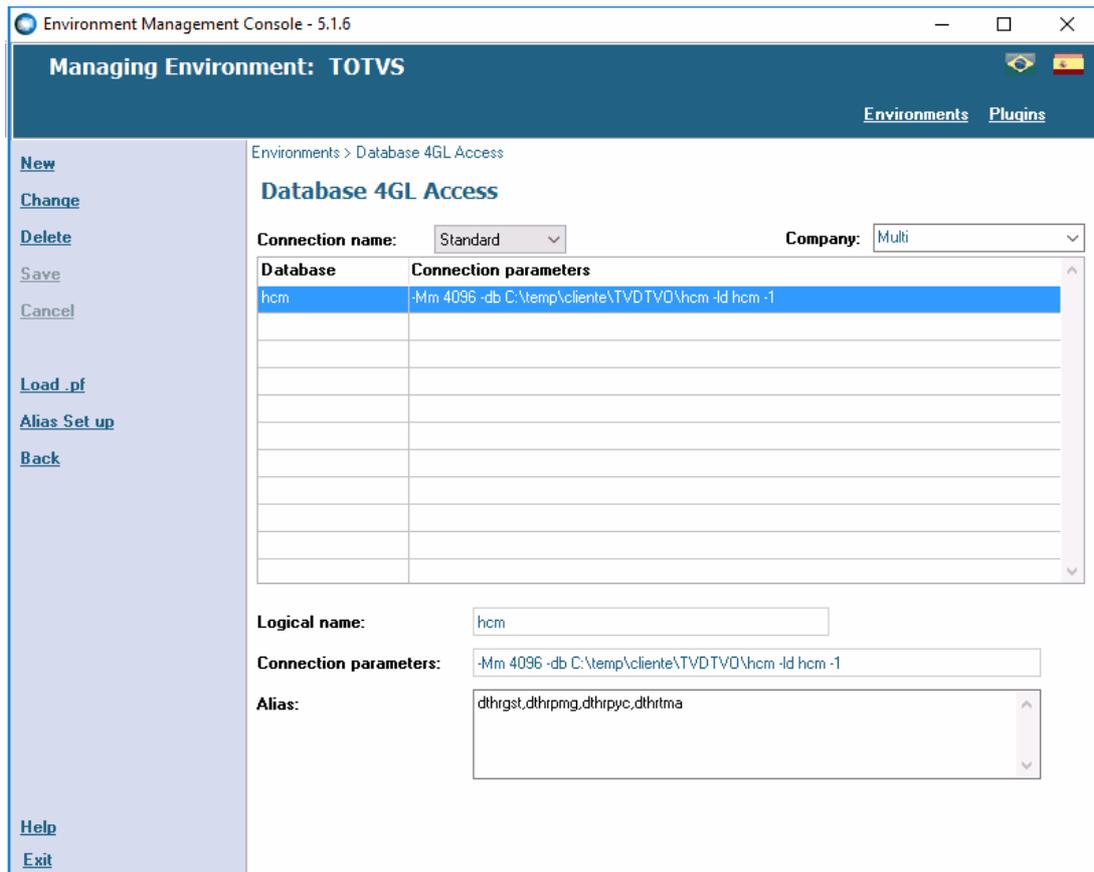
Use the "Import Connection Parameters" to import the 4GL connection data to the databases through PF files and Alias. When you click the button, select the company, indicating the PF file (.pf) and the Alias source file.

If the Progress OpenEdge database has database level security, select this option and indicate the user and password to be administrator of all databases used in the process. If a database also has a dtauthkey applied, you need to apply the rcodekey to the data directory folder programs used in the process.

After filling out all the data, click button "Import connection parameters". At this point, the console tests the connection to the databases configured in PF and registers them to the company selected. Databases with connection problems are displayed red. You can choose to register parameters for this database or to delete it, through option "Delete database selected". Do not delete the connection to a database, unless TOTVS support explicitly recommends it.

Notes on Multi and Mono-Company database connections:

For Multi-Company environments, in company "Multi" select the PF of one of the companies, even if the mono-company databases are also configured in such PF. In the other companies, import the PF of the company at issue. During the update process, the console automatically identifies whether the databases are multi or mono-company and runs the stages as needed.



Use the "SQL Database Access" screen to enter the SQL connections to the environment databases.

Progress Environment:

Use option "SQL Database Access", to register the databases that have SQL access only. These databases are used by JBoss and are not connected by PF file. You can identify the connection parameters for these databases through the database load script (-ServerType SQL).

Enter the database name in field "New database" and click "Add database". Register the database connection parameters requested onscreen (Database name, Server host, SQL connection port, User and password). The user entered must have DBA permission in the database. For this reason, we recommend you use the "sysprogress" user. At each parameter entered, click "Save connection information" to correctly register the parameter. It is important to register all databases with SQL access.

The databases with SQL access are listed below:

SQL Server Environment:

For environments with SQL Server databases, use option "SQL Database Access" to register the SQL Server database connection information. When you import connection parameters on the "4GL Database Access" screen, the SQL Server database connection data are automatically registered.

If parameter "Sqlcmd Directory" is blank, enter the directory where the "sqlcmd.exe" executable is found in the computer running the Environments Management Console. To register this parameter for all databases, select one of the databases registered, enter the parameter value and select button "Save information for all databases". Thus, the parameter selected is copied to all configured databases.

Important: The conversion log displays the SQL access database connection information. To protect the connection information (as user and password, for example), configure the console directory security so only authorized users can access the log.

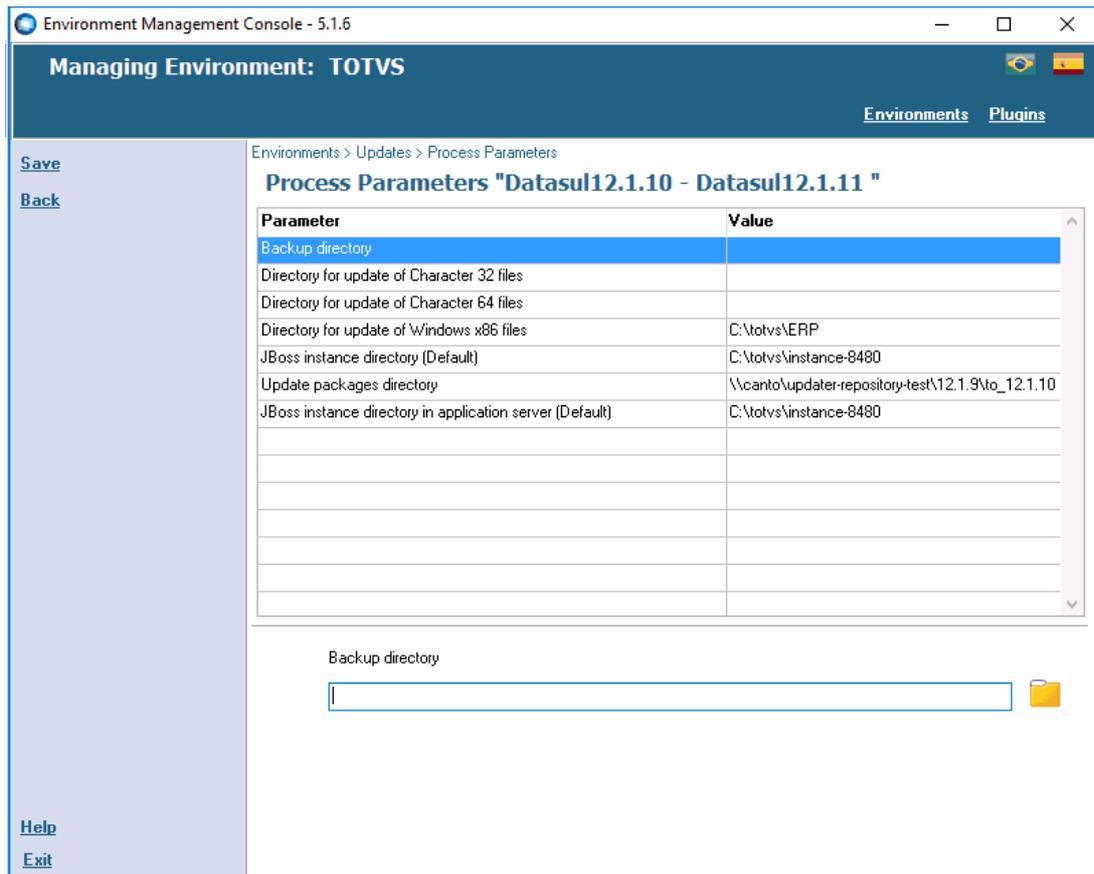
1.2.4 2.4. Available Updates

In this option, when clicking button "New", a new screen is opened to download the package according to environment to be updated or converted, where the field options on screen are displayed as the selected updated type, and it you can filter by Update, Conversion, Concepts Unification and Plugin. After downloading, you can view the package on console main screen.

Important that at this moment, the machine has access to Internet.

Below, some console update types:

1. Console update, generally, there is a description of improvements for new version beside.



WARNING: The Jboss and AppServer Progress service must not be running while updating Programs and Environment, at risk of not updating all Jboss files and configurations correctly.

This console version is ready to update Progress and Java/Flex binaries. See below the instructions for correctly filling out the fields on the "Programs and Environment" screen.

Backup Directory: Enter a directory for backing up files edited in the update process. If you do not fill out this parameter, the backup process will not run.

Example: c:\totvs\datasul\backup11.5.10

Directory for updating Character 32 files: Enter the root of the Character 32 file directory. If you do not fill out this parameter, Character 32 files will not be updated.

Example: c:\totvs\datasul\dts11510pgs\ERP

Directory for updating Character 64 files: Enter the root of the Character 64 file directory. If you do not fill out this parameter, Character 64 files will not be updated.

Example: c:\totvs\datasul\dts11510pgs\ERP

Directory for updating Windows x86 files: Enter the root of the Windows x86 file directory. If you do not fill out this parameter, Windows x86 files will not be updated.

Example: c:\totvs\datasul\dts11510pgs\ERP

Jboss instance directory: Enter the directory of the Jboss instance to be updated. This directory must be accessible from the Environments Management Console. For environments in which Jboss is in Linux, you need to share the Jboss directory through a Samba service. If you do not correctly fill out this parameter, the instance will not be updated.

Example: \\servidor\datasul\dts11510pgs\ServidorAplicacao\jboss-4.2.3.GA\server\instance-8080

Update packages directory: Enter the directory of the update packages downloaded from the TOTVS Support Portal. This parameter is required. If you do not wish to execute this update stage, select option "Do not execute this stage" in the console.

Example: c:\totvs\datasul\pacotes

Directory of Jboss instance in application server: Enter the directory of the Jboss instance to be updated. You must fill out this field with the directory of the Jboss instance in the application server view. If you update Jboss, you are required to fill out this parameter.

Example: /datasul/jboss-4.2.3.GA/server/instance-8080

URL of access to the product: In this parameter, enter the url used to access the Datasul. Do not enter the access context, as "datasul" or "menu-html", the information goes up to the port number.

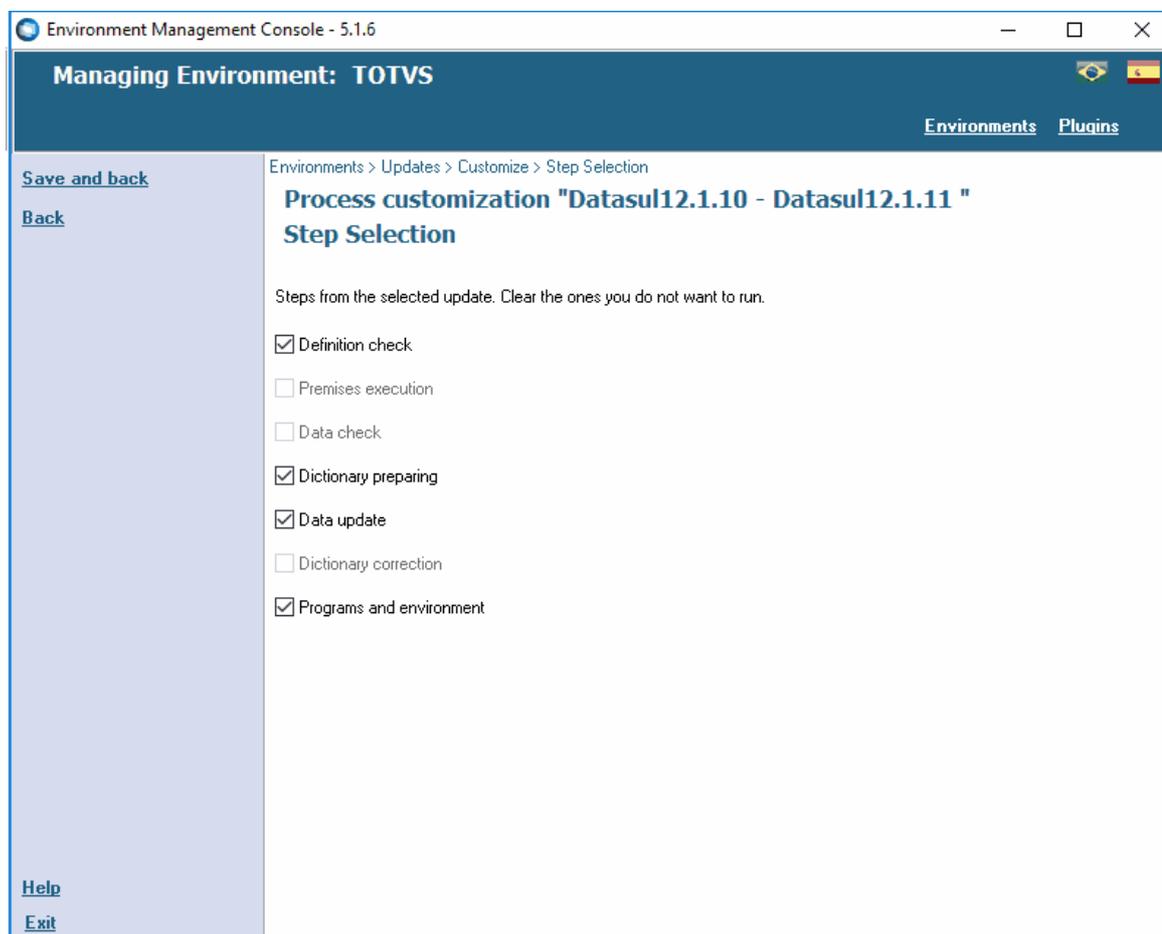
Example: http://meuservidor:8080

Notes:

- This parameter is **required** to continue the update
- This parameter will be used for the operation of the portals (CRM, Sales and MLA).

1.2.6 2.6. Customize Update

From version 4.2.0 of the Environments Management Console onwards, clicking "Customize" automatically shows the stages, already marked, to be executed in accordance with the package selected on the main screen.



The screenshot above shows the stages marked for the package downloaded. If a stage was already executed some other time, you must unmark it to not repeat the process. See below a short description of each stage:

- ✓ **Definitions checking** – validate whether the database dictionary connected to the console checks with the control files of the conversion/update package. If an error occurs at this point, you need to compare the definition of the table with the definition of directory files "...pacote-Atualizacao\CAX\"
- ✓ **Premises Execution** - valid only for the Concepts Unification package (cutoff period and history adjustment).
- ✓ **Data Checking** - validate table records. In case of divergence, the system creates a log

file with the problem found. Then, you must open a ticket for the module in charge of the table to aid correction, with the log file created by the console.

- ✓ **Dictionary Preparation** - once you adjust the data dictionaries, in case of error, the system creates a log file with the problem found.

Important: if you have already executed this stage at some point, you cannot execute it again, except when the database backup returns to repeat the conversion/update process.

- ✓ **Data update** - run the adjustment programs in the database to correct records. In case of divergence, the system creates a log file with the problem found. Then, you must open a ticket for the module in charge of the table to aid correction, with the log file created by the console.

- ✓ **Dictionary Correction** - once you adjust the data dictionaries, in case of error, the system creates a log file with the problem found.

Important: if you have already executed this stage at some point, you cannot execute it again, except when the database backup returns to repeat the conversion/update process.

- ✓ **Programs and environment** - valid only for Datasul 11, it updates Progress and Java programs, documentation and JBOSS binaries.

Requirements:

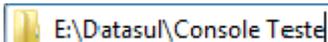
- JBOSS instance stopped during the update.
- 40Gb free space in the JBOSS instance directory.
- Run the console with one user with permission to save in the application server directory.
- To locally have the update packages found in the portal.
- If you run it at some point, you cannot run it again, except when the JBOSS instance backup returns.

1.2.7 2.7. Console Configuration

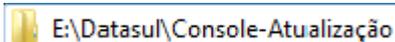
To avoid problems during console run, some necessary configurations are listed to avoid errors in process of environment conversion/update.

1. When unzipping console files, the directory can have accents or spaces between names.

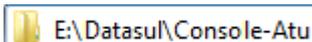
Wrong: because it has space in the directory name.

A screenshot of a Windows file explorer window showing the path E:\Datasul\Console Teste. The path is highlighted in blue.

Wrong: because it has accent in the directory name.

A screenshot of a Windows file explorer window showing the path E:\Datasul\Console-Atualização. The path is highlighted in blue.

Correct: it does not have accents and space between directory names.

A screenshot of a Windows file explorer window showing the path E:\Datasul\Console-Atu. The path is highlighted in blue.

2. As default, “conversao.ini” file of console is released with Progress path for “c:\dlc102b\”, where it must be changed according to customer environment installation. Example in the file, there is **DLC=C:\dlc102b**, this path involves the Progress installation root directory, where it must be changed for Progress installation root directory of the machine running the console.
3. Upon entering environment .pf file that is converted/updated, parameters -U and -P (user/ password) are removed, because these parameters must be registered on console database configuration screen, as it involves database security.
4. The “conversion.pf” file of console is release with parameter -Mm 4096, if the environment uses a different value, adjust parameter to avoid errors when connecting database.

1.2.8 2.8. Application Servers Configuration

Application servers are used to run processes in different servers of the one used to run Console. Irrespective of the selection entered on application servers configuration screen, each process stage questions whether the registered application servers are used. If application servers are not available for Console, this option is disabled on the following stages.

For verification processes of definition, data, premises, dictionary preparation and dictionary correction, only the first application server registered is used. So, you can connect to database in mono user mode for these processes. For the data update stage, all application servers registered are simultaneously used, dividing the programs among them.

The servers file must specify an input for each agent available in Appserver brokers. The Console considers an input in file is a server. The broker performs the balance between the Appserver agents.

If the application server is in one (or more) server different from the Console server, the following directories must be copied to make the directory of Console data for Appserver. If the application server is Unix/Linux, the copy must be through FTP to avoid problems with line terminator.

Directory	FTP Type	Condition using Appserver
cvp	Binary	Must always be copied
dir-dados\dat	ASCII	Must always be copied
dir-dados\conf dir-dados\latzconf dir-dados\actconf	Binary	If it runs verification of data or premises
dir-dados\prep	ASCII	If it runs the dictionary preparation
dir-dados\conv dir-dados\latz dir-dados\acerto	Binary	If it runs data update
dir-dados\corr	ASCII	If it runs the dictionary correction

If the server has Progress 64 bits installed, char64 directory must be copied in Console work directory, following the same rules above.

An Appserver broker must be configured with the following parameters:

- ✓ Operation mode: State-Reset;
- ✓ Work directory: Point to Console data directory copied for application server;
- ✓ Agent initialization parameters: -cpstream ibm850 -d dmy -numsep 46 -numdec 44 ;
- ✓ Pooling interval: Enter the number of agents the Appserver broker makes available. Each corresponding agent to a server for Console.

NOTIFICATION: No .pf file with database connection must not be indicated in the Appserver configuration. The Update Console automatically performs the database connection during the

update process run.

The agent initialization parameters can also contemplate the parameter `-h`, specifying the database number that is simultaneously connected by agents, and parameter `-Mm`, if the connection is in customer-server mode.

The Appserver brokers must be available during configuration of application servers in the Console. The Appserver agents that are not possible to be connected to are disregarded of the update and indicated in `.txt` conversion log.

1.2.9 2.9. Backup Directory

The environment backup was deployed in console 4.2.0 at update time, except now it copies the entire content of the directory entered in the console. In previous versions it only copied the files edited in the packages.

This procedure is valid for the "Programs and Environment" stage. Before updating the packages it will make one copy of the programs, configuration files and JBOSS binaries.

Requirements:

- JBOSS idle at update time.
- Run the console with an administrator user.
- You need to have at least 40gb of free space.
- Local backup directory to avoid file copying through network.

Important: if you leave the backup directory blank in the console register, this stage will be ignored in the update process and no backup will be made of programs, configuration files and JBOSS binaries.

See below an example of how the environment backup structure will become, in accordance with the backup directory entered in the Environments Management Console.

- `<dir_bkp_informado>\erp` - copies everything from the folder entered as "Directory for updating Windows x86 files".
- `<dir_bkp_informado>\erp32` - copies everything from the folder entered as "Directory for updating Character 32 files".

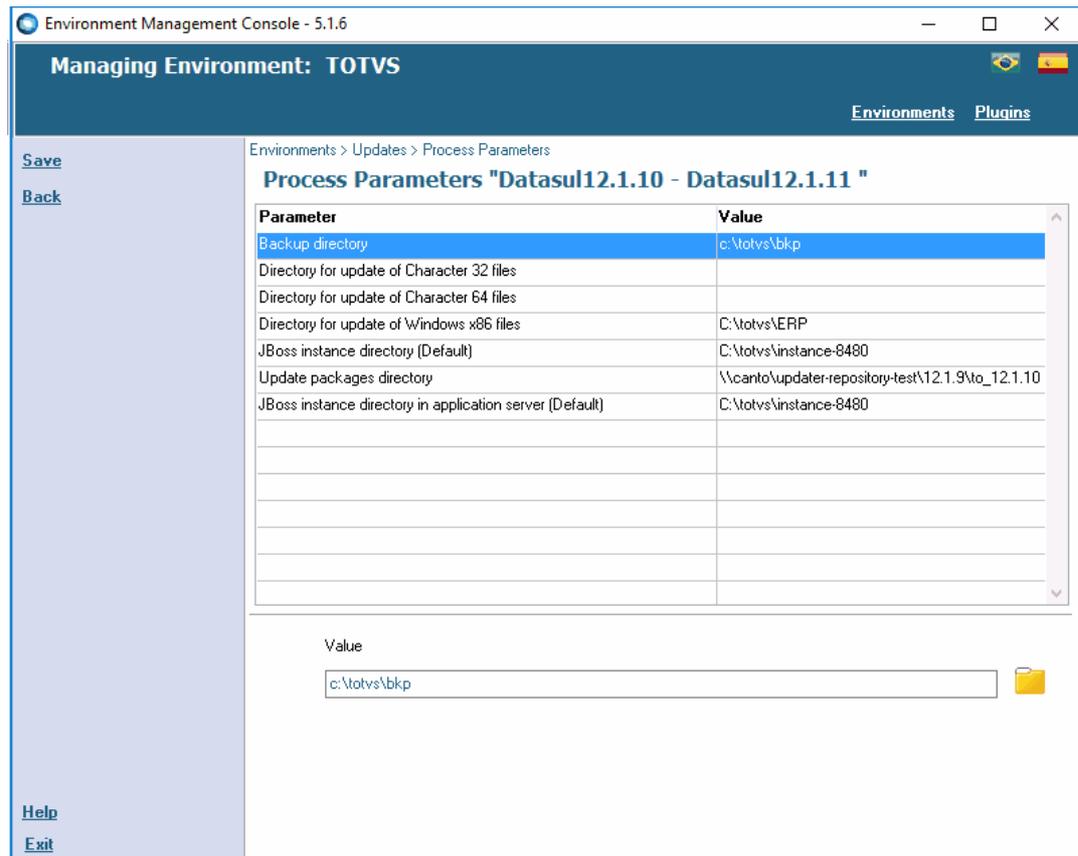
- **<dir_bkp_informado>\erp64** - copies everything from the folder entered as "Directory for updating Character 64 files".
- **<dir_bkp_informado>\instance-xxxx** - copies everything from the folder entered as "JBOSS instance directory".

By default, the Datasul 12 media installs the programs in the structure below, creating the folders CHAR32 and CHAR64 within each Datasul 12 directory.

Description	Path
Programs root directory	...\ERP\
X86 programs directory	...\ERP\ems2\
CHAR32 programs directory	...\ERP\ems2\char32
CHAR64 programs directory	...\ERP\ems2\char64

If you keep this structure in the environment, enter the root directory in the console register, because the entire content of the directory will be copied.

On the screen below, the same directory was entered for programs X86, CHAR32 and CHAR64; thus, when the console checks that the same directory is used, it backs up the entire content only once.



This procedure is important because if a problem occurs while updating "Programs and Environment", you can use the directories to revert the backup of the environment.

1.3 3. Plugins

Programs that enhance routines related to the conversion or updating of products Access the option to download Plug-ins through menu "Plug-ins", at the top right hand corner of the Environments Management Console.

Environment Management Console - 5.1.6

Managing Environment: TOTVS

Environments Plugins

Download
Download all
Stop
Back

Plugins > New

Update download

Customer: [Why enter these data?](#)

Contact E-mail:

Updating type:

Update	Package Release	Size
checksum	0 23/05/2014	1 Kbytes
tblPart	0 28/05/2014	21 Kbytes
collation	0 07/08/2014	33 Kbytes
verificaEsp	0 22/09/2014	757 Kbytes
importador-gen-logs	0 26/01/2015	60 Kbytes

Package content:
Plugin para validação da integridade de arquivos.
Pode ser utilizado para calcular hashes MD5 de qualquer arquivo, porém possui uma opção para conferir os arquivos ZIP dos pacotes de atualização do produto Datasul.

Help
Exit

1.3.1 3.1. Logs Generic Importer

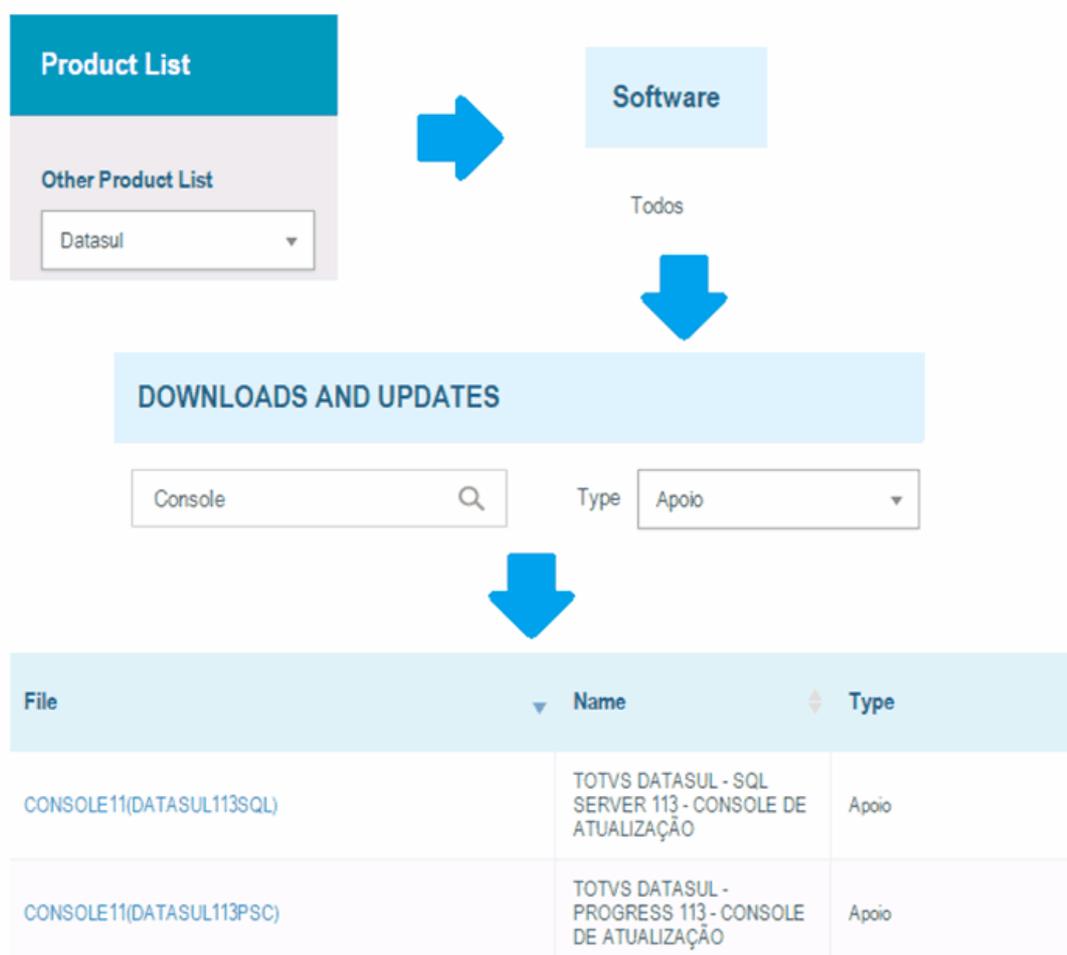
The Logs Generic Importer is a Console plug-in that helps viewing the errors and warnings occurred during the Data Check stage of some packages, such as Concepts Unification - Phase 1 (Cutoff Period and History Adjustment) and the EMS5 - International package. Use this plug-in to import log files created while running the Console. Depending on the situation that has occurred, you may be directed to the [e-Consultor](#) portal, which has information on how to solve the problem. You can export the information presented by the tool to a .csv file. In some cases, such as a lack of account translations (Concepts Unification), the file is created in the import model of the default product.

1.3.1.1 3.1.1. Plug-in Evolution

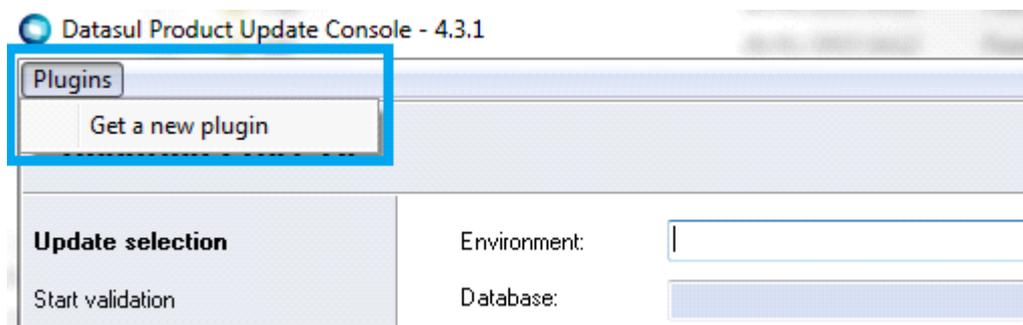
The Generic Logs Importer is an evolution of the Logs Importer plug-in of Concepts Unification released since the Datasul product release 11.5.4. As the EMS5 - International package requires its use, the plug-in was adapted as a more generic tool. This tool is available from release 12.1.4 of the Datasul product onwards.

1.3.1.2 3.1.2. How to access it?

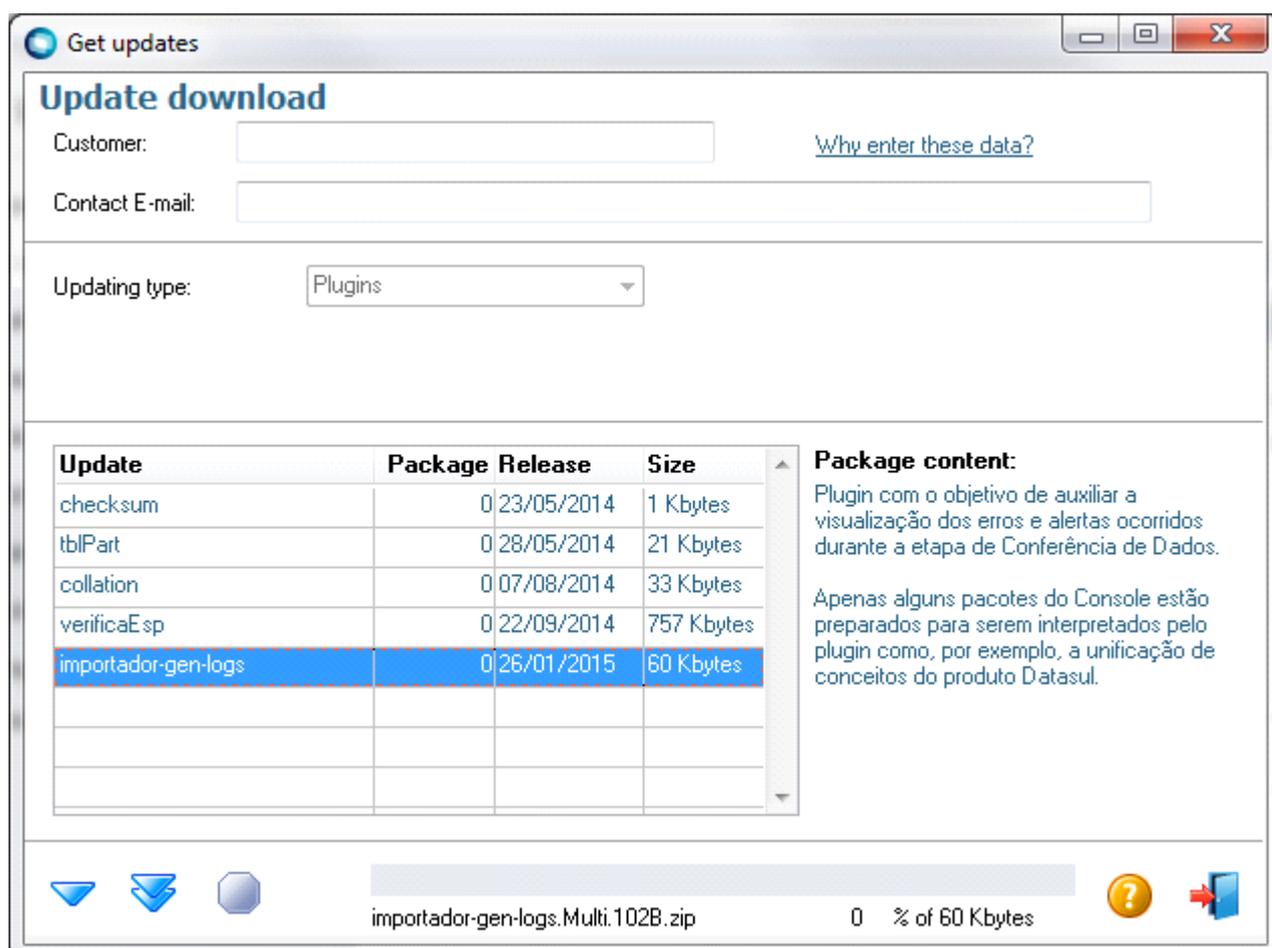
The Generic Importer of Logs is a plug-in of the Product Update Console, through which the access takes place. In the downloads page of TOTVS support (<https://suporte.totvs.com/download>), you can obtain the Console by using the following filters:



Upon opening the Console, find the access to the plug-ins on the top left corner. To get a new one, click "Get New Plug-in", as illustrated below:



Then you must select plug-in `importador-gen-log`.



1.3.1.3 3.1.3. How to Use It?

Log Analyzer - 1.01

Log Analyzer

Packages available for import
Unified Concepts (Period Cut/History adjust)

Enter the logs directory of the selected package
C:\temp\console\log-unificaconceitos-fase1-pc

Msg #	Quantity	Type
2013	7	Error
2014	3	Error
2029	6	Error

Account (&1)	Chart of Accounts (&2)	Ext OU (&3)	OU Type (&4)	Ext
30101008	TOTVS	1	998	EM:
30204006	TOTVS	1	998	EM:
42103000	TOTVS	1	998	EM:
90000199	TOTVS	1	998	EM:
90001049	TOTVS	1	998	EM:
90001079	TOTVS	1	998	EM:
90001089	TOTVS	1	998	EM:

Database	Table	Record ROWID	Comp Site	Ext BU	Ext Acct	Ext SubAcct or Ext C/Dt Trans
mgdis	conta-ft	0x0000000000046d41	1	1	30101008301	30/1

Issue Description

Account 30101008 not exist for Chart of Accounts TOTVS ! Check if parameterization of Account Composition for External Organizational Unit 1 of type 998 indicated in External Organizational Translation Matrix EMS2 is correct. Or register Account 30101008 for Chart of Accounts TOTVS in the Maintenance of Accounting Chart of Accounts. ID_MSG:2013(30101008|TOTVS|1|998|EMS2

Contains the parameters of the selected situation occurred

1. **"Packages Available for Import"**: select the package to which the logs you wish to import belong. Your package choice may affect how the information is displayed. You can only start the import process after selecting this information;
2. **"Help" button**: directs you to the location where the plug-in documentation is found;
3. **Exit button**: closes the plug-in;
4. **"Enter the logs directory of the package selected"**: in this field, enter the directory where the logs of the package selected in **"Packages Available for Import"** are found.
5. **"Import Logs" button**: starts the logs import process. An import feedback occurs and you can cancel the import process, if needed.
6. **"Clear" button**: Use this resource if you need to clear the information imported;
7. **"Situations Occurred" Browser**: displays all codes of errors and warnings occurred found in the logs. The following information is displayed: message number, quantity of times the situation

occurred and its type (warning or error). Moreover, each type has a specific highlight color.



ERROR



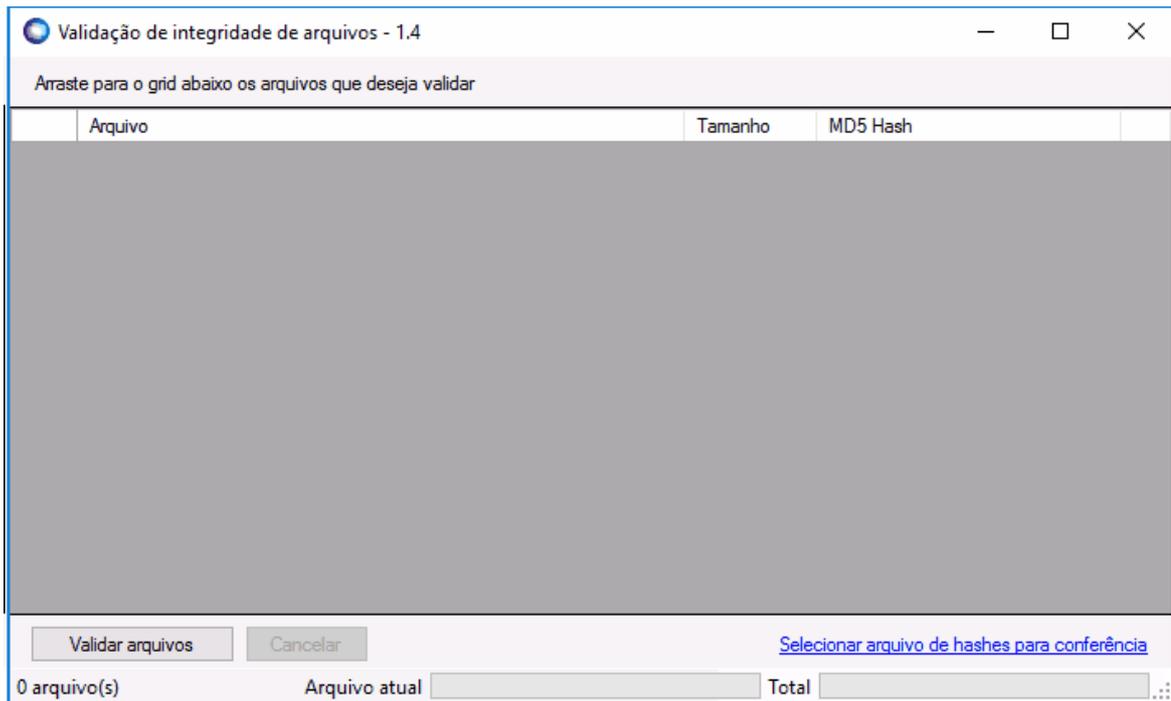
ATTENTION

8. the same error or warning may occur several times with different parameters. In this browser, in accordance with the error or warning selected in the **"Situations Occurred"** browser, a row is displayed for each distinct set of parameters.
1. **"Export" button of the "Situation Parameters" browser:** allows exporting data from the "Situation Parameters" browser to a .csv file. For some situations, such as error 2012 (Account Translation) or 2029 (Cost Center Translation), the information exported conform to the import defaults in the default product.
2. **Button "Select All" of the "Situation Parameters" browser:** allows automatic selection of all **"Situation Parameter"** browser rows. When you select package **"Concepts Unification (Cutoff Period/Historic Adjustment)"**, the records pertaining to your selection are displayed with that given situation in the **"Situation Occurrence Records"** browser.
3. **"Package Specific":** when no package is selected in the plug-in, a space dedicated to displaying specific package information is found below the browsers **"Situations Occurred"** and **"Situation Parameters"**. For example, upon selecting package **"Concepts Unification (Cutoff Period/Historic Adjustment)"**, a browser appears in which the records of a given selected situation are displayed.

"Situation Occurrence Records" browser: discloses the records of a given situation. It is displayed only upon selection of package **"Concepts Unification (Cutoff Period/Historical Adjustment)"**. Important information such as record rowid, fields used and values are displayed in this browser.
4. **"Export" button of "Situation Occurrence Records" browser:** it allows exporting data from the **"Situation Occurrence Records"** browser to a .csv file.
5. **"Description of Situation":** in accordance with the situation and the parameters selected, the message description (same as displayed in the Console log file) is shown in this field.
6. **"e-Consultant Portal Query":** click this button to access the e-Consultant portal, which focuses on the error at issue and displays the Kbases available for the situation. These Kbases are topics to help you correct the situation.

1.3.2 3.2. CheckSum

Plug-in to validate file integrity. Use it to calculate MD5 hashes of any file, though with an option to check the ZIP files of Datasul product update packages.



1.3.3 3.3. Tables Partitioner

Responsible for creating the ranges used for parallel execution of programs when converting Datasul products and unifying concepts, considerably reducing the time for this process.

We recommend you to first perform a dbanalysis of your environment to identify which are the largest tables, because you will obtain the highest gain by partitioning them.

MULTI-COMPANY ENVIRONMENT

Select this field when the environment has a multi-company structure, with database duplication. In this format, you need to separately create the ranges for each company (mono databases) you wish to to partition.

MULTI/MONO DATABASE CREATION

Field activated when you select option "multi-company environment". Use it to filter the mono/multi databases, so you can create files separately.

TABLES AVAILABLE

Displays a list with the tables you can partition.

CONNECTION

Enter the full string for connection to the database selected in the browser. You can use client-server, shared-memory or single-user connections.

RECORDS INTERVAL

Enter the quantity of records to be created in each range. The minimum limit for each range is 10,000 (ten thousand) record.

CREATE

Connects the database, in accordance with the parameters entered in field "connection", and creates the ranges based on the quantity of records entered. After creating them, the browser is updated with the quantity of ranges created.

DELETE

Deletes the creation selected.

HELP

Access the kbase with the plug-in documentation.

FILE

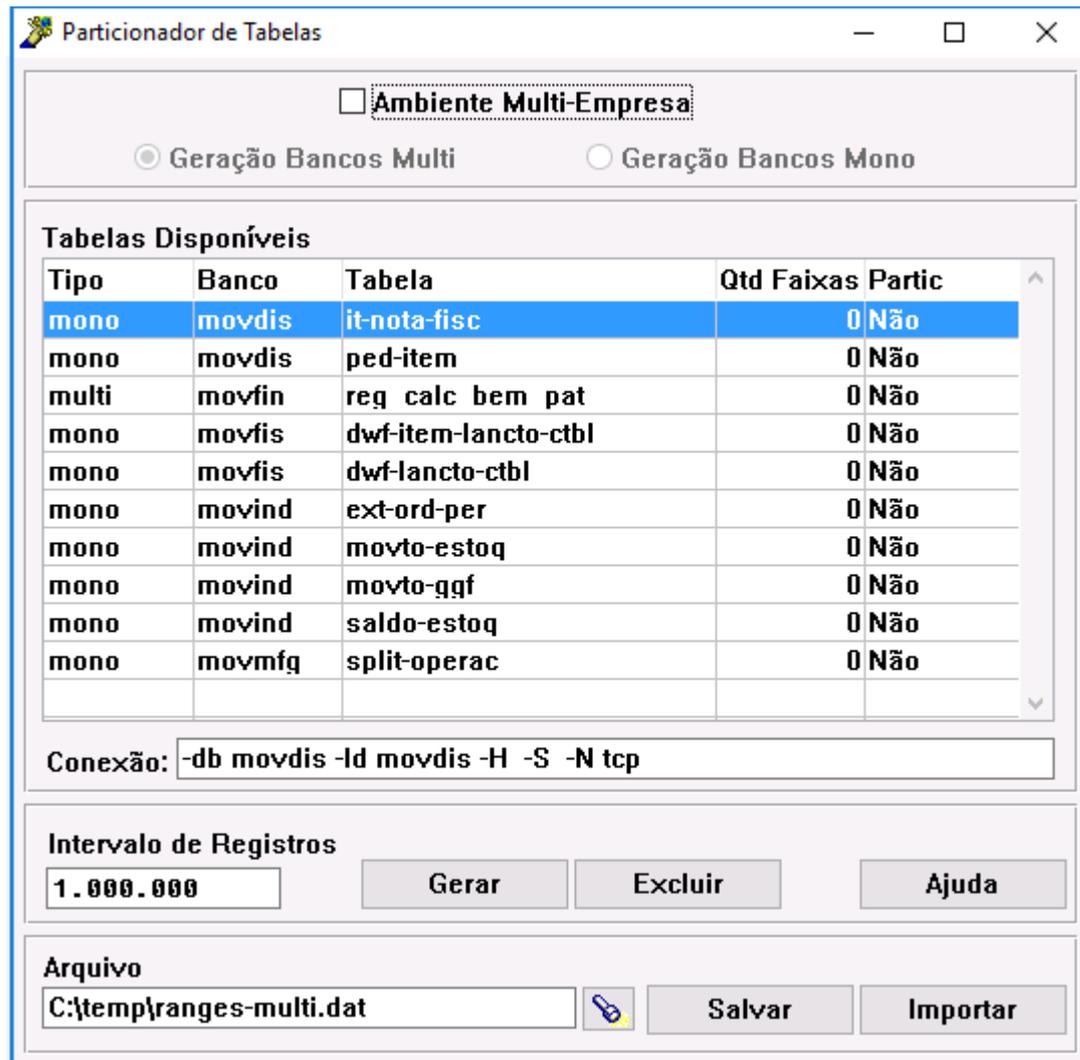
Enter the file destination where the ranges created will be saved, or the file path from which the ranges saved previously will be imported. It is important to change the file name in multi-company creations.

SAVE

Save the information created onscreen in a file. The file created is used later in the Environments Management Console.

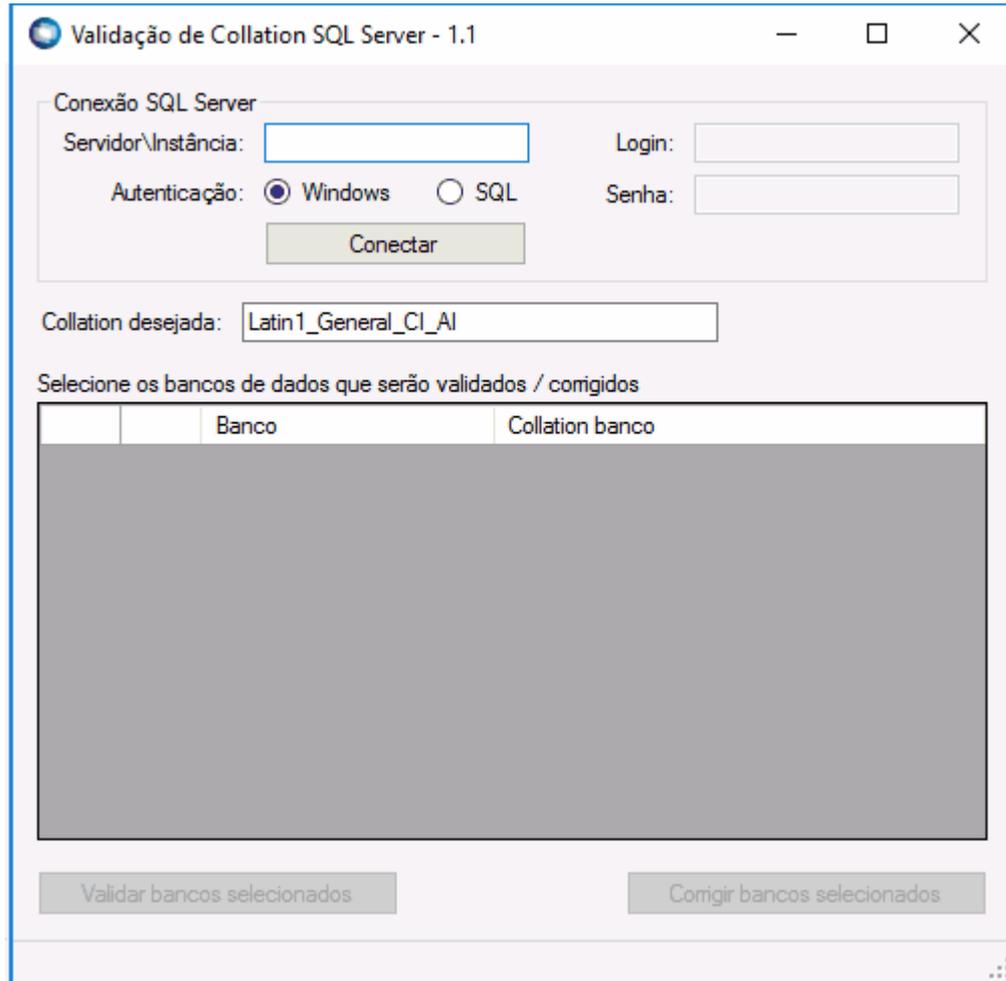
Import

Import to the screen the information previously created on file. All current information onscreen are deleted.



1.3.4 3.4. Collation

Plug-in to validate Collation databases and SQL Server tables for the Datasul product. Aids the identification and resolution of Collation conflicts, which can cause errors in the conversion/update process or in product use.



1.3.5 3.5. Check Specifics

Plug-in to identify, prior to environment updating, which specific programs need to be recompiled. Responsible for validating the CRC of specific programs before updating the Datasul 11 product, thus allowing you to recompile in advance, reducing the occurrence of CRC errors in the production environment.

CUSTOMER/CONTACT E-MAIL

This information is optional and does not affect plug-in use.

DATABASE

Enter the database used with the Datasul product.

DATASUL TARGET PACKAGE

Enter to which package you are updating/converting the product. If you are in 11.5.10 and you upgrade to

11.5.12, for example, you can run the plug-in only once, entering in this field the final target update (11.5.12, in this example).

PROGRAMS PATH

Enter the directory where the specific programs are found.

ALIAS FILE

If you use a unified database, enter the path of the alias file (.p) used by the product.

The file must have only one alias per row and must not contain special characters as comments (*/***), for example.

LOG FILE

Enter the location where the file containing the execution result will be saved, entering which programs require recompilation.

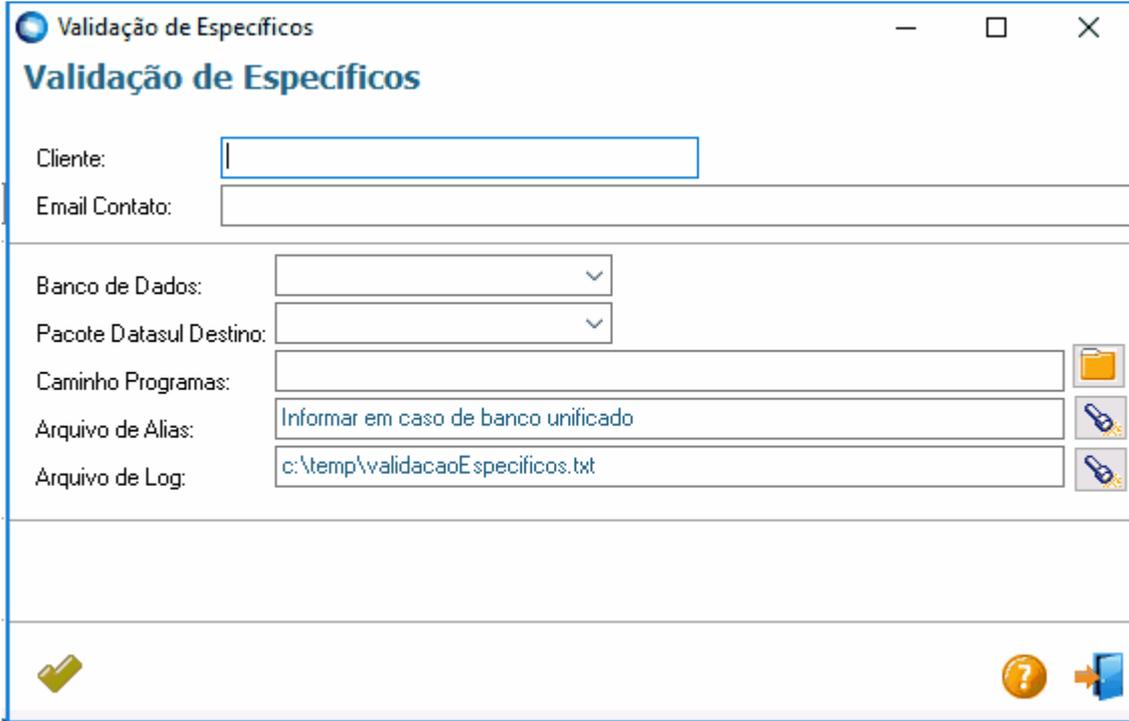
EXECUTE (green button)

starts the execution of program validations.

HELP (question mark button)

Access the kbase with the plug-in documentation.

Situation not considered in this validation: CRC index change only, with no changes to the table (few occurrences).

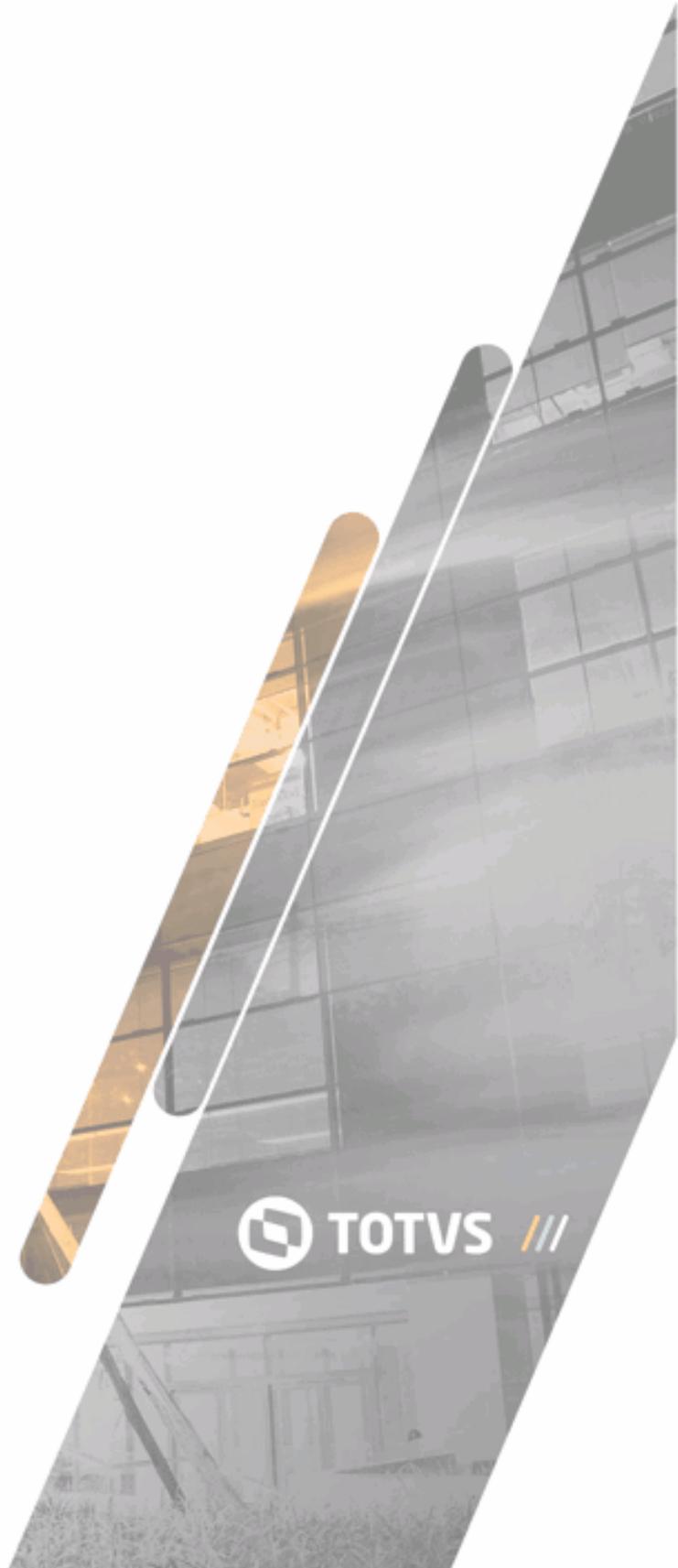


The image shows a Windows-style dialog box titled "Validação de Específicos". The title bar includes standard minimize, maximize, and close buttons. The main title "Validação de Específicos" is displayed in a large, bold, blue font. Below the title, there are several input fields and dropdown menus:

- Cliente:** A text input field.
- Email Contato:** A text input field.
- Banco de Dados:** A dropdown menu.
- Pacote Datasul Destino:** A dropdown menu.
- Caminho Programas:** A text input field with a folder icon on the right.
- Arquivo de Alias:** A text input field containing the text "Informar em caso de banco unificado" and a key icon on the right.
- Arquivo de Log:** A text input field containing the path "c:\temp\validacaoEspecificos.txt" and a key icon on the right.

At the bottom of the dialog, there is a green checkmark icon on the left, a yellow question mark icon in the center, and a blue arrow icon on the right.

2 Initial Considerations Update and Upgrade



2.1 1. Progress Version

From version 12.1.1 of Datasul onwards, media for Progress 10.2B and media for Progress 11.3 have been released, which the customer must download following the environment migration schedule.

- Customers using Progress 10.2B must apply service pack 8 and FIX 050 (10.2B.0850).
- **Customers using Progress 11.3 must apply service pack 3 and FIX 027 (11.3.3.027).**
- **Customers using Progress 11.5 must apply service pack 1 and FIX 010 (11.5.1.010).**
- Customers using Progress 11.6 must apply service pack 1 (11.6.1).

IMPORTANT: TOTVS will promote the update of the version used in compilation of TOTVS V12 from OpenEdge® 11.3 to OE 11.6.1 on October 2016, and it is applicable to all customers of Datasul line who use any OE.11.x version.

Therefore, customers who wish to migrate to Progress 11 must request from TOTVS Services Central (CST) the Progress 11.6 version and thus avoid future version updates.

2.2 2. JAVA Version

WARNING: to perform the JBOSS load, use the JAVA VM issued by Oracle.

- From Datasul 12.1.7 onwards, the minimum JAVA version to load the JBOSS service is 1.7.75, as some implementations only work with this version or above, for as long as you stay in version 1.7 of JAVA.
- If the server has a 64 bit operating system, you can use a 64 bit version of JAVA to use the available server resources.
- Workstations can use JAVA version 1.8.

2.3 3. Enable Progress 64Bit Sequences

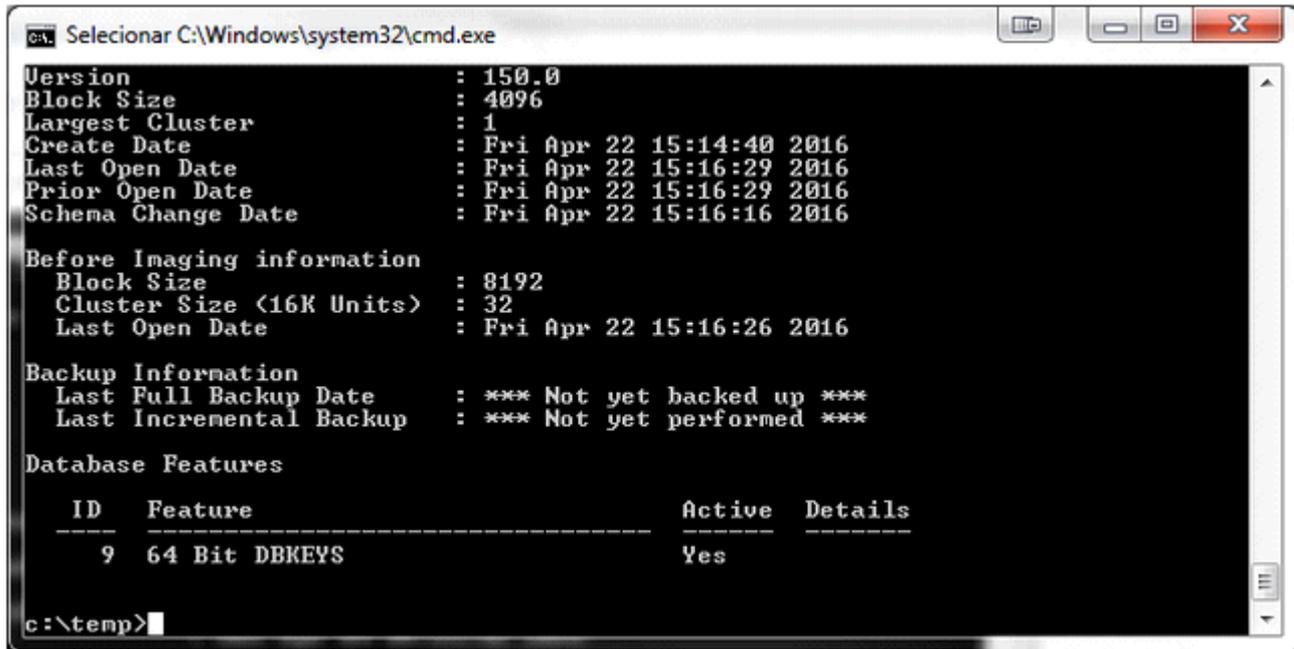
The database, when created with a version below Progress 10.2B, lacks a feature called "**64 Bit Sequences**", so you can only create 32 bit sequences.

To meet the needs of Datasul 12 sequence definitions, you must activate this feature to avoid errors while creating objects.

- With the command below, you can check whether the enabled feature is found in the database, using the PROENV of Progress.

proutil nome-banco -C describe

In the example below, the feature is not enabled in the database.



```

C:\Windows\system32\cmd.exe
Version                : 150.0
Block Size             : 4096
Largest Cluster       : 1
Create Date            : Fri Apr 22 15:14:40 2016
Last Open Date        : Fri Apr 22 15:16:29 2016
Prior Open Date       : Fri Apr 22 15:16:29 2016
Schema Change Date    : Fri Apr 22 15:16:16 2016

Before Imaging information
Block Size             : 8192
Cluster Size (16K Units) : 32
Last Open Date        : Fri Apr 22 15:16:26 2016

Backup Information
Last Full Backup Date  : *** Not yet backed up ***
Last Incremental Backup : *** Not yet performed ***

Database Features

  ID  Feature
-----
   9  64 Bit DBKEYS
                        Active  Details
                        Yes

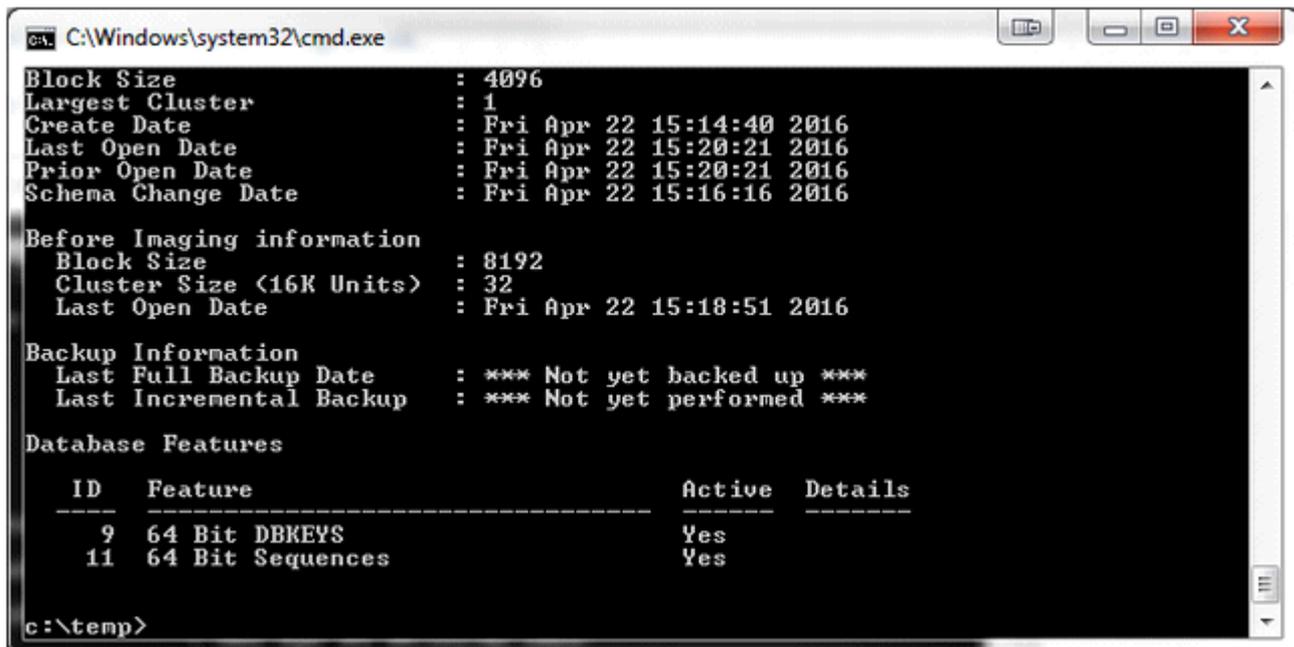
c:\temp>

```

- To enable the feature, run the command below in the database, using the PROENV of Progress.

proutil nome-banco -C enableseq64

When you check it again, the feature must appear as enabled.



```

C:\Windows\system32\cmd.exe
Block Size             : 4096
Largest Cluster       : 1
Create Date            : Fri Apr 22 15:14:40 2016
Last Open Date        : Fri Apr 22 15:20:21 2016
Prior Open Date       : Fri Apr 22 15:20:21 2016
Schema Change Date    : Fri Apr 22 15:16:16 2016

Before Imaging information
Block Size             : 8192
Cluster Size (16K Units) : 32
Last Open Date        : Fri Apr 22 15:18:51 2016

Backup Information
Last Full Backup Date  : *** Not yet backed up ***
Last Incremental Backup : *** Not yet performed ***

Database Features

  ID  Feature
-----
   9  64 Bit DBKEYS
  11  64 Bit Sequences
                        Active  Details
                        Yes
                        Yes

c:\temp>

```

2.4 4. JBOSS Parameters

With the release of version Datasul 12.1.20 must be done manually setting the run.bat/run.conf file that contains the configuration of the JBOSS.

The environment administrator must execute the procedure below:

- Stop JBOSS.
- Edit file ...\\ServidorAplicacao\\jboss-4.2.3.GA\\bin\\run.bat (Windows) or ...\\ServidorAplicacao\\jboss-4.2.3.GA\\bin\\run.conf (Linux)
- Insert the parameter as the operating system,;

Windows

```
rem JVM encoding parameters
set JAVA_OPTS=%JAVA_OPTS% -Dsun.jnu.encoding=UTF-8 -Dfile.encoding=UTF-8
```

Linux

```
# JVM encoding parameters
JAVA_OPTS="$JAVA_OPTS -Dsun.jnu.encoding=UTF-8 -Dfile.encoding=UTF-8"
```

- Start JBOSS.

2.5 5. Checking PROPATH

You need to perform a validation in the PROPATH defined for Datasul. Basically, you need to check whether all the directories defined exist physically. If they no longer exist, you need to delete them from PROPATH. This significantly impacts performance, because when it seeks the directory, it waits for the operating system to provide feedback notifying that they do not exist and only then it moves on to the next directory.

2.6 6. SRCADGER Connection

For a customer using Plan Management, you need to identify whether the JBOSS configuration file has the SRCADGER database connection, to avoid errors while using Plan Management.

Find this configuration file in the directory of the JBOSS instance in ...\\ServidorAplicacao\\jboss-4.2.3.GA\\server\\instance-8x80\\deploy\\named in accordance with the environment database.

Example:

- progress-ds.xml - Progress database
- oracle-ds.xml - Oracle database
- mssql-ds.xml - SQL Server database

1. Progress database content:

```

<local-tx-datasource>
  <jndi-name>srcadger</jndi-name>
  <connection-url>jdbc:datadirect:openedge://<SERVIDOR-BANCO>:<PORTA-SQL>;
databaseName=srcadger</connection-url>
  <driver-class>com.ddtek.jdbc.openedge.OpenEdgeDriver</driver-class>
  <user-name>pub</user-name>
  <password>pub</password>
  <metadata>
    <type-mapping>PostgreSQL 7.2</type-mapping>
  </metadata>
  <min-pool-size>1</min-pool-size>
  <max-pool-size>30</max-pool-size>
</local-tx-datasource>
<local-tx-datasource>
  <jndi-name>ErpDS</jndi-name>
  <connection-url>jdbc:datadirect:openedge://<SERVIDOR-BANCO>:<PORTA-SQL>;
databaseName=srcadger</connection-url>
  <driver-class>com.ddtek.jdbc.openedge.OpenEdgeDriver</driver-class>
  <user-name>pub</user-name>
  <password>pub</password>
  <metadata>
    <type-mapping>PostgreSQL 7.2</type-mapping>
  </metadata>
  <min-pool-size>1</min-pool-size>
  <max-pool-size>30</max-pool-size>
</local-tx-datasource>

```

- Substitute value <SERVIDOR-BANCO> by the IP or server name of SRCADGER database.
- Substitute value <PORT A-SQL> by the SQL port loaded for the SRCADGER database.

2. Oracle database content:

```

<local-tx-datasource>
  <jndi-name>srcadger</jndi-name>

```

```

        <connection-url>jdbc:oracle:thin:@<SERVIDOR-ORACLE>:1521:<INSTANCIA-
ORACLE></connection-url>
        <driver-class>oracle.jdbc.driver.OracleDriver</driver-class>
        <user-name>srcadger</user-name>
        <password>srcadger</password>
        <exception-sorter-class-name>org.jboss.resource.adapter.jdbc.vendor.
OracleExceptionSorter</exception-sorter-class-name>
        <metadata>
            <type-mapping>Oracle10g</type-mapping>
        </metadata>
        <min-pool-size>1</min-pool-size>
        <max-pool-size>8</max-pool-size>
    </local-tx-datasource>
<local-tx-datasource>
    <jndi-name>ErpDS</jndi-name>
    <connection-url>jdbc:oracle:thin:@ <SERVIDOR-ORACLE>:1521:<INSTANCIA-
ORACLE></connection-url>
    <driver-class>oracle.jdbc.driver.OracleDriver</driver-class>
    <user-name>srcadger</user-name>
    <password>srcadger</password>
    <exception-sorter-class-name>org.jboss.resource.adapter.jdbc.vendor.
OracleExceptionSorter</exception-sorter-class-name>
    <metadata>
        <type-mapping>Oracle10g</type-mapping>
    </metadata>
    <min-pool-size>1</min-pool-size>
    <max-pool-size>8</max-pool-size>
</local-tx-datasource>

```

- Substitute value <SERVIDOR-ORACLE> by the IP or name of server in which the Oracle instance is installed.

- Substitute value <INSTANCIA-ORACLE> by the name of Oracle instance in which the SRCADGER was created.

3. SQL Server database content:

```

<local-tx-datasource>
    <jndi-name>srcadger</jndi-name>
    <connection-url>jdbc:sqlserver://<SERVIDOR-SQLSERVER>;instanceName=
<NOME-BANCO>;databaseName=srcadger</connection-url>
    <driver-class>com.microsoft.sqlserver.jdbc.SQLServerDriver</driver-class>
    <user-name>totvs</user-name>
    <password>totvs</password>

```

```

    <metadata>
      <type-mapping>MS SQLSERVER2008</type-mapping>
    </metadata>
    <min-pool-size>1</min-pool-size>
    <max-pool-size>8</max-pool-size>
  </local-tx-datasource>
  <local-tx-datasource>
    <jndi-name>ErpDS</jndi-name>
    <connection-url>jdbc:sqlserver://<SERVIDOR-SQLSERVER>;instanceName=
    <NOME-BANCO>;databaseName=srcadger</connection-url>
    <driver-class>com.microsoft.sqlserver.jdbc.SQLServerDriver</driver-class>
    <user-name>totvs</user-name>
      <password>totvs</password>
    <metadata>
      <type-mapping>MS SQLSERVER2008</type-mapping>
    </metadata>
    <min-pool-size>1</min-pool-size>
    <max-pool-size>8</max-pool-size>
  </local-tx-datasource>

```

- Substitute value <SERVIDOR-SQLSERVER> by the IP or name of server in which the SQL Server was installed.
- Substitute value <NOME-BANCO> by the name of the database created for the SRCADGER.

2.7 7. Oracle user permissions

Some programs, such as TimeOut, when configured for an environment with the Oracle database, access the control tables (v\$session) and, depending on user permission level, may display the message "table or view does not exist".

Thus we recommend you create a ROLE, to grant the needed permissions to all Oracle users configured for Datasul.

```

CREATE ROLE "DATASUL";
GRANT ALTER SYSTEM TO "DATASUL";
GRANT CREATE SEQUENCE TO "DATASUL";
GRANT CREATE SESSION TO "DATASUL";
GRANT CREATE TABLE TO "DATASUL";
GRANT SELECT ANY DICTIONARY TO "DATASUL";
GRANT SELECT ANY TABLE TO "DATASUL";
GRANT SELECT ANY SEQUENCE TO "DATASUL";
GRANT SELECT ON "SYS"."ARGUMENT$" TO "DATASUL";
GRANT SELECT ON "SYS"."COL$" TO "DATASUL";
GRANT SELECT ON "SYS"."COM$" TO "DATASUL";
GRANT SELECT ON "SYS"."CON$" TO "DATASUL";

```

```
GRANT SELECT ON "SYS"."DUAL" TO "DATASUL";
GRANT SELECT ON "SYS"."ICOL$" TO "DATASUL";
GRANT SELECT ON "SYS"."IND$" TO "DATASUL";
GRANT SELECT ON "SYS"."LINK$" TO "DATASUL";
GRANT SELECT ON "SYS"."OBJ$" TO "DATASUL";
GRANT SELECT ON "SYS"."PROCEDURES$" TO "DATASUL";
GRANT SELECT ON "SYS"."SEQ$" TO "DATASUL";
GRANT SELECT ON "SYS"."SYN$" TO "DATASUL";
GRANT SELECT ON "SYS"."TAB$" TO "DATASUL";
GRANT SELECT ON "SYS"."TS$" TO "DATASUL";
GRANT SELECT ON "SYS"."USER$" TO "DATASUL";
GRANT SELECT ON "SYS"."VIEW$" TO "DATASUL";
GRANT "CONNECT" TO "DATASUL";
GRANT "RESOURCE" TO "DATASUL";
```

Once the creation is done, you must grant users the ROLE created. For example:

```
GRANT DATASUL TO EMS2CAD;
```

IMPORTANT: you need to grant permissions to all users configured in Datasul, basically all who were registered in program databases by company (btb\btb962aa.r).

3 Update for Datasul 12.1.20



3.1 1. Process Requirements

To start the update process for Datasul, the system must follow the source package version (between parenthesis) supported by update, according to definitions of the following table:

Source System	Target System
EMS 2.04 Comex (Expired 11.5.6)	Datasul 12.1.20
EMS 2.04 Progress (F91 BSO /10.1B F90 BSO)	
EMS 2.04 Oracle (F91 BSO)	
EMS 2.06B (C29)	
EMS 5.05 (Expired 11.5.8)	
EMS 5.06 (D20)	
EMS 5.06 (F67 – Localition Argentina/México)	
GP 1.00 (EMS505 Expired (11.5.10))	
GP 1.00 (EMS506 Expired (12.1.2))	
HCM 2.09 (Expired 11.5.4)	
HCM 2.10 (Expired 12.1.1)	
HCM 2.10 (Expired 12.1.1) SQL Server	

*** For this product conversion, contact Plans Management support.**

The console automatically lists the necessary routines for the environment update, according to source and target information selected in console, by link "New". Download all data directory listed by console.

After finishing the download, the console lists processes available for update.

The update process demands configurations in environment that must be observed before starting it. Check whether it has the following requirements:

- ✓ If the source system database is unified, this unification has to follow the standard specified by TOTVS, according to available documentation in the Customers Portal or with the Database Support.
- ✓ If the database is Progress, all database indexes are active. In case of questions in this definition, use the following command:

Command to generate the report with indexes information in Progress database:

```
proutil name-of-database -C idxanalys > name-of-database.idx
```

- ✓ Edit file name-of-database.idx generated. Search information "(inactive)". Activate inactive indexes with the following command:

Command to activate the indexes in Progress:

```
proutil name-of-database -C idxbuild
```

- ✓ If the database is Oracle, database owner must follow the standard specified by Datasul product. This standard was configured in **datasul.pf** file in the **scripts** directory of ERP. If you want to use other owners, the schema-holder deltas must be changed by customer.
- ✓ If the database is SQL Server, database owner must follow the standard specified by Datasul product. This standard was configured in **datasul.pf** file in the **scripts** directory of ERP.
- ✓ Datasul 11 system demands Progress minimum version is 10.2B07. If database is not in this version, convert it first to version 10.2B07 and later, update product;
- ✓ If Windows of computer running the Console has UAC (user access control) active, the Console must be run as administrator.

Console enables you to download and automatically updates. But, it is only possible if the computer running the Console has access to Internet.

We recommend some good practices to ensure update trustiness:

- ✓ If you use Progress OpenEdge database for store, enable files option greater than 2 Gbytes. If you use other database, confirm if tablespaces or file-groups are ready for database growing.

Command to enable extensions that are greater than 2 Gbytes in Progress Openedge:

```
proutil name-of-database -C enablelargefiles
```

- ✓ Backup database in points determined by the process.

- ✓ Some conversions demand routines before and after the standard update procedure. Follow information in the guideline.
- ✓ Some specific routines for the converted products demand import definitions in database by using resources of database management system.
- ✓ Never use paths UNC (\\servidor\compartilhamento) as console work directory.

3.2 2. End Considerations

The product update can have manual procedures previous or later the update run by update console. These procedures are described in the product updated guideline.

3.2.1 2.1. Database substitution in target system

NOTIFICATION: Not using all databases suggested by the product installation media may cause unexpected results in the system Just stop using any database if it is explicitly recommended by Datasul product technical support.

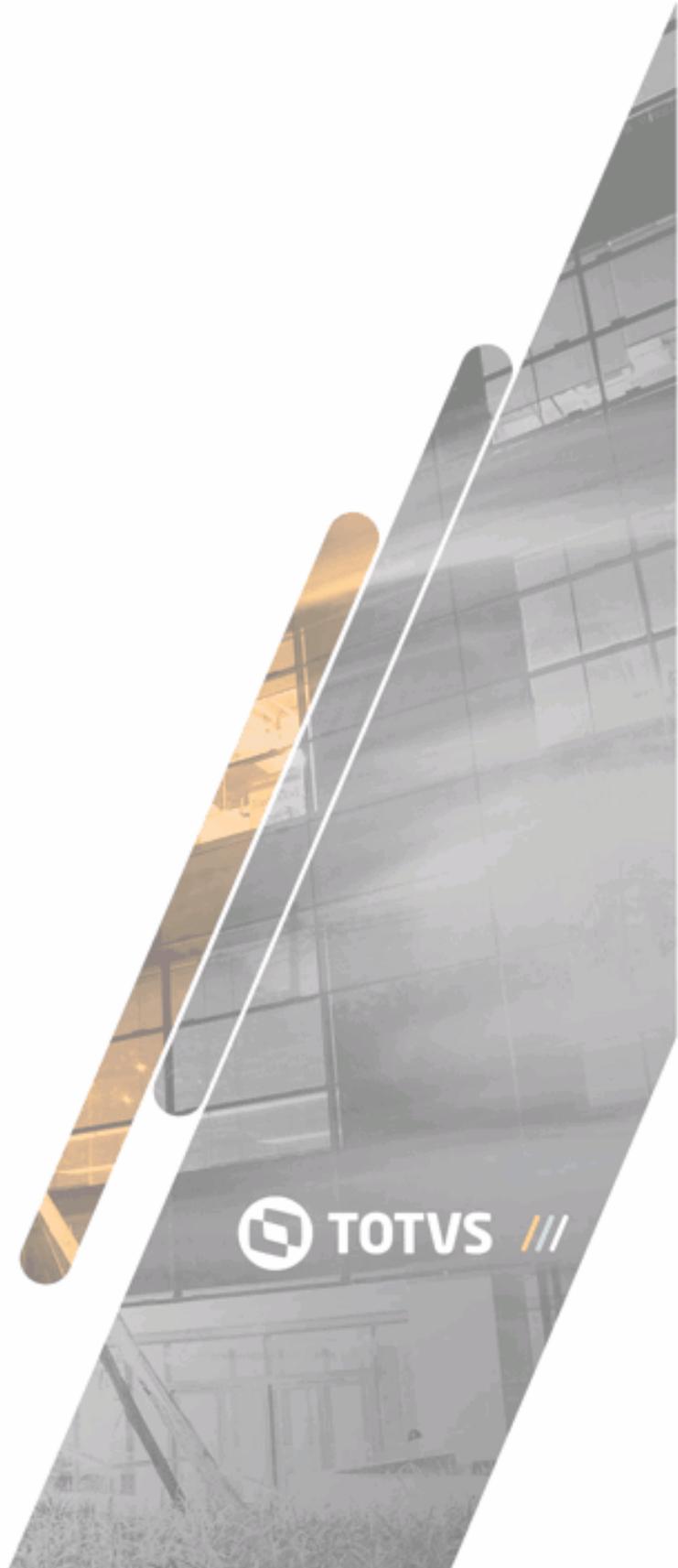
Datasul 12 is made by updated database, plus database corresponding to new functionalities available by programs media. The following Datasul system files must also be checked to contemplate converted database:

- ✓ Database connection .pf file: check if converted database is contemplated in the connection, as well as, specific database brought in the process;
- ✓ File **progress-ds.xml** in the JBoss: the "EMS2UNI" database is needed for Flex environment run. This file has connection parameters to this database and it may be unified to source database.
- ✓ Alias program, if database are unified.

Besides changing these files, check the "Company Database" and "Relationship Company x Users" in Datasul system.

The Console update performs the conversion of a system in each run. It's recommendable to finish the conversion of all source products before using Datasul 11 product in production.

4 Upgrade Ems 2.06b

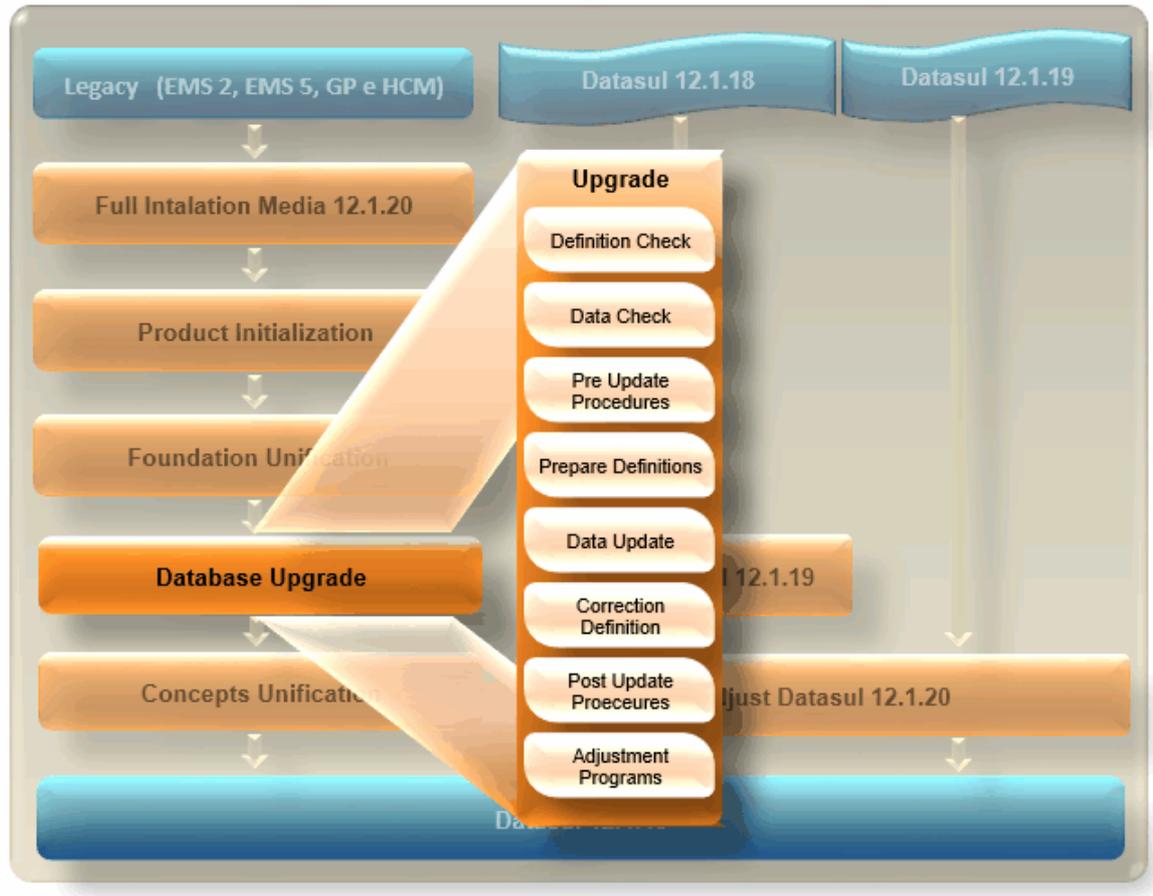


4.1 1. Upgrade Process

NOTIFICATION: Besides this document, query Guidelines of [Update for Datasul 12.1.20](#).

Information on process run is available there.

The adjust process converts the database of systems previous to Datasul 12.1.19 for Datasul 12.1.20. This process has several stages according image as follows:



The Update Console adapts the run of stages according to pre defined configurations in upgrade process. Therefore, the Console documents the run routine in the stage help. Routines not run by Update Console are documented in this guideline.

4.2 2. Pre Update Procedures

The product needs adjustments before updating changing the source database. Some of these procedures disable the source database to be used again by the system source version.

NOTIFICATION: From these processes, changes are performed in source database. Backup

database before start.

4.2.1 2.1. Foundation Unification

NOTIFICATION: This procedure aims at all customers in versions earlier than Datasul 10 and that want to migrate foundation files to Datasul 12. Not running this procedure implies the need to manually register Foundation data. Further information can be obtained through Foundation Unification Guideline.

4.2.2 2.2. Corporative Licenses

If it uses License Server with corporative license, check in the source system if the company CNPJ is equal to license CNPJ. Differences in this information derail converted Datasul 12 use.

4.2.3 2.3. Audit Trail

NOTIFICATION: This procedure is targeted only to customers using the Audit Trail module with option "Full Table".

From Datasul 12.5.0 version, the storing method of information audited for full tables changed. To keep data already audited compatibility, run **auapi008** BEFORE of database structure change.

Data that cannot be converted are deleted. Information related to audit 'field to field' keeps regularly working.

4.2.4 2.4. "MOVFRO" Database Security Repairing

NOTIFICATION: This procedure is targeted to all customers with fleet module with Progress OpenEdge database.

Due to "MOVFRO" database definition failure, table "mmv-movto-mdo" may be restricted in access permission. This restriction must be corrected before starting EMS 2 conversion.

It can be performed by Data Administration tool available in Progress OpenEdge. From option "Run Program" of the system, run program _admin.p. This program opens the Data Administration. Select MOVFRO database or corresponding one unified in "Database" – "Select working database" menu. Select menu "Admin" – "Security" – "Edit data security". Locate table "mmv-movto-mdo" and change permissions by substitution information "!,*" by "*".

4.2.5 2.5. EMS 2 Financial

NOTIFICATION: This procedure targeted to customers using controlling and financial modules in EMS 2 product. Customers using these modules in EMS 5 product do not need to this stage.

The EMS 2 product enables financial modules for use. But Datasul product enables financial modules for EMS 5 product now called "financials part".

Controlling and financials modules of EMS 2 cannot be automatically converted to Datasul 12. There are two alternatives to proceed with conversion:

- ✓ Alternative 1: install EMS 5.06 provisionally, then perform configuration for this version. Once configured, proceed with product regular conversion. The advantage of this alternative is that EMS 5.06 can read EMS 2 information what makes the conversion of financials part faster. However, a provisory installation is a step further for the process.
- ✓ Alternative 2: convert EMS 2 regularly. After conversion, configure the financial part in Datasul 12. Therefore, you do not need to perform provisory installation of another system version, but it takes longer time to bring information for Datasul 12 that cannot communicate with EMS 2.

Customers, in this use characteristic, must provide, along with Totvs branch serving it, a deployment service to determine the best alternative for its environment. Besides configuration of Financials part, this intermediate step already evaluates the configuration to ensure an integrated test among all modules, running a full routine, since orders/purchases to integrations with financial and accounting.

This configuration is a request to enjoy product functionalities and contributes with further productivity and organization of information in the new system.

After conversion process, in target base, run program "prgint/utb/utb800aa.p" to adjust base parameterization (indicating ERP integration must be with EMS5 Financials).

4.2.6 2.6. EMS 2 Production

NOTIFICATION: This procedure is targeted to customers using production control module in EMS 2 product. Customers not using this module do not need this stage.

To migrate EMS2 for Datasul 12, run program CP0332A where you must generate all transactions

of pending asynchronous reports in EMS2. It is valid only for customers using asynchronous report of production control module.

Important to perform procedure for all transactions including the ones with error in the environment, otherwise when converting for Datasul 12 can generated problems in application.

4.2.7 2.7. Accessory Components

NOTIFICATION: This procedure is targeted to all customers with MAF, MOE and MSC accessory components.

From Datasul product version 11, accessory component data are stored in a single database called "EMSDCA". This database must be created and the accessory customers of the source system must be unified to have converted definitions for Datasul 12.

For this, create a new database for source system named "EMSDCA" and import definitions of file **spp/emsdca-origem.df**.

TIP: After this procedure, you can use accessory component in source system using EMSDCA, while official conversion is not performed. Connect with old logic name or create an alias for this name.

In Oracle database "EMSDCA", you can also create two steps: create a schema-holder with "SHEMSDCA" name and import definitions of file **spp/shemsdca.df**. Then, create a new schema in Oracle called "EMSDCA", then import file **spp/shemsdca.sql** on this scheme.

At last, perform a data dump and sequence values related to MAF, MOE and MSC accessory components, then perform load on created EMSDA database. Use this EMSDCA database for update process for Datasul 12.

4.2.8 2.8. APS Version Anticipation

NOTIFICATION: This procedure is targeted to all customers with APS module in version later than 2.0 with EMS2.

Customers with APS module must check log of verification program **conf-db005.p**. In this log, whether APS version is anticipated is indicated.

In this case, APS “EMS2DBR” and “MOV2DBR” database are not connected by conversion process. When the update Console accuses the absence of database, they must be selected not to convert.

4.3 3. Post Update Procedures

NOTIFICATION: Database are converted only after the conclusion of these post updated procedures. Do not use database with incomplete update.

They must be run after changes performed by conversion process.

4.3.1 3.1. Users creation in database with JDBC access

NOTIFICATION: This procedure is only targeted to customers converting previous systems to Datasul for Datasul 12.

Some database in Datasul need JDBC access for Flex routines run. EAI and MGUNI database come from conversion and need to have users “sysprogress” and “pub” manually created. Standard passwords for this user are respectively “sysprogress” and “pub”. If you want to enter another password, change it in **progress-ds.xml** file of JBoss.

The same file can also be changed in case any database of the list is unified in another database. Therefore, change connection parameters, keeping *jndi* tab defining reference to database name.

4.3.2 3.2. APS Version Anticipation

NOTIFICATION: This procedure is targeted to all customers with APS anticipate version indicated in conf-db005 verification program.

Customers with APS anticipated version need to convert EMS2DBR and MOV2DBR database disregarded during the conversion process.

For this, import files **spp\deltaAPS201to300-ems2dbr.df** and **spp\deltaAPS201to300-mov2dbr.df**, in “EMS2DBR” and “MOV2DBR” database.

Customers with Oracle database, besides files listed above that must be imported in the schema-holder must also import files **spp\deltaAPS201to300-ems2dbr.sql** and **spp\deltaAPS201to300-mov2dbr.sql** in Oracle database.

4.3.3 3.3. Previous systems to Datasul to Datasul 12

Customers migrating to EMS 2 and HCM systems have two “EMS2UNI” databases that are unified between source databases. As Datasul unifies all products, only a copy of this database is connected.

If the customer has in its source only one of these systems (EMS 2 or HCM), “EMS2UNI” database, to be used in Datasul system, is the same used in the source system. If the customer has two systems, “EMS2UNI” from EMS 2 system must be used. “EMS2UNI” database of HCM system is disregarded.

If “EMS2UNI” of HCM is unified to other databases, import screen **ems2uni-hcm.df** located in directory **spp** of update Console. This delta deletes “EMS2UNI” database tables. Customers with Oracle databases must also run **ems2uni-hcm.sql** to delete “EMS2UNI” tables in Oracle.

In this case, if HCM has a company that does not exist in EMS2, this company must be manually registered in Datasul 12.

4.3.4 3.4. Concepts Unification Phase 1

Ems 2.06B needs to pass through process [unificaconceitos-fase1](#) before being used in Datasul 12.1.1.

Check the concepts unification guideline for information.

5 Upgrade EMS 5 International



5.1 1. Process summary

This package must be executed only for customers with the legacy TOTVS product, EMS 5.06, issued in languages Spanish or English, with or without localization.

This package aims to convert the database of the legacy TOTVS product, EMS 5.06, from Spanish or English to Portuguese. This is needed because the upgrade process from EMS 5.06 to release TOTVS 12 is prepared only for the database in the Portuguese language (refers only to indicative fields, as the contents of other fields remain in the original language).

To run this package you need to set the source language parameter. Then, the following stages are executed: Data Checking, Application of Deltas and Data Updating. Regarding the execution of programs (Checking and Updating), for all tables with indicative fields (those with predefined values), the values stored in Spanish or English are converted to Portuguese. The Data Checking stage only validates the data to anticipate any situation that may occur in the Data Updating stage, in which the due changes are made. In stage Application of Deltas of Preparation, the data dictionary structure, which is also in Spanish or English, is updated to the structure of the Portuguese data dictionary.

Details on this package follow in the topics below.



5.2 2. Requirements

Prior to executing the Product Updating Console with package EMS5 International, check the following points:

- ✓ The TOTVS legacy product, EMS5.06 must be in Spanish or English;
- ✓ If you have localization, check in the table below whether it is available in the target release:

Release	Available Localizations
12.1.20	Argentina (bancos: cad2loc, cad5loc, mov2loc e mov5loc)
	México (bancos: cad2loc, cad5loc, mov2loc e mov5loc)
	Chile (bancos: cad2loc, mov2loc)
	Colômbia (bancos: cad2loc, cad5loc, mov2loc e mov5loc)
	EUA (bancos: cad2loc, cad5loc, mov2loc e mov5loc)

Paraguay (bancos: cad2loc, mov2loc, cad5loc e mov5loc)

ATTENTION: this process is required for TOTVS legacy customers, EMS 5.06 in Spanish or English, and it must be executed prior to upgrading to TOVS 12..

5.3 3. Parameters

Package EMS 5 International inserts a parameter configuration screen in the update console.

Process Parameters

Installed updates that demand parameters: EMS 5.06 Internacional para EMS 5.06

Parameter	Value
Language Origin	English

Language Origin English

[Save](#)

5.3.1 3.1. Source language

Parameter that indicates the source language of TOTVS legacy, EMS 5.06. The options are: Spanish or English.

Default Value: Spanish

5.4 4. Data Checking

This stage aims to simulate the Data Updating process for the consistency of information.

Attention: All errors found in this stage must be corrected prior to running the Data Update process. You can execute this stage as many times as needed and it only checks the database, not making any changes.

When you run Data Checking, the records of all tables involved are processed and given consistency. The occurrence of an inconsistency can be due to test transfers, the utilization of specifics, or to other factors.

The programs aim to cover all table records with indicative fields and to validate whether the caption in each record has a corresponding caption in Portuguese, in a specific configuration file of the package. If any record has an indicative field caption not mapped in the configuration file, an error situation is generated. In these cases, you need to open a ticket for the support team to check whether this is a database inconsistency or an unmapped caption, thus solving the situation.

After the Data Checking becomes 100% error free, you can move on with the process.

5.5 5. Facilitator

We have created a new plug-in for the Update Console of the Product to help the process, mainly in the Data Checking stage.

5.5.1 5.1. Generic Importer of Logs

To view the errors and warnings occurred during the Data Checking process, there was a need to open all log files and to identify and correct the situations. The Generic Importer of Logs is a Console plug-in that helps you easily view and identify the errors and warnings occurred during the Data Checking process. For further details (how to access, utilization, etc.), refer to the documentation of this plug-in in Fluig community D@CAT, session Documents / Plug-ins / Generic Importer of Logs or to the Console Help.

5.6 6. Data Update

This stage aims to edit all tables with indicative fields, changing values from Spanish or English to Portuguese.

Attention: Backup your database before running this stage. If the Data Checking stage ran 100% error free and the Data Updating stage reports an error, contact TOTVS support and report the situation.

5.7 7. Post-update Procedures

After executing this package, you can proceed to upgrade to TOTVS 12 by executing the default package Upgrade from EMS 5.06 to TOTVS 12.

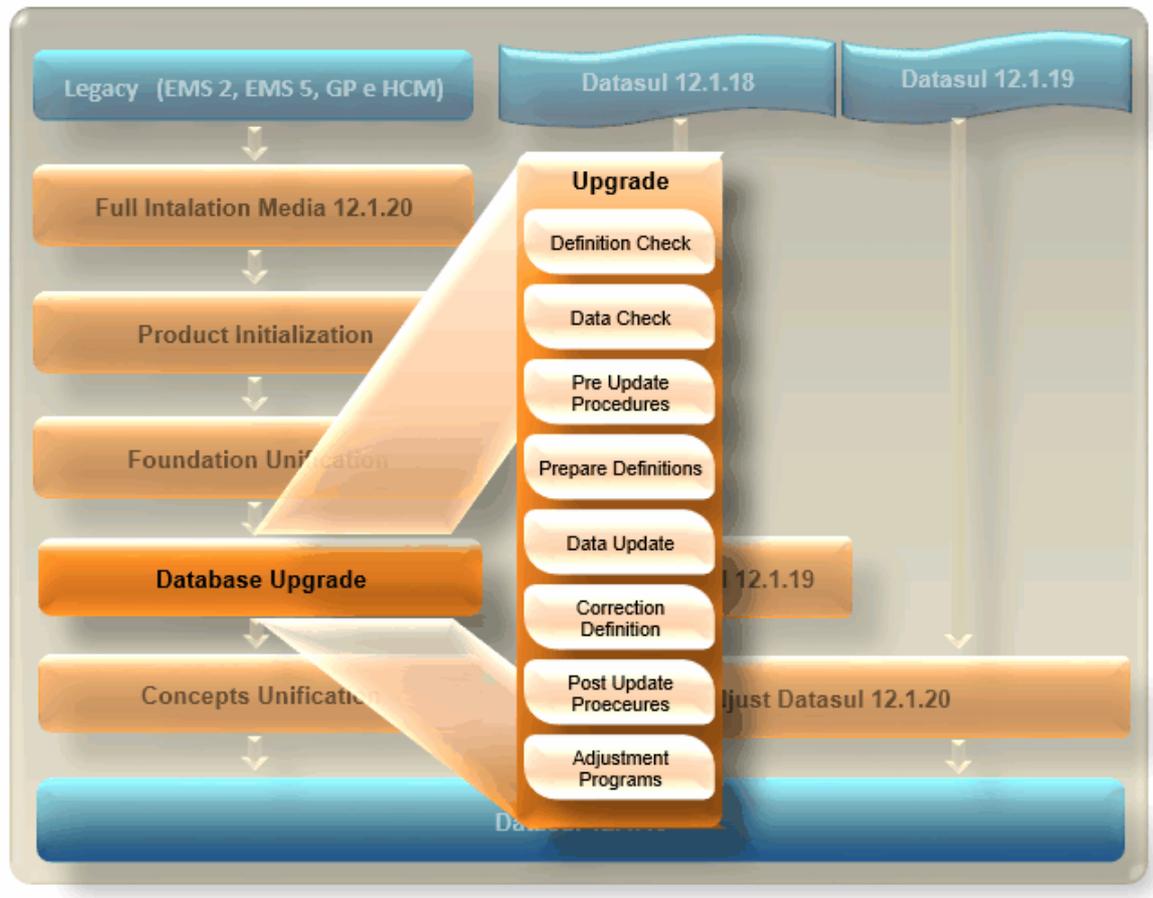
6 Upgrade Ems 5.06



6.1 1. Upgrade Process

NOTIFICATION: Besides this document, query Guidelines of [Update for Datasul 12.1.20](#). Information on process run is available there.

The adjust process converts the database of systems previous to Datasul 12.1.19 for Datasul 12.1.20. This process has several stages according image as follows:



The Update Console adapts the run of stages according to pre defined configurations in upgrade process. Therefore, the Console documents the run routine in the stage help. Routines not run by Update Console are documented in this guideline.

6.2 2. Pre Update Procedures

The product needs adjustments before updating changing the source database. Some of these procedures disable the source database to be used again by the system source version.

NOTIFICATION: From these processes, changes are performed in source database. Backup

database before start.

6.2.1 2.1. Foundation Unification

NOTIFICATION: This procedure aims at all customers in versions earlier than Datasul 10 and that want to migrate foundation files to Datasul 12. Not running this procedure implies the need to manually register Foundation data. Further information can be obtained through [Foundation Unification Guideline](#).

6.2.2 2.2. Corporative Licenses

If it uses License Server with corporative license, check in the source system if the company CNPJ is equal to license CNPJ. Differences in this information derail converted Datasul 12 use.

6.2.3 2.3. Audit Trail

NOTIFICATION: This procedure is targeted only to customers using the Audit Trail module with option "Full Table".

From Datasul 12.5.0 version, the storing method of information audited for full tables changed. To keep data already audited compatibility, run **auapi008** BEFORE of database structure change.

Data that cannot be converted are deleted. Information related to audit 'field to field' keeps regularly working.

6.2.4 2.4. EMS 5 Translation Matrix

In Datasul system, with a single *login*, the users have access to all products. To make it without loosing reference to company registered in each product, create a Translation Matrix for External Organization in EMS 5 (**prgint/utb/utb118aa**) if it exists.

The matrix is used to identify the organizational unit of EMS 5 corresponding to organizational unit of EMS 2 related to the user *login*. It is also used when the company is changed in Datasul system (procedure "Exchange Company User").

There must be at least one relationship record between the company of EMS 2 with company of EMS 5. The other ones are registered after the conversion.

The External Organization Translation Matrix must have the name "EMS2" and the "Organization Origin" must be EMS. If there already is a matrix called "EMS2", it is the official used in the integration

between the EMS 2 and EMS 5. In the matrix, all companies and sites used in EMS 2 must be registered as below:

- ✓ Organizational Unit Type: company/site used in EMS2.
- ✓ External Organizational Unit: EMS 2 Organizational Unit.
- ✓ Organizational Unit: EMS 5 Organizational Unit.

Other information (accounts matrix, cost center matrix and others) do not need to be identified in this moment.

6.2.5 2.5. EMS5 International - Database Translation

ATTENTION: This procedure refers only to customers with EMS5 in version 5.05 English or Spanish.

Before you start the migration process by using this package, you must run package "[EMS5 International](#)" to convert the Spanish or English database to Portuguese. Check the Guide of the package.

- Phase 1 Concepts Unification Guide for Datasul 12.1.20: you must change topic "Logs Importer of Concepts Unification" to "Generic Importer of Logs" and describe said topic as follows:

To view the errors and warnings occurred during the Data Checking process, there was a need to open all log files and to identify and correct the situations.

The Generic Importer of Logs is a facilitator that helps you easily view and identify the errors and warnings occurred during the Data Checking process. The Generic Importer of Logs interprets the logs in this package. For further details (how to access, utilization, etc.), refer to the documentation of this facilitator [Generic Importer of Logs](#).

6.3 3. Post Update Procedures

NOTIFICATION: EMS 5.06 conversion has post update procedures. Converted database are already used in target version when update is ended.

7 Unification of Datasul History Adjust Concepts



7.1 1. Summary of Unification Process of History Adjust Concepts

This package is run in TOTVS 12.1.20 Datasul Line environment, after the Concepts Unification process - Phase 1 (Cut-off Period). The aim of this package is to perform the adjust of records from previous transaction tables to the cut-off period indicated in the Concepts Unification - Phase 1 (Cut-off Period) package run. You must have TOTVS 12.1.20 environment for adjustment and parameterizations, if necessary.

Before starting the process through Update Console, check and run the requirement procedures.

The Update Console runs all stages for this package:

- ✓ Premises Verification;
- ✓ Data Verification;
- ✓ Data Update;

To improve performance of Verification of Data and Update of Data processes, there are optimization tips related to database connection, adjust of process parameters and configuration files that must be checked and applied.

Read carefully all Guideline topics.

NOTIFICATION: If the [Unificação de Conceitos – Fase 1 \(Cut-off Period\)](#) is not performed, so you cannot perform the History Adjust. This Guideline has business and technical considerations.

7.2 2. Requirements

Before running the Product Update Console with Concepts Unification - History Adjust package, check and perform some business procedures. **Related to integration EMS2 and/or HCM with Financials (EMS5):**

- ✓ **1st Headoffice External Organizational Unit:** the Headoffice OU is used in process whose code must be indicated in "Headoffice Translation OU" parameter.
- ✓ **2nd Translations of Companies and Sites of EMS2 and/or HCM:** for all companies and sites of EMS2 and/or HCM that have transactions of database and are affected by the Concepts Unification process must have respective translations registered in Headoffice OU;

- ✓ **3rd Rules of Accounts and Subaccounts Translation:** the accounts and subaccounts translation rules parameterized for companies and sites in Headoffice OU: Accounts and Composition Headoffice;
- ✓ **4th Translations of Ledger Account and consistencies of Accounts and Cost Centers:** If the Accounts Headoffice is used, all accounts with transactions with EMS2 and/or HCM must must have the translations registered in Accounts Headoffice. **Note:** during the process, the Translation file related to the External Account (With the subaccount in blank) is requested. This type of status refers to the tables using a determined rule where the subaccount definition or cost center can be determined only during transaction, that is, in the record, there is no valid cost center but an indication the cost center must be searched another way. With this, register the translation only for External Account without entering the subaccount, but it must point to respective Account in the Financials and any cost center (as, in this case, the Cost Center is not updated). **For example:** the HCM, has the employee Cost Center. The parameterized events in HCM have account and a cost center value or the indication that, during the transaction, the employee cost center must be used (In this case, the Cost Center value is: "xxxxxxx"). All records with employee account + cost center will only have account adjusted during the process and the cost center continues with value indicated as belonging to the employee. Supposing we have an account: "001" + cost center "xxxxxxx", must be a translation for the external account "001" (subaccount in blank) pointing to financials account: "000001" (uses Cost Center and it can be any value, as it is not used).

If Composition is used, you can check whether the Accounts and Cost Centers from positions related to Composition are registered in Financials;

- ✓ **5th Rule of Cost Center Translation with accounting and subaccounts purpose:** for each company considered in the Concepts Unification process, there must be a External Cost Center Headoffice registered. If there are EMS2 and/or translations using the cost center and/or only Subaccount, register translations in the respective External Cost Center Headoffice of the company. **Warn:** In EMS2, there are other concepts of Cost Center: productive, capacity. For these case, the cost centers are not changed. For tables with only Subaccount information, it is changed to financials cost center using the Cost Center Headoffice as well. In HCM, all cost centers are changed for Financials cost centers.

- ✓ **6th matriz-ccusto.dat Configuration File:** you must configure the matriz-ccusto.dat file that is located in the "dat" directory of this package. The file initially is in blank and must be edited through Text Editor. This file starts to indicated the Financials Company x External Cost Center Headoffice used for process of from-to of cost centers and/or subaccounts of EMS2 and/or HCM with Financials. For each company considered, it must have a row in this file indicating: "<Financials Company>" "<Cost Center Headoffice>". **Example:** The company considered in the process is company "1" (EMS2) pointing to company "001" (Financials). The Cost Center Headoffice was created with code "MCCUSTO" for company "001". Enter in matriz-ccusto.dat file: **"001" "MCCUSTO"**. **Warn:** After the last row of file, there must be a row in blank and the inverted commas used must be used in example (Use "" and not use ").

Note: during the run of this package by Update Console, some parameters are requested, such as, companies considered in process, ou translation headoffice, start and end period. The evaluation of verification and procedures are influenced by indicated parameters. Further details, check Parameters topic of this Guideline.

7.3 3. Optimization

NOTIFICATION: The tips displayed require technical knowledge in database.

The run time of Data Verification and Data Update stages is high depending on the size of database and process parameters (defining whether all records are affected or only from determined companies and transaction dates). For further performance, some tips are followed:

- ✓ We recommend you to configure the multiple agents of Appserver (Console Stage: Load Balance) to be used by Product Update Console and, then, several programs are simultaneously run. Note: configure where the database and the quantity of agents are located according to quantity of processors available in this machine.
- ✓ The tablas.dat file indicates all programs that are run from tables affected in the process. Each row of this file corresponds to a table, we recommend you to change this file first, in a way that corresponding rows to the greatest tables are in the beginning of the file to be run. Therefore, while some programs run during all process run time, other appservers run programs of smaller tables. This file is in the directory <directory of console>/

conceptsunification-phase1-ah/dat.

- ✓ Perform the connection of the right database in shared memory to avoid transfer of data through net.
- ✓ Disable the after-image in Progress database, or reduce the log level in other databases
- ✓ Define a cluster of 32 mbytes and a 16 kbytes block for before-image of Progress database.
- ✓ Load a Progress database with BIW, another APW for each Appserver available for process.
- ✓ Parameterize the load to have several buffers of database and before-image available (-B e -bibufs, respectively).

7.4 4. Parameters

The Concepts Unification process adds a parameters configuration screen to the update console. This screen configures parameters for process run, according to data stored in database.

TIP: The Console does not change the database on screen. It only reads information previously requested by data package configuration.

Parâmetros do Processo

Parâmetro	Valor
Empresas consideradas na unificação de conceito	1,10,2,20,3,30,4,40,5,50,6,7,8,9
Matriz Tradução UD	
Executa unificação de conceitos para o ERP?	Sim
Executa unificação de conceitos para o HCM?	Sim
Mostra registros com erro/alerta?	Sim
Utilizava Unidade de Negócio no ERP neste período?	Não
Período Final (AAAA/MM)	2012/01
Período Inicial (AAAA/MM)	0001/01

Empresas consideradas na unificação de conceito

[Salvar](#) [Importar](#) [Exportar](#)

7.4.1 4.1. Companies considered in concepts unification

In this parameter, select all companies (EMS2/HCM) considered in the Concepts Unification. If you select any company, for transactions, the Concept Unification Phase I, comprehending Account, Subaccount and Cost Center, is not performed. If there are inactive companies, they can be unselected in this parameter and the transactions of these companies are not considered in the process.

Default Value: All companies are considered.

If the console has DEBUG mode active, all transaction that were ignored during the process are displayed in conversao.txt log as an information message. Example:

Example of ignored transactions message:

```
Information(conv2020): Table Record: mgdis.ri-bem | ROWID(0x00000000000214a4), Company 99  
was not considered in the Concepts Unification.
```

7.4.2 4.2. UO Translation Headoffice

This parameter indicates the External Organizational Translation Headoffice that is used in the process. When the value is: "Accounting 2.00", the Headoffice used is the one parameterized in Accounting 2.00 in program EMS Integration Parameters (prgint/utb/utb036za.r). If another code is entered, the OU Headoffice is used with the indicated code.

Default Value: ""

7.4.3 4.3. Does it run the concepts unification for ERP?

This parameter indicates whether the Concepts Unification must be applied to ERP tables (EMS2). If it is not selected, database used only for ERP (EMS2) are not connected.

Default Value: Yes.

7.4.4 4.4. Does it run the concepts unification for HCM?

This parameter indicates whether the Concepts Unification must be applied to HCM.

If it is not selected, database used only for HCM are not connected.

Default Value: Yes.

7.4.5 4.5. Does it display Records with error/NOTIFICATION?

This parameter indicates whether information from record with determined error or NOTIFICATION is displayed in the log and uses by importer plugin of Concepts Unification Logs to have a view of all records involved in determined errors and NOTIFICATIONS.

Default Value: Yes.

NOTIFICATION: This parameter influences the process run performance if there are several errors and notifications.

7.4.6 4.6. Does it use Business Unit in the ERP in this period?

This parameter indicates whether between start and end period indicated, the ERP (Only EMS2) uses Business Unit.

If "Yes" is entered for tables with Account, Subaccount and Business Unit field, it must be updated according to Account and Subaccount translation.

If "No" is entered, the Business Unit field is not updated according to Account and Subaccount translation.

Default Value: No.

7.4.7 4.7. Start Period (YYYY/MM)

This parameter indicates the start period to be considered in the Concepts Unification process. From this period to the end period indicated, all transactions in this range are changed by Concepts Unification process. The records that are not in the range are disregarded. This treatment is performed for all transactions tables.

The start period must be earlier to cut-off period indicated in the Concepts Unification - Phase I (Cut-off Period) package and earlier than or equal to end period indicated. The start period is converted to date corresponding to the first day of the month of indicated year.

Note: in a hypothetical situation where, in the Concepts Unification - Phase I (Cut-off Period) package, period 2013/01 is indicated. With this, all registers were updated and only transactions with date equal to or later than 01/01/2013 are adjusted. All transactions previous to 01/01/2013 need to be adjusted so the Report Queries are success are successfully performed. This process must be performed in this package run and can be performed by using all remaining period or in stages (Run only one with Start Period: 0001/01 and End Period: 12/2012 or in parts: 2012/01 to 2012/12, 2011/01 to 2011/12, 0001/01 to

2010/12). How the History Adjust is performed must be performed based on some factors, such as, chart of accounts effectiveness.

Example 1: in a legacy database starting in 2010, and with annual Chart of Accounts (2010 - Plan: PL1, 2011 – Plan: PL2, 2012 – Plan: PL3 and 2013 – Plan: PL4), the Upgrade for release 5.4 of Datasul 12 Product was performed, after running the Concepts Unification - Phase 1 (Cut-off Period) process. In this process, the cut-off period adopted was the last chart of accounts in effect: 2013/01. The Concepts Unification - History Adjust package is run to adjust transactions of previous periods according to the chart of accounts in effect in each period. Three process run are performed:

1st Run: Start Period: 2012/01, End Period: 2012/12, OU Headoffice set with Accounts Headoffice using the Chart of Accounts P3.

2nd Run: Start Period: 2011/01, End Period: 2011/12, OU Headoffice set with Accounts Headoffice using the Chart of Accounts P2.

3rd Run: Start Period: 2010/01, End Period: 2010/12, OU Headoffice set with Accounts Headoffice using the Chart of Accounts P1.

Remember the order the three runs are performed is customer's decision.

Example 2: in a legacy database starting in 2010, and with annual Chart of Accounts (Plan: PLGERAL), the Upgrade for release 5.4 of Datasul 12 Product was performed, after running the Concepts Unification - Phase 1 (Cut-off Period) process. In this process, to speed it up, the cut-off period chosen was 2013/01. The Concepts Unification - History Adjust package is run to adjust transactions of previous periods. Only a single run or in parts is performed (customer's decision).

Default Value: 0001/01.

7.4.8 4.8. End Period (YYYY/MM)

This parameter indicates the end period to be considered in the Concepts Unification process. From the start period to this period indicated, all transactions in this range are affected by Concepts Unification process. The records that are not in the range are disregarded. This treatment is performed for all transactions tables.

The end period must be earlier to cut-off period indicated in the Concepts Unification - Phase I (Cut-off Period) package and later than or equal to start period indicated. The end period is converted to date corresponding to the last day of the month of indicated year.

7.5 5. Premises

The Concepts Unification process adds a Premises screen to the update console. This screen runs only a single program.

NOTIFICATION: We recommend you not to ignore the Premises stage running it whenever the Data Verification process and/or Data Update is run. Changing any rule used by the Concepts Unification - History Adjust process and it is updated in this stage, so its run is mandatory.

If this NOTIFICATION is ignored, business errors already identified and adjusted may continue to happen, as Concepts Unification process rules have not been updated.

Parâmetros do Processo

Parâmetro	Valor
Empresas consideradas na unificação de conceito	1,10,2,20,3,30,4,40,5,50,6,7,8,9
Matriz Tradução UO	Contabilizações 2.00
Executa unificação de conceitos para o ERP?	Sim
Executa unificação de conceitos para o HCM?	Sim
Mostra registros com erro/alerta?	Sim
Período de Corte (AAAA/MM)	0001/01

Empresas consideradas na unificação de conceito

[Salvar](#) [Importar](#) [Exportar](#)

7.5.1 5.1. Financial

This premise creates all rules used in the Concepts Unification and perform some necessary validation before starting the verification and update process. All rules are listed in the log conversao.txt. As follows:

Companies considered in the concepts unification process: as parameter indicated, company rules considered in the process are created and listed as below:

Information(conv2016): Company &1 Concepts Unification is considered.

- ✓ **Start Period and End Period:** based on "Start Period" and "End Period" parameters indicated, the validation of these periods is performed, as well as the dates range definition considered for the transaction tables. **Example:** if the start period indicated is 2012/01 and the end period indicated is 2012/12, so start date is 01/01/2012 and end date is 31/12/2012, all transactions between start date and end date are updated, but the file tables.
- ✓ **Parameterization of the Organizational Unit Headoffice:** the translation of account and subaccount rules is created by company and/or site according to External Organizational Translation Headoffice indicated in the Process Parameters and they are listed below:

Code of External Organization Translation Head Office used:

Information (conv2004): TRANSLATION HEAD OFFICE - EXTERNAL ORGANIZATION: &1

Rules of Sites:

Information(conv2017): Rule of Site &1: Site EMS5 = &2 / Company EMS5 = &3 / External Account Head Office = &4

Rules of companies:

Information (conv2018): Rule of Company &1: Company EMS5 = &2 / External Account Head Office = &3 / External CCenter Head Office = &4

(When the account translation rule is through Composition):

Information (conv2019): Rule of Company &1: By Composition - Account (POS: &2 | TAM: &3 | Plan: &4) / CCenter (POS: &5 | TAM: &6 | Plan: &7) / Business Unit (POS: &8 | TAM: &9 | &10)

- ✓ **Financials Company x External Cost Center Headoffice:** according to matriz-ccusto.dat configuration file, the following validation is performed:

Validation and possible errors:

Check the existence of matriz-ccusto.dat file in the dat directory of Concepts Unification - Phase 1.

Error(conv2023): Configuration file was not found. &1 in the directory: &2.

Check if matriz-ccusto.dat file import was successfully performed.

Error(conv2024): The configuration file: &1 is invalid. Query the Guideline of this package for further information related to this file.

For each company considered in the process, there must be a translation pointing to the financials company in the OU Headoffice, as this information is used to check if the Cost Center Headoffice code indicated in the file for financials company is valid.

Error(conv2007): Translation of Company &1 not found in OU Headoffice &2 Register in External Organizational Unit Translation Headoffice &2 corresponding to Company &1.

For each company considered in the process, the respective information of Financials Company x External Cost Center Headoffice must be in matriz-ccusto.dat file.

Error(conv2025): Cost Center Headoffice was not entered for company &1 in configuration file &2.

Check if the Cost Center Headoffice indicated in the file for each company considered is registered.

Error(conv2026): The Cost Center Translation Headoffice &1 of company &2 not exist.

After validation, the creation of Financial Companies x External Cost Center Headoffice rules is performed and they are listed as below:

Information(conv2027): Cost Center Headoffice - Company &1 | Headoffice: &2

7.6 6. Data Verification

This stage main purpose is the Data update process simulation for the consistency of information.

NOTIFICATION: All errors pointed in this stage must be adjusted before Data update process run. This stage can be run as many times as it is necessary and it only checks the database without changes.

During the Data Verification run, all tables involved in the process have records that are related to the consisted parameters. The consistency is performed with validation of records information, then, during the process, data inconsistencies caused by test translations, use of specifics, old translations, among other factors, are displayed.

TIP: Most of the errors, different data inconsistencies are corrected in a simple manner with solution registered in E-consultor portal. Through the Product Update Console, when clicking twice the table row where there is an error, the error description is displayed and, when clicking the button Search Solutions, the direction is performed for the e-consultor portal positioned in the error and solution. You can also manually query errors in the portal by accessing the link <http://ingleses.datasul.com.br/econsultor>, go to Knowledge Base, enter the error code (Example: conv2006), then click Literal Search.

During this stage, besides possible errors, there are also information and NOTIFICATIONs being displayed only in conversao.txt log. These messages do not prevent the process, but it is important to check them.

Example of NOTIFICATION message:

NOTIFICATION(conv1134): Doubled register. The Record ROWID (&1) is translated to ACCOUNT : &2, CCENTER: &3, UN: &4 is part of the table key. But there already is a record with this key or another record pointing to the same translation, therefore it is added after unification process.

7.7 7. Facilitators

From release 5.6 of TOTVS Datasul 12, facilitators helping some Concepts Unification process situations.

7.7.1 7.1. Importer of Concepts Unification Logs

To view errors and NOTIFICATIONS during the Data Verification process, you needed to open all log files, identify the situations and correct them.

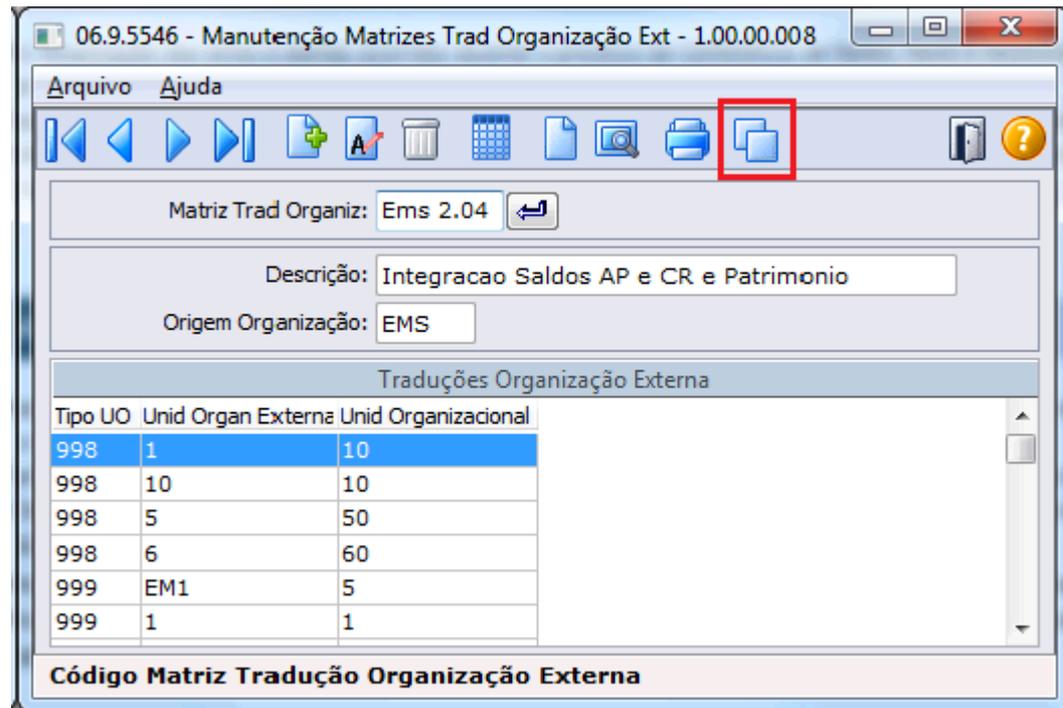
The Importer of Concepts Unification Logs is a facilitator enabling in a simple manner the view and identification of errors and NOTIFICATIONS during the Data Verification process. For further details (such as access, use, ...), check this facilitator document in the community [D@CAT, Raíz/Comunidades/D@CAT \(Conversão, Ambiente de produto e Tecnologia\) / Documentos / Plugins / Importador Genérico de Logs](#).

7.7.2 7.2. Duplicator of External Organization Headoffice

When you needed to register a new External Organization Headoffice based on an already existing Headoffice, you needed to manually copy all configurations.

The Duplicator of External Organization Headoffice is a facilitator enabling the user to choose a Source Headoffice and enter a Target Headoffice. So, the Target Headoffice is created with the same OU Translation configurations, Headoffices and Source Headoffice Accounts Composition.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Duplicator of Account Translation, enter program Ext Organization Transl Headoffice Maintenance (prgint/utb/utb118aa.r), then click button: Double OU Headoffice, according to image below:

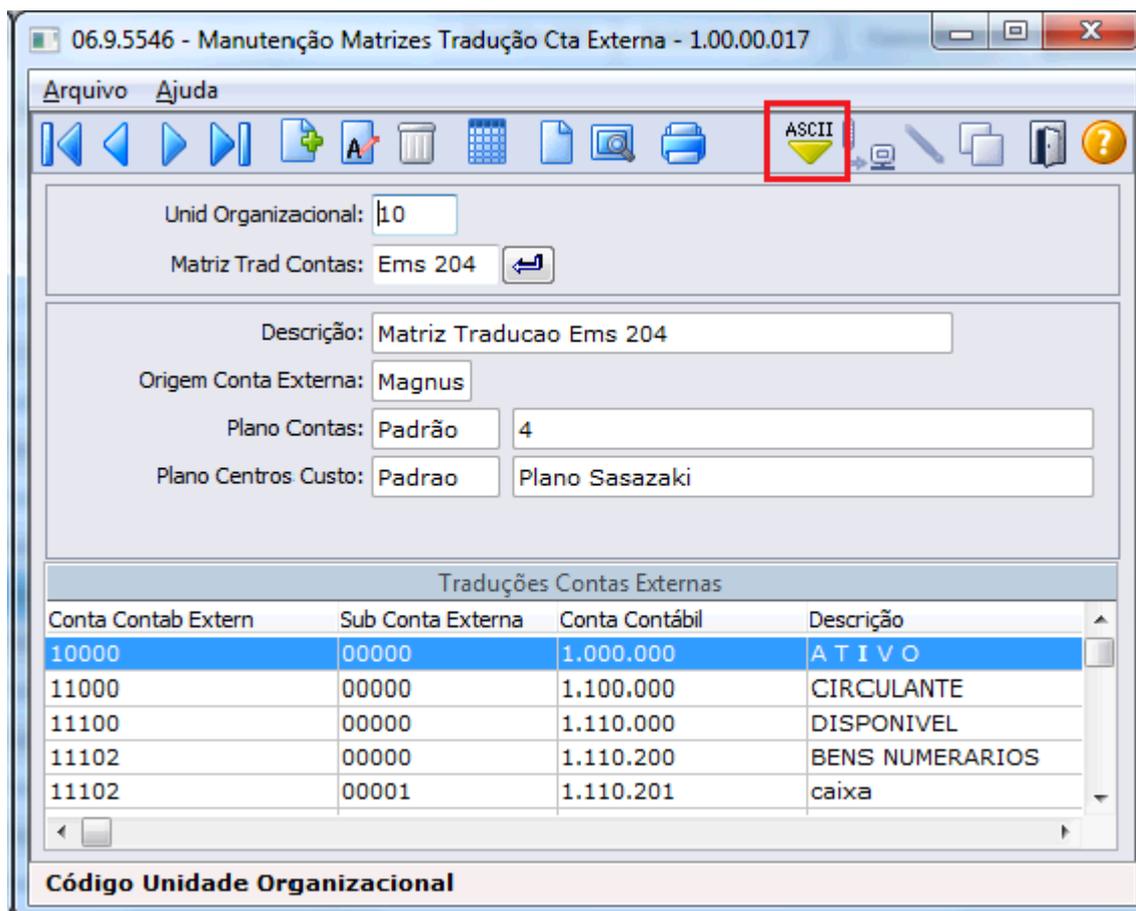


7.7.3 7.3. Importer of Account Translation

When you needed to register several account translations in an External Account Translation Headoffice, you also needed to add each translation.

The Importer of Account Translation is a facilitator enabling to import a file (.csv) with translation information. Faster, several translations are created in a single action.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Importer of Account Translation, enter program External Acc Translation Headoffice Maintenance (prgint/utb/utb119aa.r), then click button: Import Ext Ledger Account Translation, according to image below:

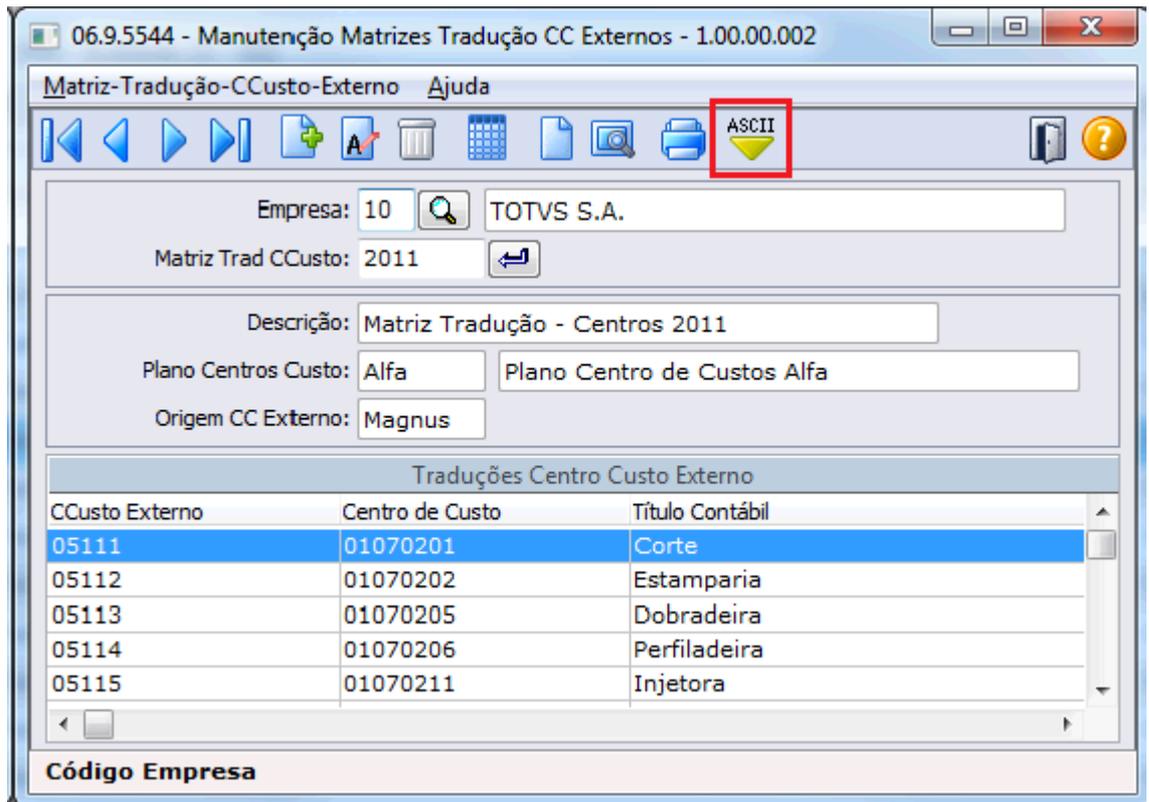


7.7.4 7.4. Importer of Cost Center Translation

When you needed to register several cost center translations in an External CCenter Translation Headoffice, you also needed to add each translation.

The Importer of Cost Center Translation is a facilitator enabling to import a file (.csv) with translation information. Faster, several translations are created in a single action.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Importer of Cost Center Translation, enter program External CC Translation Headoffice Maintenance (prgint/dcu/dcu001aa.r), then click button: Import Ext Cost Center Translation, according to image below:



7.8 8. Data Update

This stage aims at performing the adjust process of the ledger accounts, subaccounts and EMS2 cost centers and/or HCM for ledger accounts and Financials cost centers (EMS5).

NOTIFICATION: This stage can be run as many times as it is necessary and it performs changes in the database.

7.9 9. Post Update Procedures

NOTIFICATION: The Concepts Unification - History Adjust does not have post update procedures.

7.10 10. Package validation of Concepts Unification

After this package run, if the user wants to be sure running was successful, the programs below can be used according to module/application:

- HCM

- Transactions:

In the payroll, during accounting statement generation, the system searches for payroll

transactions and ledger accounts parameterized in programs FP0820, FP0680 to account in each event (budget) and to feed a temporary table that is used in the integration (FP3310);

The history of accounts accounted in previous months is not saved. If the FP4040 (accounting statement) is generated for retroactive transactions, it always searches for accounts of plan in effect.

- **Files:**

FP0820 – The payroll events in which the account is accounted are parameterized.

FP0680 – The accounts are parameterized for social duties.

FP0660 – Ledger account file – If in parameter HB0000.r is selected: (HCM Datasul + ERP Datasul) the accounts are directly obtained from FGL module from financial administrative.

- **Generation programs:**

FT4040 – Accounting Statement

FP4051 – Accounting statement when the company uses apportion by cost center.

FP3310 – Integration of payroll accounting

- **INVOICING**

- **Transactions:**

During the accounting statement generation, the program FT0708 searches for the ledger accounts parameterized in programs CD0309/CD0403 and this information is stored in "Accounting Summary". To check information in the "Accounting Summary", use program FT0709 - Auxiliary Journal, but this program has the option that enables Deleting the "Accounting Summary", therefore, you can only view history information that is not deleted through this program. The program Invoicing Accounting - FT0608 uses the "Accounting Summary" to perform the integration with Accounting module.

For invoiced direct debit items where the cost center is indicated in the invoice item (FT0301) to check the accounts in items, as well as, the invoice accounting grid, you can use program FT0507 - List of Issued Invoices, in option Detailed.

- **Files:**
 - FT0301 – Accounting Cost Account
 - CD0309 – Invoicing Accounts
 - CD0403 – Sites Maintenance
- **Generation programs:**
 - FT0708 – Accounting statement
 - FT0709 - Auxiliary Journal
 - FT0608 – Invoicing Accounting
- **SALES ORDERS**
 - For direct debit items, the orders module requests the item application account, and it is taken to invoice during invoicing. This information (from sales order item) is not used in any other point of the system. If you need to query it, the deployment/sales order maintenance program is used.
- **STOCKS**
 - **Transactions:**

To query ledger accounts saved in the stock transactions related to history periods, the following programs are used: CE0301 – Transactions Log, CE0402 - Stock Ledger and CE0403 – Stock Auxiliary Journal.
 - **Files:**
 - CE0101 – Stock Parameters
 - CD0611 – Materials Site
- **CONTRACTS**
 - **Transactions:**
 - CN0601 - Contracts Query– If there is apportion by Contract
 - CN0602 – Query Contract Items

CN0609 - Query Contract Measures

CN0606 – Contracts Transaction

CN0608 - Query Ledger Account Transaction

- **Files:**

CN0101 - Contract Parameters

- **RECEIPT**

- **Transactions:**

RE0501 – Documents Report

- **TAX LAYOUT**

- **Transactions:**

Records were not changed for MLF, accounting SPEDs, tax and pis/cofins records. For this module, the SPEDs must be generated and sent before the conversion, with the old accounts and, even after the conversion, the accounts in the records are not changed. Only in SPEDs future generations, new accounts (unification) are used. Therefore, there is nothing to check for this module, as the records are not converted.

- **TAX DUTIES**

- **Transactions:**

Transactions are generated by invoicing and receipt, but they can also be manually generated by the program OF0305, where you can enter the ledger account of the item (it-doc-fisc).

- **Files:**

The files are the same used by invoicing, receipt and stock.

- **Generation programs:**

There are no generation programs, only report programs where the ledger account is listed.

OF0520 – record of industry inflows
OF0530 – record of trade inflows
OF0620 – record of industry outflows
OF0630 - record sales outflows

- **GRAIN ORIGIN**

- **Transactions:**

To check the invoices generated through packing slips, you must use the described programs for receipt and invoicing modules.

In relation to titles, use programs described for accounts payable and accounts receivable modules.

- **Files:**

GG1005 – Grain Parameters

GG1089 – Grain Parameters Stock Group

- **Generation programs:**

GG9003 – Offsetting of Accounts Contract Purchase (use option simulation)

- **PRODUCTION CONTROL**

- **Transactions:**

CP0311 – Production Order Report

CP0309 – Material Request

- **Files:**

CP0106 – CP Parameters

CP0301 – Production Maintenance Order

- **Generation programs:**

CP0507 – Production Maintenance Order

8 Concepts Unification Phase 1

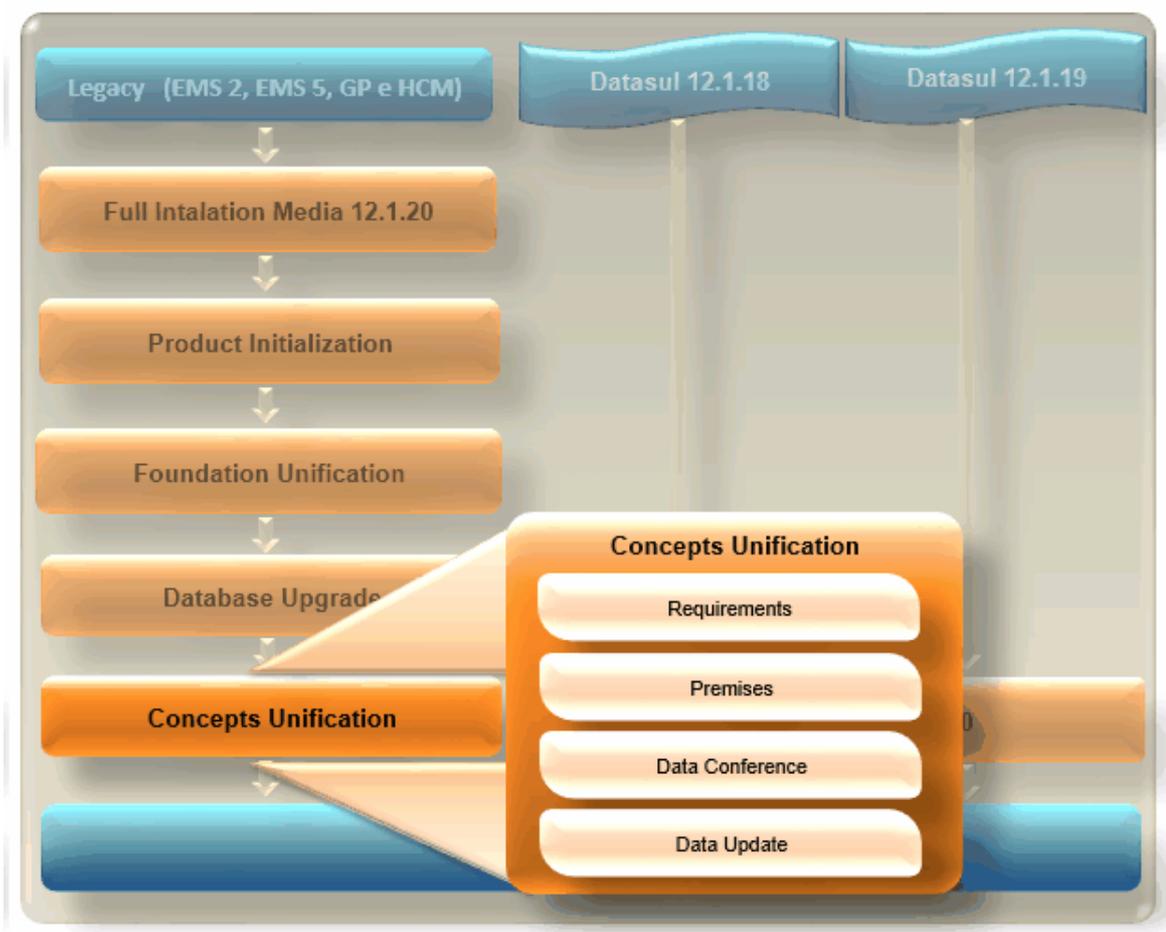


8.1 1. Upgrade Process

NOTIFICATION: Besides this document, query [Guidelines of Update for Datasul 12.1.20](#).

Information on process run is available there.

The concepts unification process changes database already updated for release 12.1.20. This process has several stages according image as follows:



The Update Console adapts the run of stages according to pre-defined configurations in upgrade process. Therefore, the Console documents the run routine in the stage help. Routines not run by Update Console are documented in this guideline.

8.2 2. Summary of Concepts Unification Process

This package is run in TOTVS 12.1.1 Datasul Line target environment, after the Upgrade or Update process. You must have TOTVS 12.1.1 environment for adjustment and parameterizations, if

necessary.

Before starting the process through Update Console, check and run the requirement procedures.

The Update Console runs all stages for this package:

- ✓ Premises Verification;
- ✓ Data Verification;
- ✓ Data Update;

To improve performance of Verification of Data and Update of Data processes, there are optimization tips related to database connection, adjust of process parameters and configuration files that must be checked and applied.

Read carefully all Guideline topics.

NOTIFICATIONS: If the Upgrade process has been run for a package earlier than 12.1.1 and later than 11.5, update for Release 12.1.1 before starting the Concepts Unification process, without needing to perform the Upgrade again. If the Concepts Unification process has already been performed in a release that is equal to or later than 11.5.0, it cannot be run again.

This Guideline has business and technical considerations.

8.3 3. Concepts Unification Phase 1

In TOTVS 11.5 Datasul Line, a Concepts Unification phase is performed consisting of using files related to chart of accounts, accounts, cost center plan and Financials module cost center.

In general, the product was changed to:

- ✓ Increase the format of field "Cost Center" of 11 for 20 positions;
- ✓ Request Account (20 positions) and Cost Center (20 positions);
- ✓ All screens from product have the same Financials enabling to enter the Account and Cost Center.

You also can enter an Alternative Account that is a junction available in Financials.

- ✓ Perform all validations of Account and Cost Center by using Financials concept. **Example:** the field "Cost Center" remains disabled if the indicated account not use cost center (Distribution Criterion File).

To update TOTVS 11.5 Datasul Line or any later release, run the ledger accounts, subaccounts and EMS2 and/or HCM update process for financials (EMS5) ledger accounts and cost centers.

This update is performed with this package run.

NOTIFICATION: Run package [Unificação de Conceitos – Fase 1 \(cut-off period\)](#) before releasing the production environment from TOTVS 11.5 Datasul Line, but when the only product in this release is HCM. Check further details in topic [Scenarios TOTVS 11.5 Datasul Line](#).

8.4 4. Scenario TOTVS 11.5 Datasul Line

Before starting the process, check considerations of scenario below:

Customers that only have the HCM (Legacy): to migrate only HCM for TOTVS 11.5 or later, you cannot run this package;

Customers that have the HCM and ERP (Legacy): In case to define to migrate only HCM for TOTVS 11.5 or later, you cannot run this package, Integration between HCM (TOTVS 11.5) and ERP (Legacy) continues the same manner (Translation Headoffice of Accounts or Composition). After the ERP is migrated for TOTVS 11.5 or later, this package run is mandatory.

You cannot migrate only the ERP for TOTVS 11.5 or later and keep with the HCM in the Legacy, with the exception if there is no integration between the products.

8.5 5. Requirements

Before running the Product Update Console with Concepts Unification - Phase 1 (Cut-off Period) package, check and perform some business procedures. **Related to integration EMS2 and/or HCM with Financials (EMS5):**

- ✓ **1st Headoffice External Organizational Unit:** is used in the OU Headoffice process indicated in parameter "OU Translation Headoffice" that, as standard, has the value "Accounting 2.00" indicating the OU Headoffice to be used is parameterized in Accounting 2.00 in program EMS Integration Parameters (prgint/utb/utb036za.r). If another parameter value is different, the OU Headoffice is used with the indicated code.
- ✓ **2nd Translations of Companies and Sites of EMS2 and/or HCM:** for all companies and sites of EMS2 and/or HCM that have transactions of database and are affected by the Concepts Unification process must have respective translations registered in Headoffice OU;
- ✓ **3rd Rules of Accounts and Subaccounts Translation:** the accounts and subaccounts translation rules parameterized for companies and sites in Headoffice OU: Accounts and Composition Headoffice;

- ✓ **4th Translations of Ledger Accounts and consistencies of Accounts and Cost Centers:** If the Accounts Headoffice is used, all accounts with transactions with EMS2 and/or HCM must have the translations registered in Accounts Headoffice. **Note:** during the process, the Translation file related to the External Account (With the subaccount in blank) is requested. This type of status refers to the tables using a determined rule where the subaccount definition or cost center can be determined only during transaction, that is, in the record, there is no valid cost center but an indication the cost center must be searched another way. With this, register the translation only for External Account without entering the subaccount, but it must point to respective Account in the Financials and any cost center (as, in this case, the Cost Center is not updated). **For example:** the HCM, has the employee Cost Center. The parameterized events in HCM have account and a cost center value or the indication that, during the transaction, the employee cost center must be used (In this case, the Cost Center value is: "xxxxxxx"). All records with employee account + cost center will only have account adjusted during the process and the cost center continues with value indicated as belonging to the employee. Supposing we have an account: "001" + cost center "xxxxxxx", must be a translation for the external account "001" (subaccount in blank) pointing to financials account: "000001" (uses Cost Center and it can be any value, as it is not used).
If Composition is used, you can check whether the Accounts and Cost Centers from positions related to Composition are registered in Financials;
- ✓ **5th Rule of Cost Center Translation with accounting and subaccounts purpose:** for each company considered in the Concepts Unification process, there must be a External Cost Center Headoffice registered. If there are EMS2 and/or translations using the cost center and/or only Subaccount, register translations in the respective External Cost Center Headoffice of the company. **Warn:** In EMS2, there are other concepts of Cost Center: productive, capacity. For these case, the cost centers are not changed. For tables with only Subaccount information, it is changed to financials cost center using the Cost Center Headoffice as well. In HCM, all cost centers are changed for Financials cost centers.
- ✓ **6th matriz-ccusto.dat Configuration File:** you must configure the matriz-ccusto.dat file that is located in the "dat" directory of this package. The file initially is in blank and must be edited through Text Editor. This file starts to indicated the Financials Company x External Cost Center Headoffice used for process of from-to of cost centers and/or subaccounts of EMS2 and/or HCM with

Financials. For each company considered, it must have a row in this file indicating: "<Financials Company>" "<Cost Center Headoffice>". **Example:** The company considered in the process is company "1" (EMS2) pointing to company "001" (Financials). The Cost Center Headoffice was created with code "MCCUSTO" for company "001". Enter in matriz-ccusto.dat file: **"001"** **"MCCENTER"**. **Warn:** After the last row of file, there must be a row in blank and the inverted commas used must be used in example (Use "" and not use ").

Note: during the run of this package by Update Console, some parameters are requested, such as, companies considered in process, ou translation headoffice and cut-off period. The evaluation of verification and procedures are influenced by indicated parameters. Further details, check Parameters topic of this Guideline.

8.6 6. Optimization

NOTIFICATION: The tips displayed require technical knowledge in database.

The run time of Data Verification and Data Update stages is high depending on the size of database and process parameters (defining whether all records are affected or only from determined companies and transaction dates). For further performance, some tips are followed:

- ✓ We recommend you to configure the multiple agents of Appserver (Console Stage: Load Balance) to be used by Product Update Console and, then, several programs are simultaneously run. Note: configure where the database and the quantity of agents are located according to quantity of processors available in this machine.
- ✓ The tablas.dat file indicates all programs that are run from tables affected in the process. Each row of this file corresponds to a table, we recommend you to change this file first, in a way that corresponding rows to the greatest tables are in the beginning of the file to be run. Therefore, while some programs run during all process run time, other appservers run programs of smaller tables. This file is in the directory <directory of console>/conceptsunification-phase1-pc/dat.
- ✓ Perform the connection of the right database in shared memory to avoid transfer of data through net.
- ✓ Disable the after-image in Progress database, or reduce the log level in other databases
- ✓ Define a cluster of 32 mbytes and a 16 kbytes block for before-image of Progress database.
- ✓ Load a Progress database with BIW, another APW for each Appserver available for process.

- ✓ Parameterize the load to have several buffers of database and before-image available (-B e -bibufs, respectively).

8.7 7. Parameters

The Concepts Unification process adds a parameters configuration screen to the update console. This screen configures parameters for process run, according to data stored in database.

TIP: The Console does not change the database on screen. It only reads information previously requested by data package configuration.

Parâmetros do Processo

Parâmetro	Valor
Empresas consideradas na unificação de conceito	1,10,2,20,3,30,4,40,5,50,6,7,8,9
Matriz Tradução UO	Contabilizações 2.00
Executa unificação de conceitos para o ERP?	Sim
Executa unificação de conceitos para o HCM?	Sim
Mostra registros com erro/alerta?	Sim
Período de Corte (AAAA/MM)	0001/01

Empresas consideradas na unificação de conceito

50
6
7
8
9

[Salvar](#) [Importar](#) [Exportar](#)

8.7.1 7.1. Companies considered in concepts unification

In this parameter, select all companies (EMS2/HCM) considered in the Concepts Unification. If you select any company, for transactions, the Concept Unification Phase I, comprehending Account, Subaccount and Cost Center, is not performed. If there are inactive companies, they can be unselected in this parameter and the transactions of these companies are not considered in the process.

Default Value: All companies are considered.

If the console has DEBUG mode active, all transaction that were ignored during the process are displayed in conversao.txt log as an information message. Example:

Example of ignored transactions message:

Information(conv2020): Table Record: mgdis.ri-bem | ROWID(0x00000000000214a4), Company 99 was not considered in the Concepts Unification.

8.7.2 7.2. UO Translation Headoffice

This parameter indicates the External Organizational Translation Headoffice that is used in the process. When the value is: "Accounting 2.00", the Headoffice used is the one parameterized in Accounting 2.00 in program EMS Integration Parameters (prgint/utb/utb036za.r). If another code is entered, the OU Headoffice is used with the indicated code.

Default Value: "Accounting 2.00"

8.7.3 7.3. Does it run the concepts unification for ERP?

This parameter indicates whether the Concepts Unification must be applied to ERP tables (EMS2). If it is not selected, database used only for ERP (EMS2) are not connected.

Default Value: Yes.

8.7.4 7.4. Does it run the concepts unification for HCM?

This parameter indicates whether the Concepts Unification must be applied to HCM. If it is not selected, database used only for HCM are not connected.

Default Value: Yes.

8.7.5 7.5. Does it display records with error/NOTIFICATION?

This parameter indicates whether information from record with determined error or NOTIFICATION is displayed in the log and uses by importer plugin of Concepts Unification Logs to have a view of all records involved in determined errors and NOTIFICATIONS.

Default Value: Yes.

NOTIFICATION: This parameter influences the process run performance if there are several errors and NOTIFICATIONS.

8.7.6 7.6. Cut-off Period (YYYY/MM)

This parameter indicates the start period to be considered in the Concepts Unification process. From this period to the current period (today), all transactions in this range are changed by Concepts Unification process. The records that are not in the range are disregarded. This treatment is performed for transaction tables for **files, all records** tables, irrespective of the indicated period, they are affected in the process.

As the Concepts Unification process uses only a single Organizational Unit Headoffice with its parameterization in effect, we recommend the cut-off period is the start of the effectiveness for parameterization. **Example:** in the beginning of 2013, PLCONTAS chart of accounts is in effect, whose accounts headoffice parameterized in the organizational unit headoffice for companies registered is MPLCONTAS. The period indicated is 2013/01, wherein transactions previous to this period use a different parameterization than the current one. **2nd Example:** since the beginning to the database transactions, same concept of today's is used, same chart of accounts, accounts headoffice and OU headoffice. You can enter as period: 0001/01, or therefore, only the last year 2012/01 (faster procedure). **Important:** you cannot query and/or issue transaction reports that have not passed by Concepts Unification process.

Note 1: The periods out of this package process can be adjusted through the Concepts Unification package - History Adjust.

Note 2: This definition of period needs to be carefully evaluated, as it is decisive in the performance of this process as whole, but it cannot be the only argument for this definition. Time between first release of database for production (cutoff period chosen for this package) and the adjustment of transactions that were updated (When is the history transactions adjust performed?), it can also be used as parameter, that is, the longer the time, the longer the update start period must be. Remember that, in case of cut-off period is 2013/01, so reports and queries of transactions before 2013/01 are only performed after the run of Concepts Unification - Phase 1 - History Adjust package of periods previous to defined cut-off date.

Default Value: 0001/01.

8.8 8. Premises

The Concepts Unification process adds a Premises screen to the update console. This screen runs only a single program.

NOTIFICATION: We recommend you not to ignore the Premises stage running it whenever the Data Verification process and/or Data Update is run. Changing any rule used by the Concepts Unification - Phase 1 process and it is updated in this stage, so its run is mandatory.

If this NOTIFICATION is ignored, business errors already identified and adjusted may continue to happen, as Concepts Unification process rules have not been updated.

8.8.1 8.1. Financial

This premise creates all rules used in the Concepts Unification and perform some necessary validation before starting the verification and update process. All rules are listed in the log conversao.txt. As follows:

Companies considered in the concepts unification process: as parameter indicated, company rules considered in the process are created and listed as below:

```
Information(conv2016): Company &1 Concepts Unification is considered.
```

✓ **Cut-off Period:** based on "Cut-off Period" parameter indicated, the validation of this period is performed, as well as the dates range definition considered for the transaction tables. **Example:** if the period indicated is 2012/01 and the start period indicated is 01/01/2012 and end date is 31/12/2012, all transactions between start date and end date are updated, but the file tables that will have all records updated.

✓ **Verification of Concepts Unification process run:** verification is performed in case the Concepts Unification process has already been performed for companies considered of EMS2 and/or HCM products selected with parameter "Run concepts unification for <EMS2/HCM>". If process has already been run, the following error happens:

```
Error(conv2032): Concepts Unification Package - Phase 1 already run for company &1 and product &2.  
You cannot run it again.
```

If you need to run the process again, get back to database backup.

✓ **Parameterization of the Organizational Unit Headoffice:** the translation of account and

subaccount rules is created by company and/or site according to External Organizational Translation Headoffice indicated in the Process Parameters and they are listed below:

Code of External Organization Translation Head Office used:

Information (conv2004): TRANSLATION HEAD OFFICE - EXTERNAL ORGANIZATION: &1

Rules of Sites:

Information(conv2017): Rule of Site &1: Site EMS5 = &2 / Company EMS5 = &3 / External Account Head Office = &4

Rules of companies:

Information (conv2018): Rule of Company &1: Company EMS5 = &2 / External Account Head Office = &3 / External CCenter Head Office = &4

(When the account translation rule is through Composition):

Information (conv2019): Rule of Company &1: By Composition - Account (POS: &2 | TAM: &3 | Plan: &4) / CCenter (POS: &5 | TAM: &6 | Plan: &7) / Business Unit (POS: &8 | TAM: &9 | &10)

✓ **Financials Company x External Cost Center Headoffice:** according to `matriz-ccusto.dat` configuration file, the following validation is performed:

Validation and possible errors:**Check the existence of `matriz-ccusto.dat` file in the `dat` directory of Concepts Unification - Phase 1.**

Error(conv2023): Configuration file was not found. &1 in the directory: &2.

Check if `matriz-ccusto.dat` file import was successfully performed.

Error(conv2024): The configuration file: &1 is invalid. Query the Guideline of this package for further information related to this file.

For each company considered in the process, there must be a translation pointing to the financials company in the OU Headoffice, as this information is used to check if the Cost Center Headoffice code indicated in the file for financials company is valid.

Error(conv2007): Translation of Company &1 not found in OU Headoffice &2 Register in External Organizational Unit Translation Headoffice &2 corresponding to Company &1.

For each company considered in the process, the respective information of Financials Company x External Cost Center Headoffice must be in matriz-ccusto.dat file.

Error(conv2025): Cost Center Headoffice was not entered for company &1 in configuration file &2.

Check if the Cost Center Headoffice indicated in the file for each company considered is registered.

Error(conv2026): The Cost Center Translation Headoffice &1 of company &2 not exist.

After validation, the creation of Financial Companies x External Cost Center Headoffice rules is performed and they are listed as below:

Information(conv2027): Cost Center Headoffice - Company &1 | Headoffice: &2

8.9 9. Data Verification

This stage main purpose is the Data update process simulation for the consistency of information.

NOTIFICATION: All errors pointed in this stage must be adjusted before Data update process run. This stage can be run as many times as it is necessary and it only checks the database without changes.

During Data Verification run, all table involved in the process have their records consisted (Depending on the indicated parameters, it can be all records or only part o it). Th consistency is

performed with validation of records information, then, during the process, data inconsistencies caused by test translations, use of specifics, old translations, among other factors, are displayed.

TIP: Most of the errors, different data inconsistencies are corrected in a simple manner with solution registered in E-consultor portal. Through the Product Update Console, when clicking twice the table row where there is an error, the error description is displayed and, when clicking the button Search Solutions, the direction is performed for the e-consultor portal positioned in the error and solution. You can also manually query errors in the portal by accessing the link <http://ingleses.datasul.com.br/econsultor>, go to Knowledge Base, enter the error code (Example: conv2006), then click Literal Search.

During this stage, besides possible errors, there are also information and NOTIFICATIONS being displayed only in conversao.txt log. These messages do not prevent the process, but it is important to check them.

8.10 10. Facilitators

From release 5.6 of TOTVS Datasul 12, facilitators helping some Concepts Unification process situations.

8.10.1 10.1. Importer of Concepts Unification Logs

To view errors and NOTIFICATIONS during the Data Verification process, you needed to open all log files, identify the situations and correct them.

The Importer of Concepts Unification Logs is a facilitator enabling in a simple manner the view and identification of errors and NOTIFICATIONS during the Data Verification process. For further details (such as access, use, ...), check this facilitator document in the community [D@CAT, Raíz / Comunidades / D@CAT \(Conversão, Ambiente de produto e Tecnologia\) / Documentos / Plugins / Importador Genérico de Logs](#).

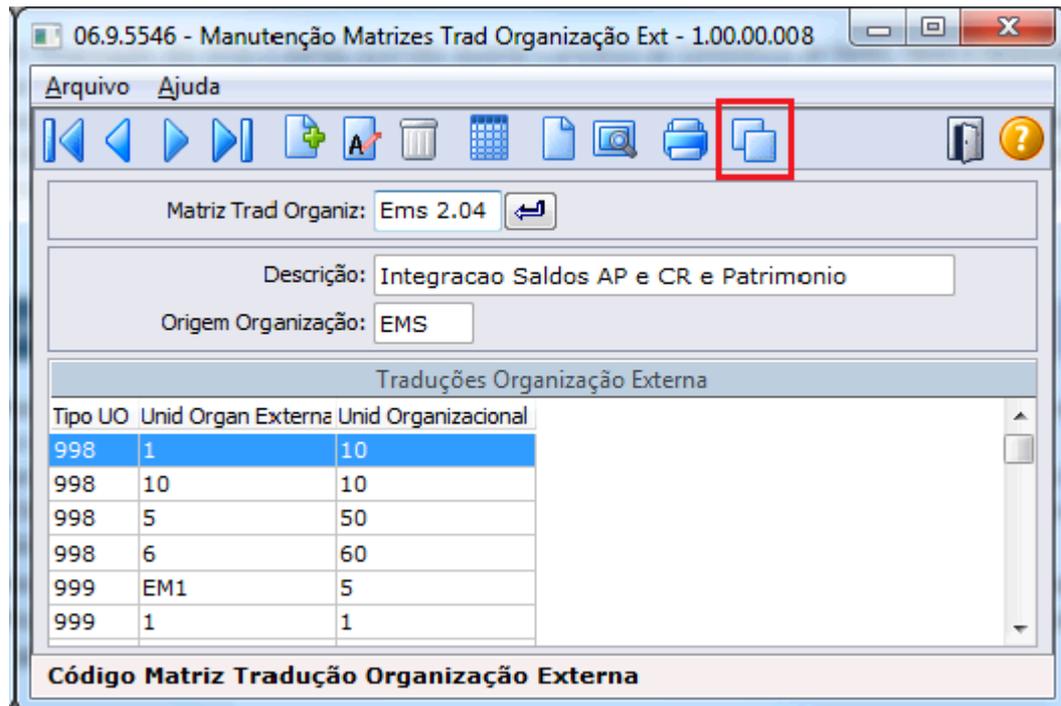
8.10.2 10.2. Duplicator of External Organization Headoffice

When you needed to register a new External Organization Headoffice based on an already existing Headoffice, you needed to manually copy all configurations.

The Duplicator of External Organization Headoffice is a facilitator enabling the user to choose a

Source Headoffice and enter a Target Headoffice. So, the Target Headoffice is created with the same OU Translation configurations, Headoffices and Source Headoffice Accounts Composition.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Duplicator of Account Translation, enter program Ext Organization Transl Headoffice Maintenance (prgint/utb/utb118aa.r), then click button: Double OU Headoffice, according to image below:

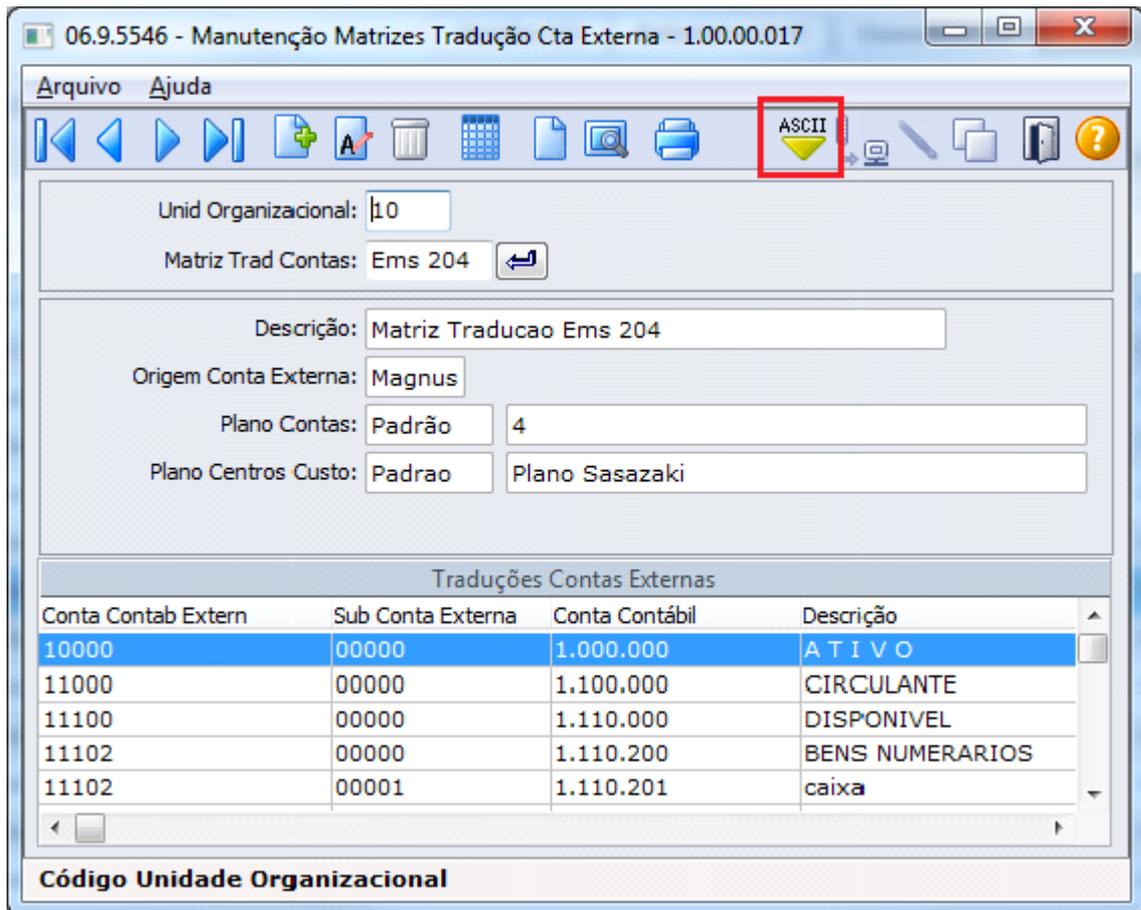


8.10.3 10.3. Importer of Account Translation

When you needed to register several account translations in an External Account Translation Headoffice, you also needed to add each translation.

The Importer of Account Translation is a facilitator enabling to import a file (.csv) with translation information. Faster, several translations are created in a single action.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Importer of Account Translation, enter program External Acc Translation Headoffice Maintenance (prgint/utb/utb119aa.r), then click button: Import Ext Ledger Account Translation, according to image below:

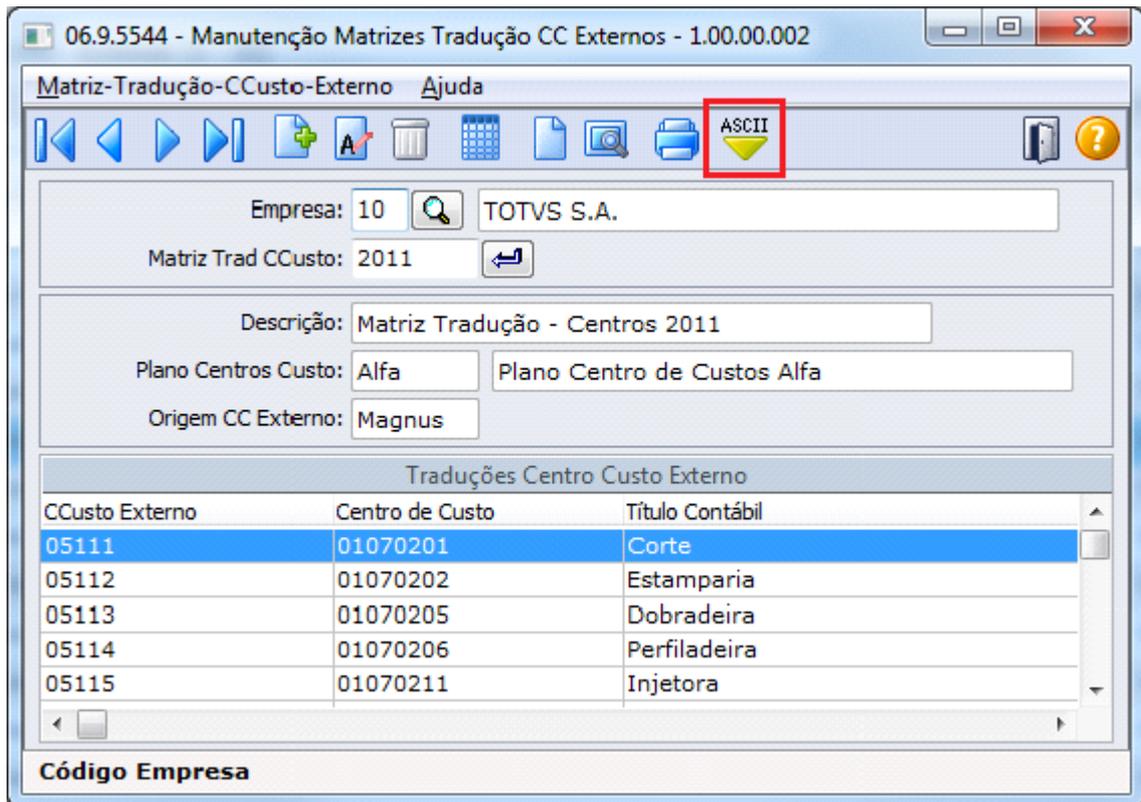


8.10.4 10.4. Importer of Cost Center Translation

When you needed to register several cost center translations in an External CCenter Translation Headoffice, you also needed to add each translation.

The Importer of Cost Center Translation is a facilitator enabling to import a file (.csv) with translation information. Faster, several translations are created in a single action.

This facilitator is available only from release 5.6 from TOTVS Datasul 12 product. To access the Importer of Cost Center Translation, enter program External CC Translation Headoffice Maintenance (prgint/dcu/dcu001aa.r), then click button: Import Ext Cost Center Translation, according to image below:



8.11 11. Data Update

This stage aims at performing the adjust process of the ledger accounts, subaccounts and EMS2 cost centers and/or HCM for ledger accounts and Financials cost centers (EMS5).

NOTIFICATION: Before performing this stage, backup database. If there is any error during the Data update run, backup, correct, then run process again. If the Data verification stage has been 100% performed without errors and if the Data update stage reports an error, contact TOTVS support reporting the situation.

8.12 12. Post Update Procedures

NOTIFICATION: The Concepts Unification - Phase 1 (Cut-off Period) does not have post update procedures.

8.13 13. Package validation of Concepts Unification

After this package run, if the user wants to be sure running was successful, the programs below can be used according to module/application:

- HCM

- **Transactions:**

In the payroll, during accounting statement generation, the system searches for payroll transactions and ledger accounts parameterized in programs FP0820, FP0680 to account in each event (budget) and to feed a temporary table that is used in the integration (FP3310);

The history of accounts accounted in previous months is not saved. If the FP4040 (accounting statement) is generated for retroactive transactions, it always searches for accounts of plan in effect.

- **Files:**

FP0820 – The payroll events in which the account is accounted are parameterized.

FP0680 – The accounts are parameterized for social duties.

FP0660 – Ledger account file – If in parameter HB0000.r is selected: (HCM Datasul + ERP Datasul) the accounts are directly obtained from FGL module from financial administrative.

- **Generation programs:**

FT4040 – Accounting Statement

FP4051 – Accounting statement when the company uses apportion by cost center.

FP3310 – Integration of payroll accounting

- **INVOICING**

- **Transactions:**

During the accounting statement generation, the program FT0708 searches for the ledger accounts parameterized in programs CD0309/CD0403 and this information is stored in "Accounting Summary". To check information in the "Accounting Summary", use program FT0709 - Auxiliary Journal, but this program has the option that enables Deleting the "Accounting Summary", therefore, you can only view history information that is not deleted through this program. The program Invoicing Accounting - FT0608 uses the "Accounting Summary" to perform the integration with Accounting module.

For invoiced direct debit items where the cost center is indicated in the invoice item

(FT0301) to check the accounts in items, as well as, the invoice accounting grid, you can use program FT0507 - List of Issued Invoices, in option Detailed.

- **Files:**

FT0301 – Accounting Cost Account

CD0309 – Invoicing Accounts

CD0403 – Sites Maintenance

- **Generation programs:**

FT0708 – Accounting statement

FT0709 - Auxiliary Journal

FT0608 – Invoicing Accounting

- **SALES ORDER**

- For direct debit items, the orders module requests the item application account, and it is taken to invoice during invoicing. This information (from sales order item) is not used in any other point of the system. If you need to query it, the deployment/sales order maintenance program is used.

- **STOCKS**

- **Transactions:**

To query ledger accounts saved in the stock transactions related to history periods, the following programs are used: CE0301 – Transactions Log, CE0402 - Stock Ledger and CE0403 – Stock Auxiliary Journal.

- **Files:**

CE0101 – Stock Parameters

CD0611 – Materials Site

- **CONTRACTS**

- **Transactions:**

CN0601 - Contracts Query – If there is apportion by Contract

CN0602 – Query Contract Items

CN0609 - Query Contract Measures

CN0606 – Contracts Transaction

CN0608 - Query Ledger Account Transaction

- **Files:**

CN0101 - Contract Parameters

- **RECEIPT**

- **Transactions:**

RE0501 – Documents Report

- **TAX LAYOUT**

- **Transactions:**

Records were not changed for MLF, accounting SPEDs, tax and pis/cofins records.

For this module, the SPEDs must be generated and sent before the conversion, with the old accounts and, even after the conversion, the accounts in the records are not changed. Only in SPEDs future generations, new accounts (unification) are used.

Therefore, there is nothing to check for this module, as the records are not converted.

- **TAX DUTIES**

- **Transactions:**

Transactions are generated by invoicing and receipt, but they can also be manually generated by the program OF0305, where you can enter the ledger account of the item (it-doc-fisc).

- **Files:**

The files are the same used by invoicing, receipt and stock.

- **Generation programs:**

There are no generation programs, only report programs where the ledger account is listed.

OF0520 – record of industry inflows

OF0530 – record of trade inflows

OF0620 – record of industry outflows

OF0630 – record of trade outflows

- **GRAIN ORIGINATION**

- **Transactions:**

To check the invoices generated through packing slips, you must use the described programs for receipt and invoicing modules.

In relation to titles, use programs described for accounts payable and accounts receivable modules.

- **Files:**

GG1005 – Grain Parameters

GG1089 – Grain Parameters Stock Group

- **Generation programs:**

GG9003 – Offsetting of Accounts Contract Purchase (use option simulation)

- **PRODUCTION CONTROL**

- **Transactions:**

CP0311 – Production Order Report

CP0309 – Material Request

- **Files:**

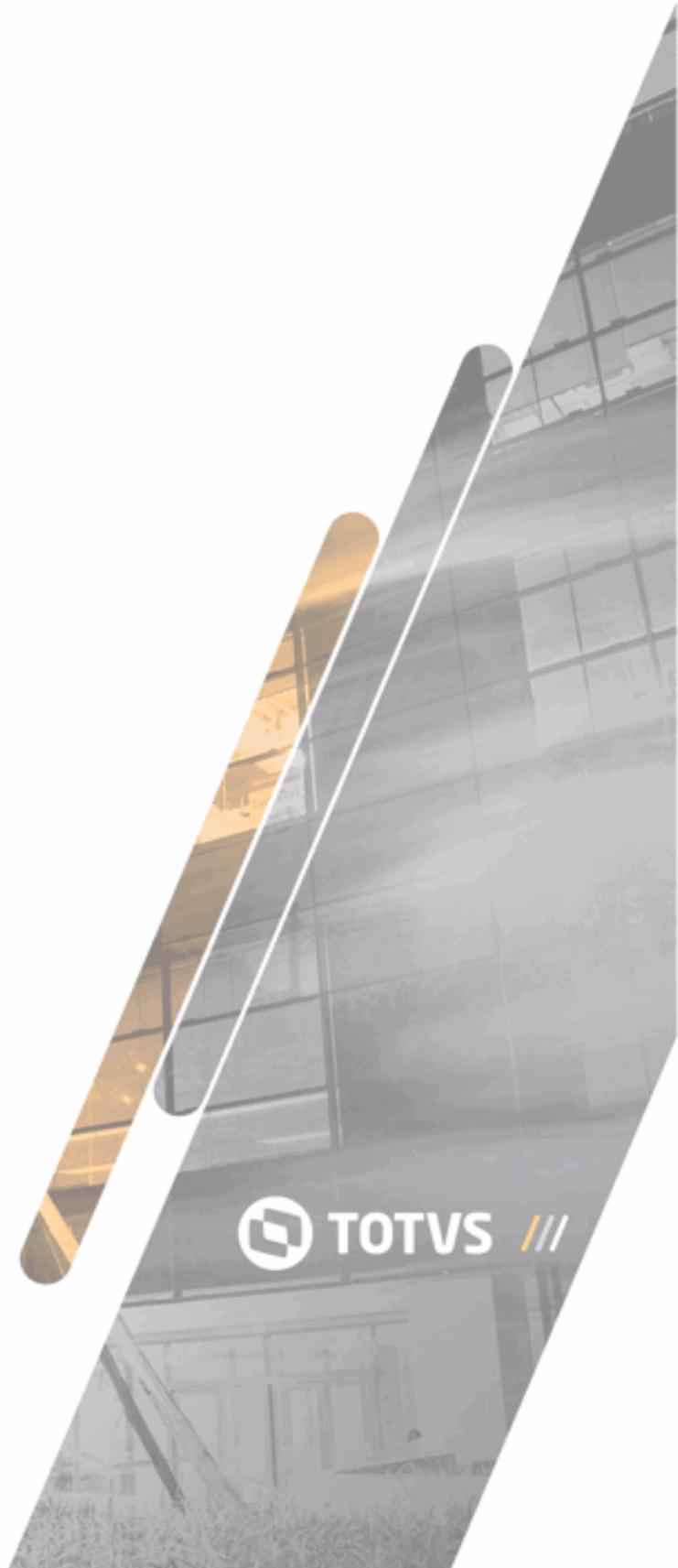
CP0106 – CP Parameters

CP0301 – Production Maintenance Order

- **Generation programs:**

CP0507 – Production Maintenance Order

9 Foundation Unification



9.1 1. Foundation Unification

Since version 10, there is a single file of information related to the system nucleus, known as Foundation, in TOTVS Datasul product. To unify this information, the Foundation Unification process follows what must be migrated, unifying the doubled files or change them, according to customer option.

The Foundation Unification purpose is to migrate and unify Foundation data of legacy products for Datasul 12 in a way it is not necessary to manually register them.

9.2 2. Process Requirements

Before starting the Foundation Unification process, Datasul 12 product must be installed from the installation media and initialized. Additional information on the installation and initialization is in the Installation Guideline of Datasul 12 product.

NOTIFICATION: Besides this document, query Guidelines of [Foundation Unification](#).

Information on process run is available there.

9.3 3. Process Run

TIP: Reduce the environment unavailability time by installing, starting and unifying Foundation before starting the business conversion process.

To perform the procedure must create a shortcut of the operating system by connecting only the Bank of Foundation (EMSFND), then run program **btb/btb959za.w**. The first two screens display information and NOTIFICATIONS on Foundation Unification process. After agreeing to information, the screen enables the choice of products order converted is displayed. This order determines the system has priority on the migration of files, and the first system fully migrates and others are adapted to the first. If suggested three systems do not exist, select option "Not exist". The following table displays the *Foundation* database of each system:

System	Foundation Database
EMS 2	ems2uni
EMS 5	emsbas

HCM

ems2uni

For further information, see the FAQ [BTB959ZA- Unificação Tabelas Foundation](#)

Enter connection parameters to *Foundation* database connection of each one of the existing systems, **without entering the database logic name**.

Example of connection parameters to the Foundation databases:

```
-db ems2cad -H servidor -S 15000 -N tcp
```

After connection parameters, press "Connect" button. In this moment, validation is performed, if the database indicated is not equivalent to selected product in the combination box, an error message, indicating the connected database does not have the Foundation standard tables, is displayed. If these errors are displayed, check if connection parameters are pointing to correct database.

On the next screens, the Users, Users Group and Companies, with information in legacy product database, are listed. You can change the records value that are migrated. The column "Product Value" displays the value registered in legacy product, and the column "ByYou Value" displays the record value in Datasul 12. To ignore migration of a record, double click its row. The button "All" select all records as "Ignored", indicating these ones are not migrated for Datasul 12. The button "None" clear all indicating all records are migrated. The button "Invert" inverts the value from selected to clear and vice-versa.

On the following screen, you can select information migrated by Foundation Unification. Select options below based on configurations listed below:

- **Company:** tables "company" and "bco-timeout" are unified.
- **User:** during the users unification, the password is the own user code in lower case letters (user Alice, password alice; user Bob, password bob) due to a incompatibility between unilateral functions used between EMS2, EMS5 and HCM and TOTVS 11, and it is expired, making user to change password in the first access. In this process, the following tables are unified: "grp_usuar", "layout_impres_padr", "imprsor_usuar", "usuar_mestre", "configur", "usuar_mestre_ext", "usuar_grp_usuar". Records are created in table "fnd_usuar_univ".

- **Printing Type:** these tables are united "tip_imprsor", "impressora", "layout_impres", "efeito_impres", "configur_tip_imprsor", "configur_layout_impres", "ord_configur_imprsor".
- **Dictionary Tables:** this table is united "tab_dic_dtsul".
- **Menu:** these tables are united "produt_dtsul", "aplicat_dtsul", "prog_dtsul", "sist_dtsul", "modul_dtsul", "procedimento", "proced_consult_proced", "proced_relat_proced".
- **Security:** these tables are united "grp_usuar", "aplicat_dtsul_segur", "prog_dtsul_segur", "segur_empres_usuar".
- **Extra Tables:** these tables are united "video", "catal_video", "som", "catal_som", "catal_img", "imagem", "docto_anexo", "catal_docto_anexo", "servid_exec", "servid_exec_imprsor", "servid_rpc".
- **Foundation Company:** this table is united: "empresa" and these records are created "fnd_empres" and "bco_empres".

For "Business Areas", the options are:

- **Financials EMS 2**
- **HCM**
- **Manufacture**
- **Financials**
- **Logistic**

At last, enter the log file to be generated during the unification. Select folder through button "...". The file name is calculated according to date and time of migration run to avoid the overlapping of multiple unifications. Press button "Unify" to start process.

At the end of the process, the "Unification Completed" message is displayed. For verification of migrated data, use information below, where:

- The column "**Table**" represents the unified table;
- The column "**EMS2**" has programs that are used to check information migrated to EMS2;
- The column "**DATASUL12**" has the programs that are used to check information migrated to Datasul 12.

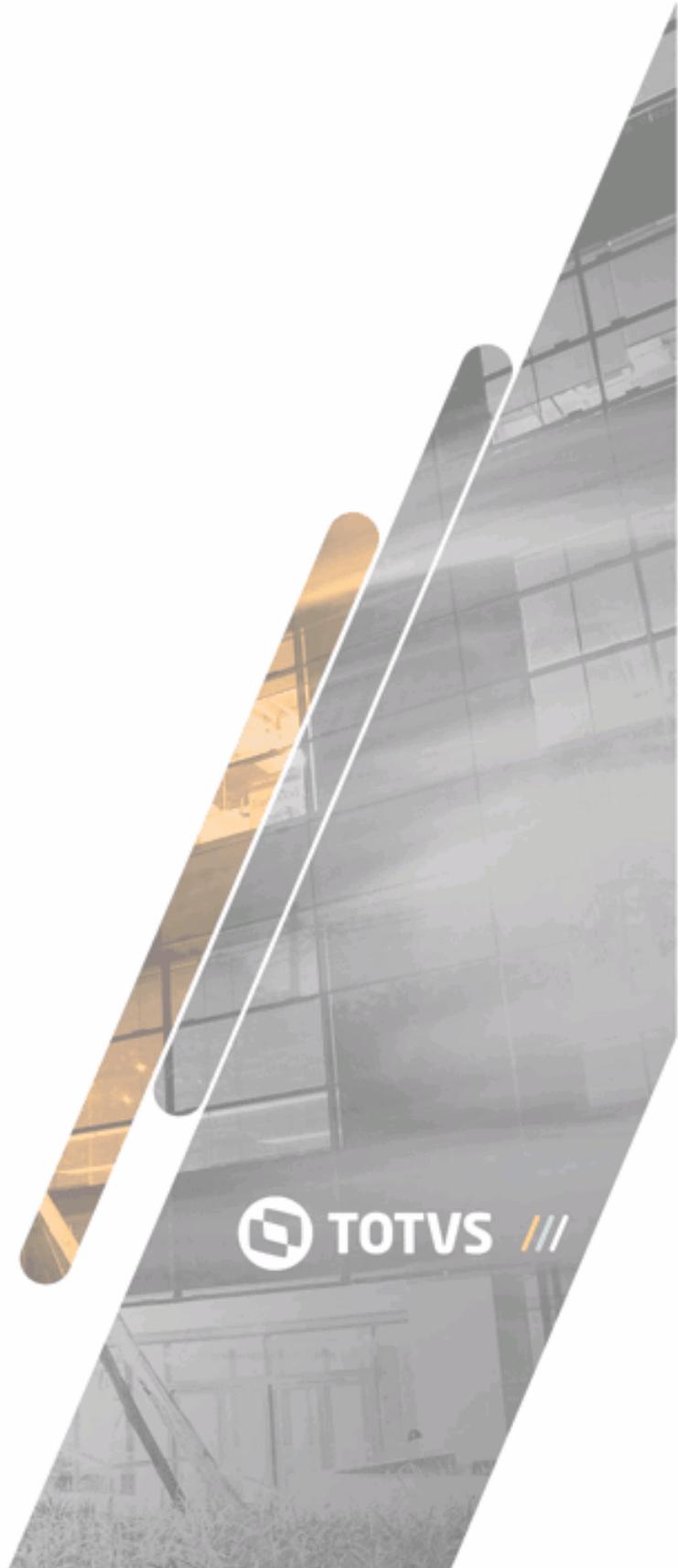
Table	EMS2	DATASUL12
fnd_empres	Inexistente	btb/btb962aa.w
bco_timeout	btb/btb010aa.w	btb/btb010aa.w
empresa	cdp/cd0104.w	cdp/cd0104.w
grp_usuar	bas_grp_usuar	bas_grp_usuar
layout_impres_padr	bas_impresora	bas_impresora
fnd_usuar_univ		
imprsor_usuar	bas_impresora	bas_impresora
usuar_mestre	bas_usuar_mestre	bas_usuar_mestre
configur		
usuar_mestre_ext	bas_usuar_mestre	bas_usuar_mestre
usuar_grp_usuar	bas_usuar_mestre, bas_grp_usuar	bas_usuar_mestre, bas_grp_usuar
produ_t_dtsul	bas_produ_t_dtsul	bas_produ_t_dtsul
aplicat_dtsul	bas_aplicat_dtsul	bas_aplicat_dtsul
prog_dtsul	bas_prog_dtsul	bas_prog_dtsul
sist_dtsul	bas_sist_dtsul	bas_sist_dtsul
modul_dtsul	bas_modul_dtsul	bas_modul_dtsul
procedimento	bas_procedimento	bas_procedimento
proced_consult_proced	bas_procedimento	bas_procedimento
proced_relac_proced	bas_procedimento	bas_procedimento
grp_usuar	bas_grp_usuar	bas_grp_usuar
aplicat_dtsul_segur	bas_aplicat_dtsul	bas_aplicat_dtsul

prog_dtsul_segur	bas_prog_dtsul	bas_prog_dtsul
segur_empres_usuar	bas_usuar_mestre	bas_usuar_mestre
video	bas_video	bas_video
catal_video	bas_catal_video	bas_catal_video
som	bas_som	bas_som
Catal_som	bas_catal_som	bas_catal_som
Catal_img	bas_catal_img	bas_catal_img
imagem	bas_imagem	bas_imagem
docto_anexo	bas_docto_anexo	bas_docto_anexo
catal_docto_anexo	bas_catal_docto_anexo	bas_catal_docto_anexo
servid_exec	bas_servid_exec	bas_servid_exec
servid_exec_imprsor	bas_servid_exec_imprsor	bas_servid_exec
servid_rpc	btb013aa	btb013aa
tip_imprsor	bas_tip_imprsor	bas_tip_imprsor
impressora	bas_impressora	bas_impressora
layout_impres	bas_layout_impres	bas_layout_impres

9.4 4. End Considerations

At the end of previous stages, the Foundation Unification is finished.

10 Tables able to partitioning



10.1 1. Tables listing

Listed below the tables able to partitioning in Upgrade / Update / Concepts Unification to Datasul 11/12.

1. Conversion EMS 2.04 (F90 BSO) to Datasul 12.1.6

Database	Table
movind	movto-estoq
movind	saldo-estoq
movmfg	split-operac

2. Conversion EMS 2.06B (C16) to Datasul 12.1.8

Database	Table
movind	movto-estoq
movind	saldo-estoq
movind	ext-ord-per
movmfg	split-operac

3. Concepts Unification Phase 1 in Datasul 12.1.8

Database	Table
movind	movto-estoq
movdis	ped-item

4. Unification of Datasul History Adjust Concepts in Datasul 12.1.8

Database	Table
----------	-------

movind	movto-estoj
movdis	ped-item