Consolidator

1.00 — Last update: 2016/05/31

Basis Technologies

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Introduction

This document is the manual for Basis Technologies “Consolidator”.

Consolidator is a SAP related tool that can be implemented to support consolidation of SAP ECC systems, this document describes the basic concepts, setup instructions, operation of Consolidator and reporting overviews available.

Basic Concepts

A list of the basic concepts in Consolidator and what these mean:

- Stage
- Customizing Data
- Custom Objects
- Hard Code Literals
- Phases
- Analysis
- Decision
- Execution
- Transfer

Stage

Consolidator works through the technical consolidation of a system by breaking this down into three stages as follows:

Customizing Data
Custom Objects
Hard Code Literals

Stages Customizing Data and Custom Objects have four phases as all Custom Objects get transferred at once. Hard Code Literals does not go through the Transfer phase.

Analysis
Decision
Execution
Transfer

Customizing Data

Customizing Data holds the information on how the system has been configured to operate for different business processes. When merging systems there will be conflicts in this configuration, Consolidator identifies the tables and lines in conflict and works out which data can be safely re-keyed into the destination system and which requires manual intervention.

Where key fields clash, for example company code 1000 is used in both systems, in one system all the references to company code 1000 need to be changed, for example to 9000. This will also need to be reflected anywhere company code 1000 has been used as a Hard Code Literal.

Custom Objects

The custom objects are customer developed repository objects (Z and Y Objects) that have to be assessed for naming conflicts between the source and target systems.

Custom Objects assessed for conflicts are:

- Authorisation Fields
- Classes
- Customer Enhancement Projects (CMOD)
- Package
- Data Domain
- Data Element
- Enhancement Implementation
- Enhancement Spot
- Lock Object
- Function Group
- Function Module
- Interface
- Message Class
- Number Range Object
- Parameter ID
- Program
- Search Help
- SAP Modification Implementations (SMOD)
- SAP SMartforms
- Authorisation Objects
- BAdI Implementation
- BAdI Definition
- Table
- Standard Text
- Trnasaction
- Table Type
- Type Group
- View

Hard Code Literals

A Hard Coded Literal (HCL) is where developers have embedded a specific value, such as Customizing Data, directly into the source code of a program or other executable object. As a part of a consolidation if the Customizing Data changes then the hard coded literals need to be checked and updated as appropriate. For this reason Customizing Data **must** be completed before hard coded literals can complete the Execution phase.

For example the ABAP code below demonstrates where a hard coded literal has been declared for a company code and embedded into the IF statement as ‘1000’. The IF statement below means the code reacts differently for company code 1000, if in the Customizing Data stage company code 1000 has now been translated to company code 9000 then the ABAP code must be updated to reflect this.

```
IF p_bukrs = '1000'.
  PERFORM special_processing.
ELSE.
  PERFORM regular_processing.
ENDIF.
```

Executable Objects which are assessed for Hard Coded Literal are:

- Classes
- Enhancement Spot
- SAP Script
- Function Group
- Function Module
- Interface
- Workflow Template
- Program
- SAP Smartforms
- Type Group

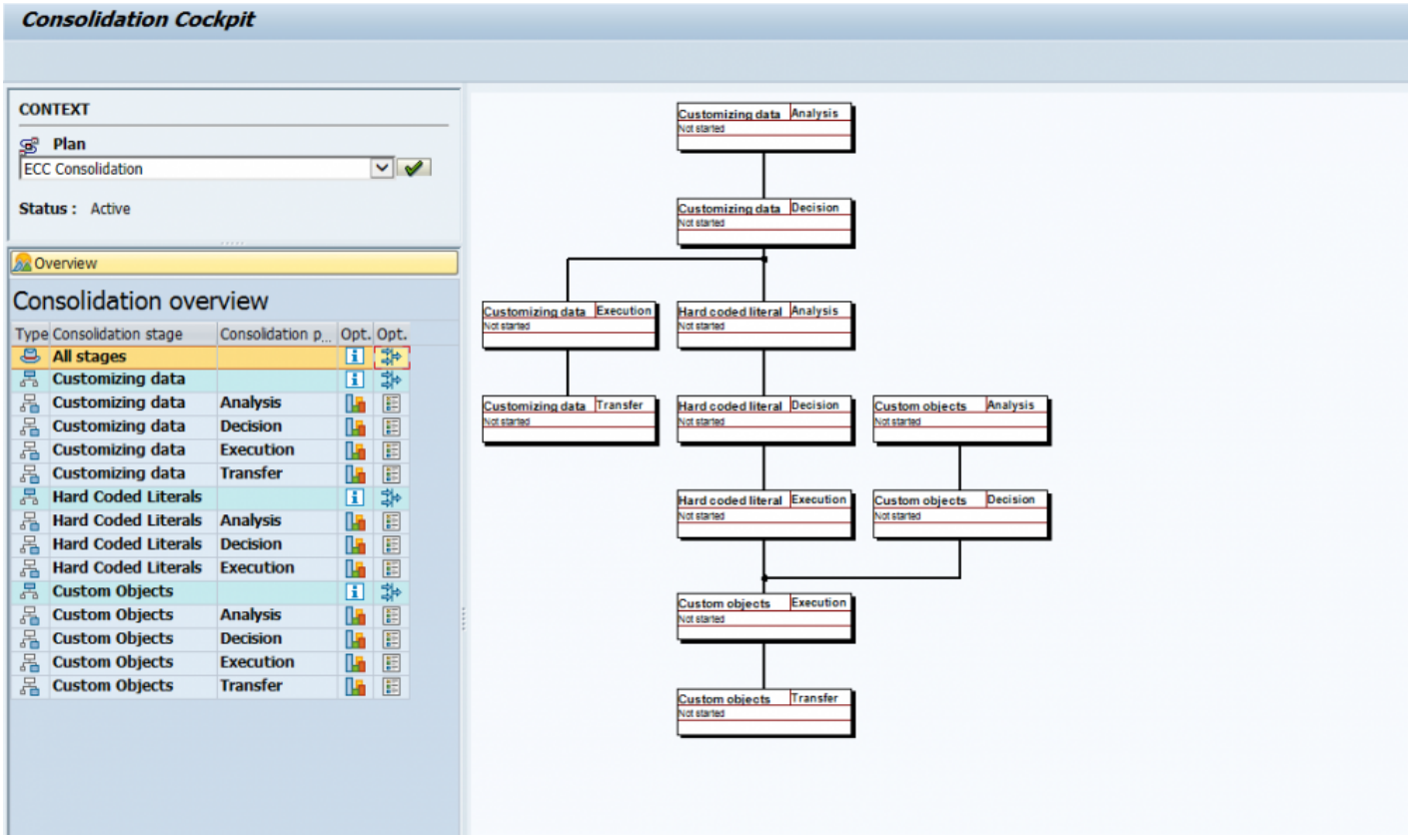
Phases

The following four phases are followed for Customizing Data and Custom Objects, although note the Hard Code Literals stage does not go through the Transfer phase.

Analysis
Decision
Execution
Transfer

> * To keep the phases in order once you close a phase it cannot be reopened

To view the order phases must be completed executing the transaction “/BTR/CON” (if in the command bar use “/N/BTR/CON”), navigate to the drawer ‘Overview’ select ‘All stages’ and press the  button. The diagram displayed shows the route the phases must flow through.



Analysis

The Analysis phase is where all of the Custom Objects, Hard Code Literals or Customizing Data are assessed by Consolidator for conflicts. Programs are executed to collect the data from the source and target systems and to run the comparison that picks up the conflicts between the systems. The results can be viewed to help assess the depth of differences between the systems and if the source and target systems are as expected.

Decision

The decision phase shows all of the conflicts for the Stage you are looking at, at this point in the process the user has to make choices of how to deal with conflicts. A number of options are offered to the user to help make their choices, including usage data for repository objects.

For Custom Objects the following decisions are available:

- Ignore conflict
- Rename in system A
- Rename in system B
- Handle manually
- Decision cancelled

For Hard Code Literals following decisions are available:

*Translate the literal
*Ignore Conflict
*Remediate Manually
*Cancel decision

For Customizing Data the following decisions are available:

- Translated
- Failed
- Manual Re-key
- Confirmation Pending
- Ignore
- Reset to initial

Execution

The execution phase is where all of the actual changes to custom objects and customizing data happens. This phase is automated based on the decisions made in the decision phase.

Transfer

The transfer phase is where all of the proposed changes are moved from the source system to the destination system

> * Note that this phase is not relevant for the stage ‘Hard Code Literals’ as all of the changes to correct the hard coded literals are held against the Custom Objects.

Setup

To set up Consolidator, read through the following sections before starting the installation process.

- Prerequisites
- Architecture
- Installation
- Systems
- Plans
- Configuration

Prerequisites

Prerequisites for Controller System

SAP® Web Application server release 7.00 (or higher)

Source/Target Systems (currently supported)

SAP® R/3® Releases
SAP® ECC 5.0 (or higher)

Prerequisites for the SAP UI

Minimum:
SAP GUI 7.10
Recommended:
Current Version SAP GUI

Architecture

The architecture for Consolidator is quite straightforward. There is the concept of a “controller” system upon which all activities relating to the consolidating process are executed. Separately, there are participating systems which are those SAP systems being consolidated. You are able to define and execute multiple consolidations between various systems via the same controller system.

The two systems that are to be merged, normally copies of production are assigned as System A and System B. After the analysis phase the target system can be selected, the other system then becomes the source.

A separate destination system can also be assigned which can act as the development environment for the target environment. This assists by helping the merge of changes that may be continuing through the target landscape.

Installation

The following installation steps are required to be performed on your SAP systems to install Consolidator.

#	Activity	Details
1	Import transports into your system Controller	Import the transports provided by Basis Technologies into your designated Controller. Diffuser followed by Transport Express followed by Consolidator They must be imported in the order specified.
2	Import transports into your Source/Target/ Destination systems	Import the transports provided by Basis Technologies into your designated Controller. Diffuser followed by Transport Express followed by Consolidator They must be imported in the order specified.
3	Create RFC users	Use SU01 to create a CON_RFC user in all clients of the Controller and Source/ Target/Destination systems. This RFC user needs roles to administer transports and develop including a developer key. Suggested SAP authorisations as follows: **SAP_BC_TRANSPORT_ADMINISTRATOR** **SAP_BC_DWB_ABAPDEVELOPER** For all remote systems the CON_RFC user needs to be of type **System User** For the Domain Controller systems the CON_RFC user needs to be of type **Service User** Important: In the Domain Controller, CON_RFC user also needs **/BTI/ TE:CTS_ADMIN_USER** and **/BTI/TE:CTS_ADMIN**
4	Create RFC destinations (in Controller)	Use SM59 (>> Create Connection) to create RFC destinations in your Controller: a. To connect to Source/Target/Destination systems taking part in the merge b. To connect back to the Controller system itself The following nomenclature must be used:

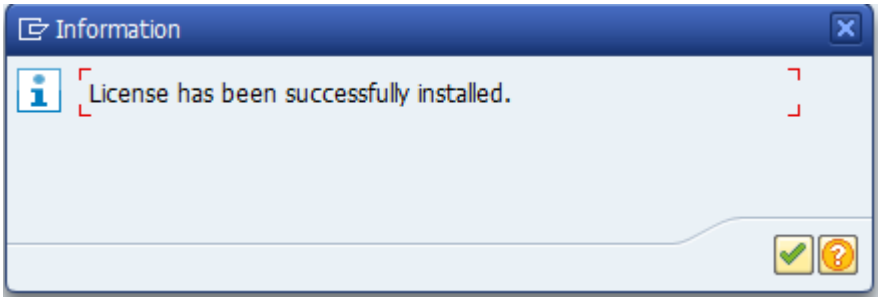
		<table><tr><td>RFC Name</td><td>CONSOLIDATOR CONTROLLER</td></tr><tr><td>Connection Type</td><td>3 (ABAP Connection)</td></tr><tr><td>Target Host</td><td>Hostname of the server of the SAP system</td></tr><tr><td>Client</td><td>The main client of the SAP system</td></tr><tr><td>User</td><td>CON_RFC</td></tr><tr><td>Password</td><td>**********</td></tr></table> After set up, test the connection via Utilities -> Test -> Authorization Test
5	Create RFC Destinations (for Source/Target/ Destination Systems)	Use SM59 (> Create Connection) to create RFC destinations in the Controller for the Controller to connect to the Source/Target/Destination SAP systems. The following nomenclature must be used: <table><tr><td>RFC Name</td><td>CONSOLIDATOR XXX Where XXX is the SID of the SAP system</td></tr><tr><td>Connection Type</td><td>3 (ABAP Connection)</td></tr><tr><td>Target Host</td><td>Hostname of the server of the SAP system</td></tr><tr><td>Client</td><td>The main client of the SAP system</td></tr><tr><td>User</td><td>CON_RFC</td></tr><tr><td>Password</td><td>**********</td></tr></table> After set up, test the connection via Utilities -> Test -> Authorization Test

Managing Licenses

Execute the transaction /N/BTR/CON_LICENSE to get taken to the license management screen in the controller system.

To install a license file select the install license option and execute the transaction, the file is then selected for upload.

A success message should be received.



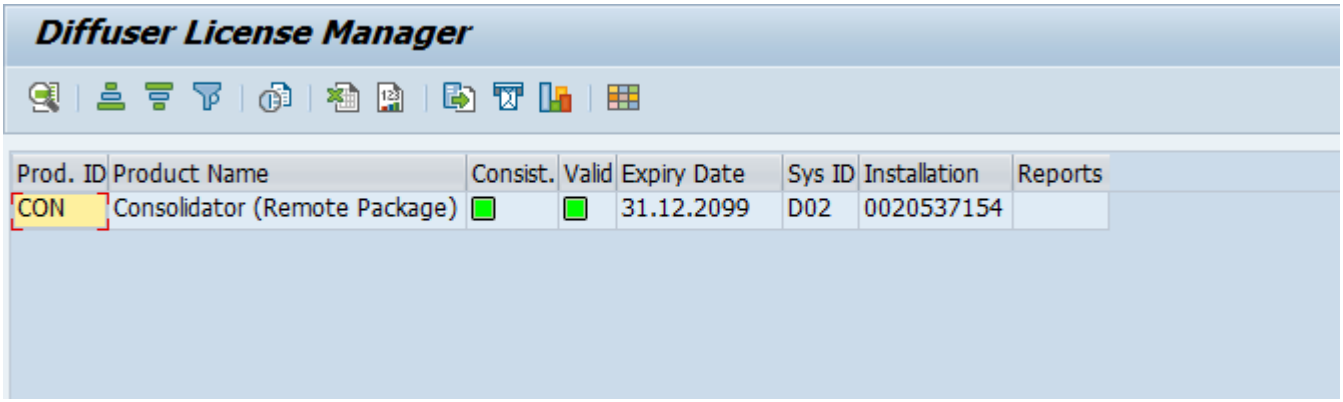
The license can now be checked by selecting the view license key and execute, the license key details should now be visible.

The source/target systems also require a license key to be installed, again a license file is provided.

Execute the transaction /N/BTR/LICENSE to get taken to the license management screen in the source/ target system.

To install a license file select the install license option and execute the transaction, the file is then selected for upload.

The license can now be checked by selecting the check license key option and execute, the license key details should now be visible.

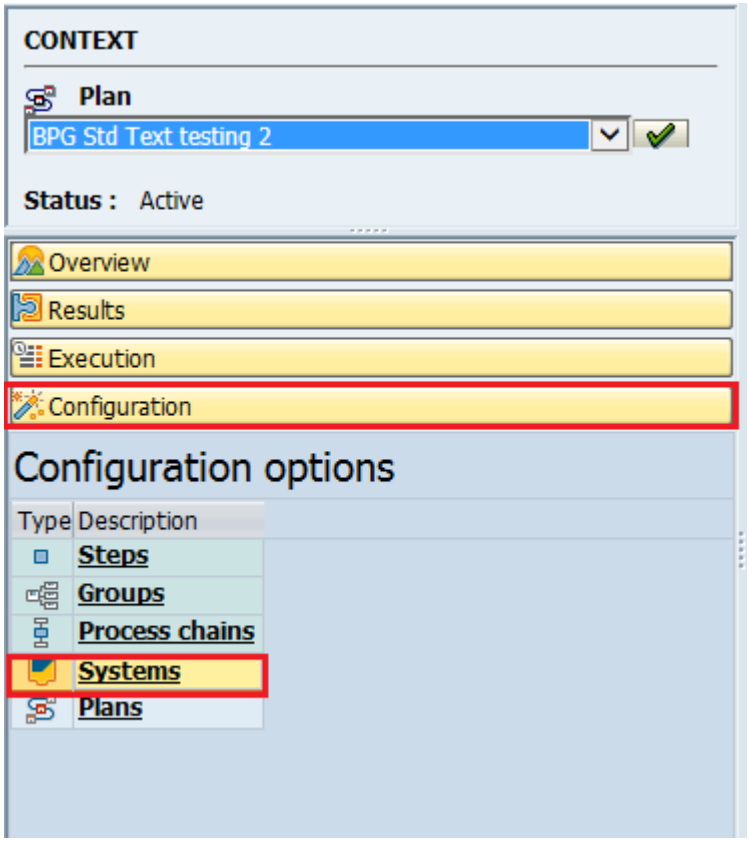


Systems

The systems to be consolidated must be configured within Consolidator. Like all actions relating to a consolidation exercise, you perform this step upon the controller system.

> * Note you will need need RFCs setup for the full creation of a system see Installation section.

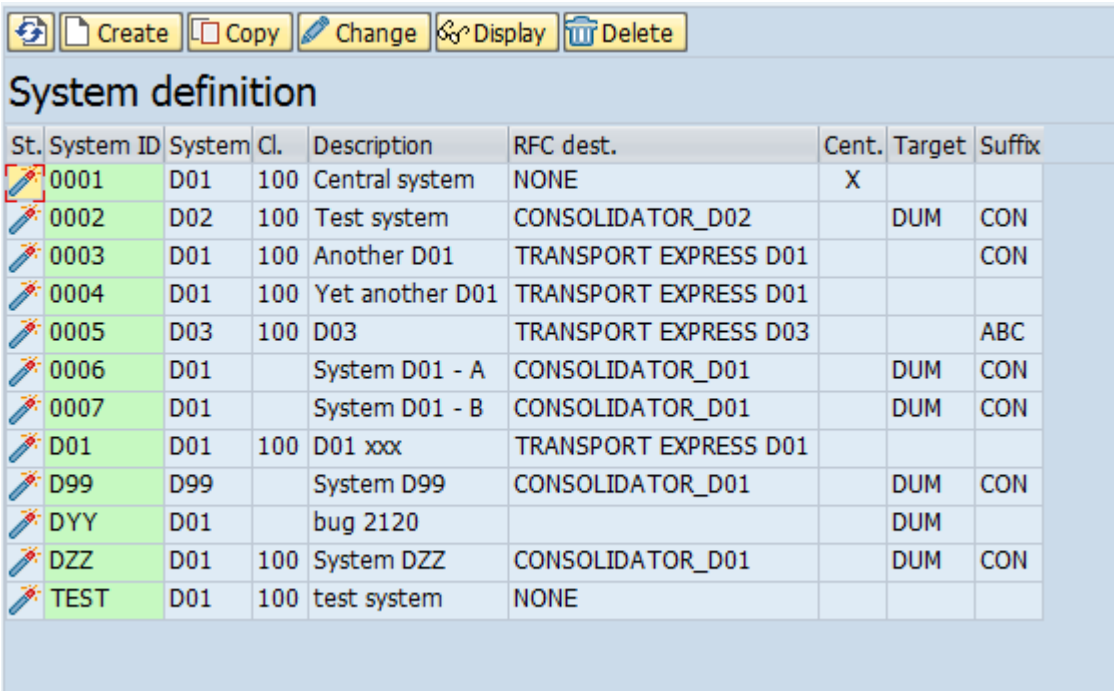
After executing the transaction “/BTR/CON” (if in the command bar use “/N/BTR/CON”), navigate to the drawer “Configuration” and then select “Systems”.



From here you can:

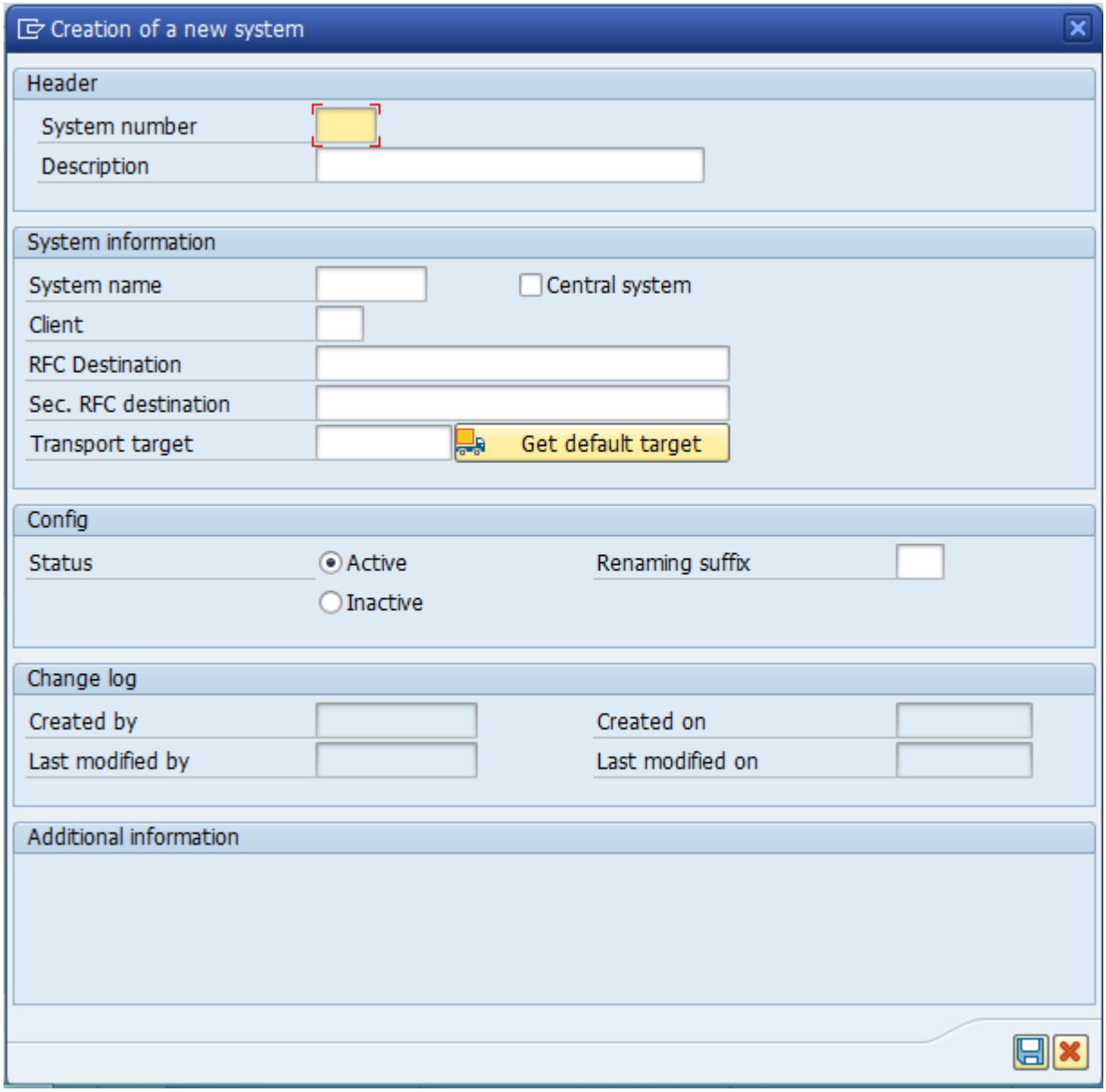
- Create a new system
- Copy an existing system
- Change a system

- Display a system
- Delete a system



St.	System ID	System	Cl.	Description	RFC dest.	Cent.	Target	Suffix
	0001	D01	100	Central system	NONE	X		
	0002	D02	100	Test system	CONSOLIDATOR_D02		DUM	CON
	0003	D01	100	Another D01	TRANSPORT EXPRESS D01			CON
	0004	D01	100	Yet another D01	TRANSPORT EXPRESS D01			
	0005	D03	100	D03	TRANSPORT EXPRESS D03			ABC
	0006	D01		System D01 - A	CONSOLIDATOR_D01		DUM	CON
	0007	D01		System D01 - B	CONSOLIDATOR_D01		DUM	CON
	D01	D01	100	D01 xxx	TRANSPORT EXPRESS D01			
	D99	D99		System D99	CONSOLIDATOR_D01		DUM	CON
	DYY	D01		bug 2120			DUM	
	DZZ	D01	100	System DZZ	CONSOLIDATOR_D01		DUM	CON
	TEST	D01	100	test system	NONE			

When creating a system the following screen is shown



An explanation for the function of each field on the “Systems” screen is as below:

- System Number – This is a unique identifier for the system
- Description – This is purely to add a description to the system
- System Name – This is the System ID of the system being setup
- Client – This is the client of that system you want to interact with

- Central System – This is the controlling system and only one system can be flagged as this, flagging this will automatically be setup the RFC Destination (below) as “NONE” in order to avoid unnecessary RFC calls from the central system to itself

- RFC Destination – This it the RFC that should have been setup in the installation

- Secondary RFC Destination – This it the secondary RFC that should have been setup in the installation

- Transport Target – This is the transport target for transports progressing through that system (the Get default target button will obtain the default)

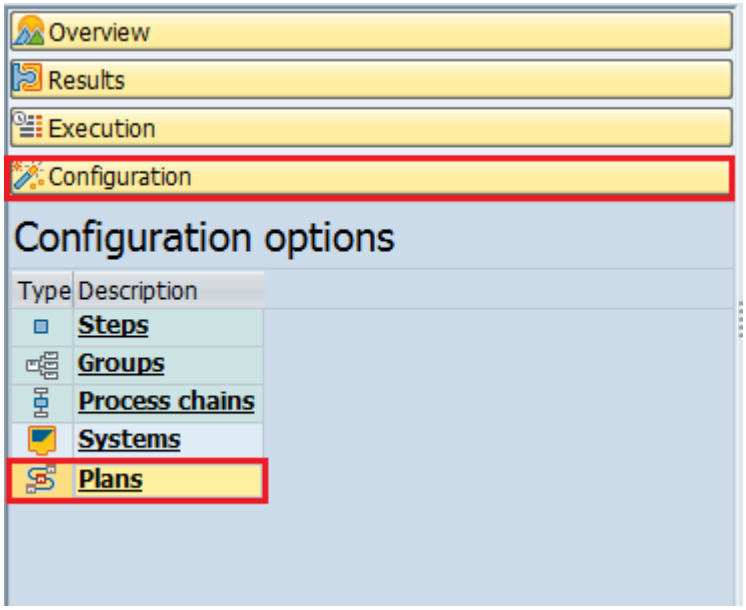
- Status – The radio button can be toggled between active and inactive, when inactive the system cannot be added to a plan

- Renaming Suffix – This is used as the suffix added to the end of custom objects when renaming

Plans

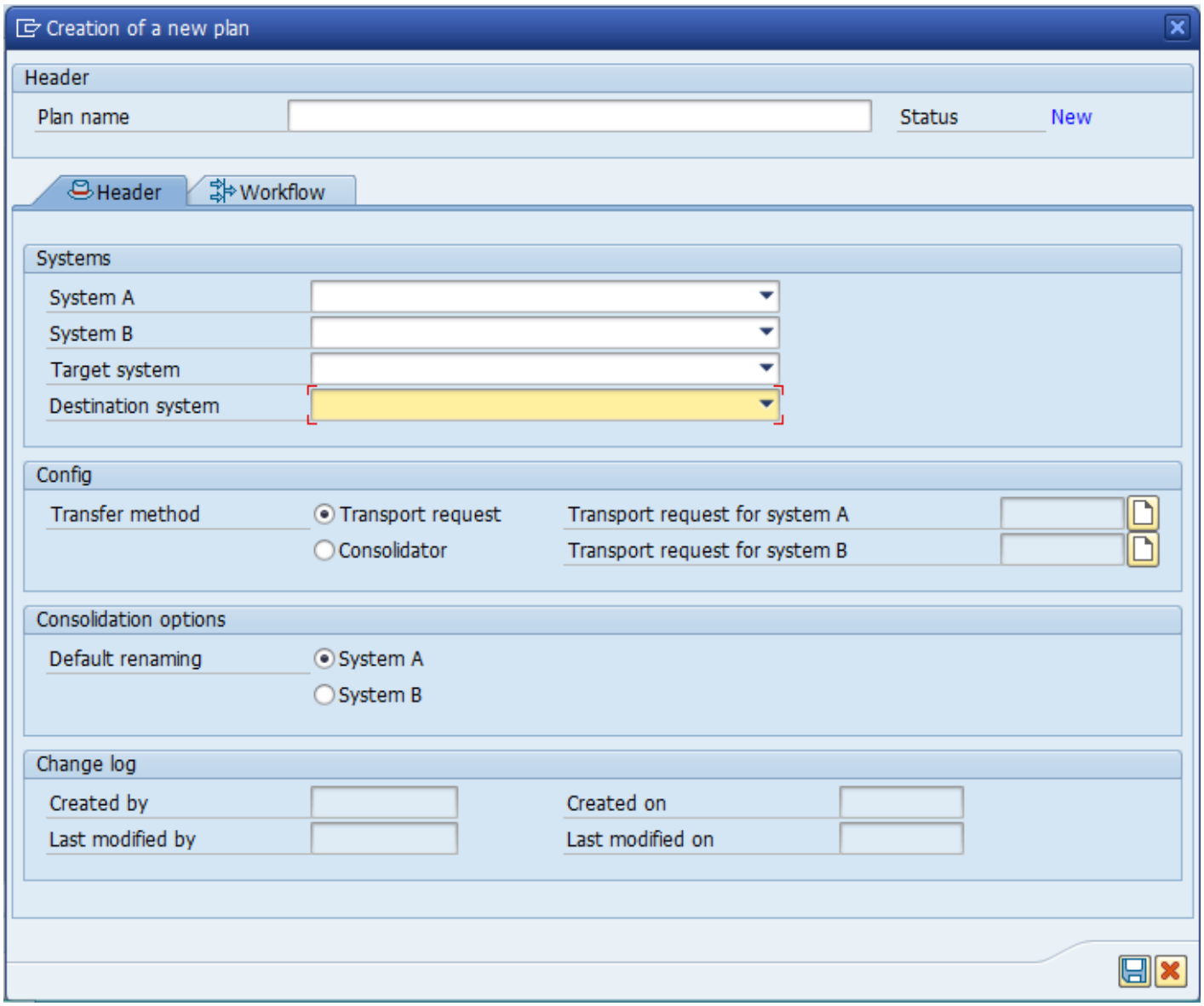
You must set up a plan before you can begin any consolidation activities. A plan specifies the participating systems (i.e. which systems are being consolidated). Here you can also configure the target system and destination system.

After executing the transaction “/BTR/CON” (if in the command bar use “/N/BTR/CON”), navigate to the drawer “Configuration” and then select “Plans”.



From here you can:

- Create a new plan
- Copy an existing plan
- Change a plan
- Display a plan

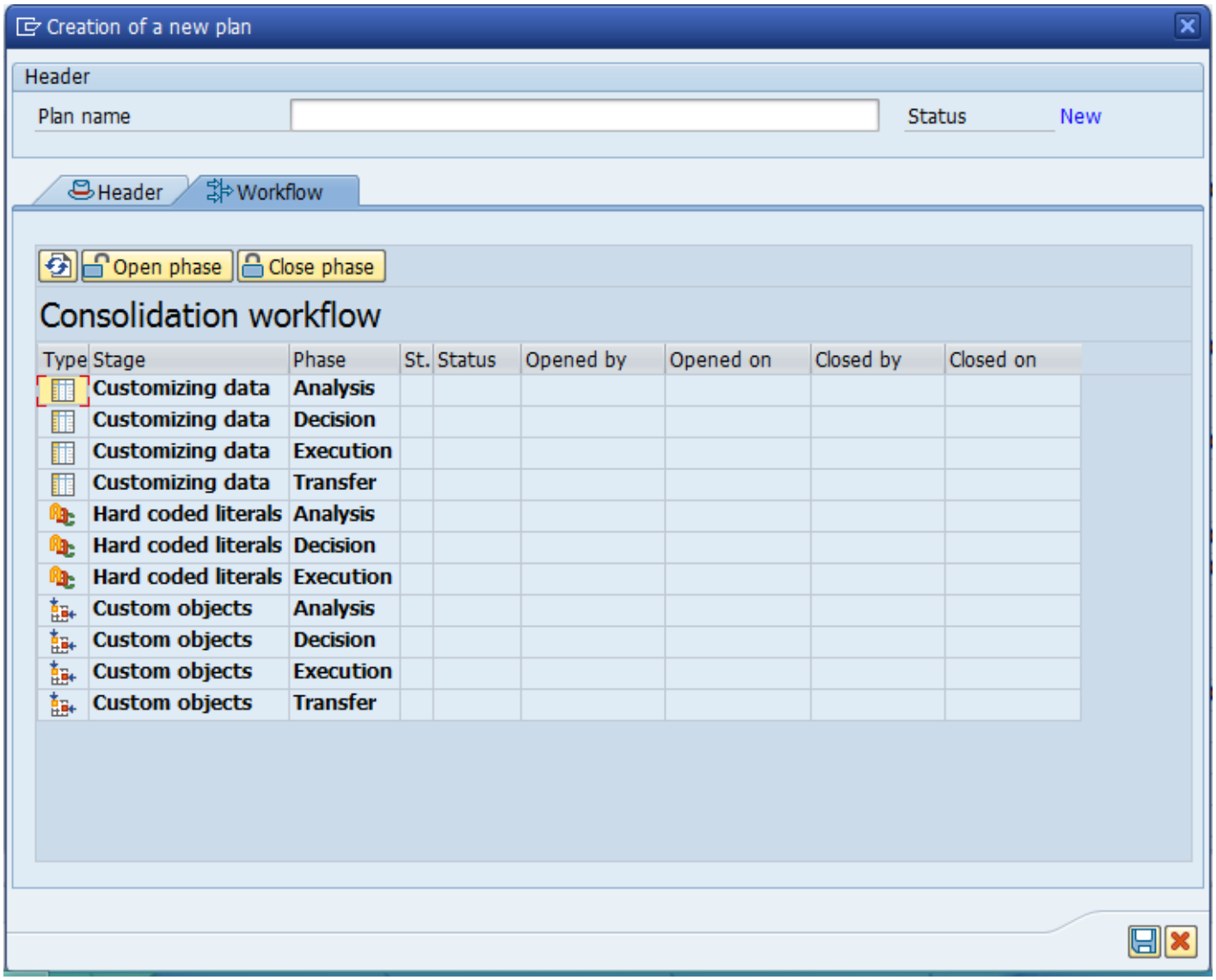


An explanation for the function of each field on the “Plan” screen is as below:

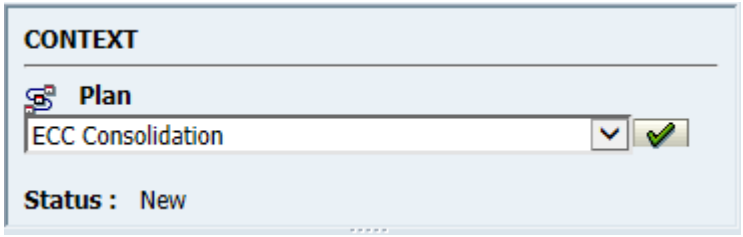
- Plan Name – This is the description of the plan
- Status – This is the status of the plan dictated by the system (options are new, active, inactive and closed)
- System A – This is one of the systems that will be consolidated
- System B – This is the other system that will be consolidated
- Target System – Choose System A or B as target system the other system is now the source

- Destination System – This is the system which will receive the transports
- Transfer Method – Choose if the changes will be transported or inserted directly, we recommend the usage of transport
- Transport request for system A (and B) – Here the create buttons will create transports in each system to contain the changes made during the execution phase
- Default Renaming – This determines if the default renaming occurs in System A or B
- Change Log – This is a log of who created and changed the plan and the date of the creation/change

The workflow tab below shows the status of each phase, who changed, when it was opened and when it was closed.

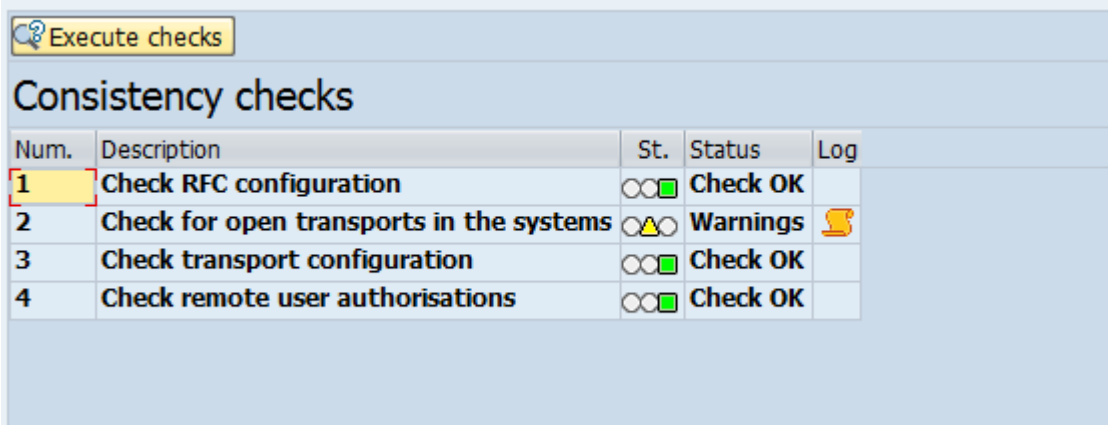


Select the plan and press the green tick button, note the status is currently ‘New’.



The plan is now ready to run the consistency checks, navigate to the drawer “Results” and then select “Plan consistency checks”.

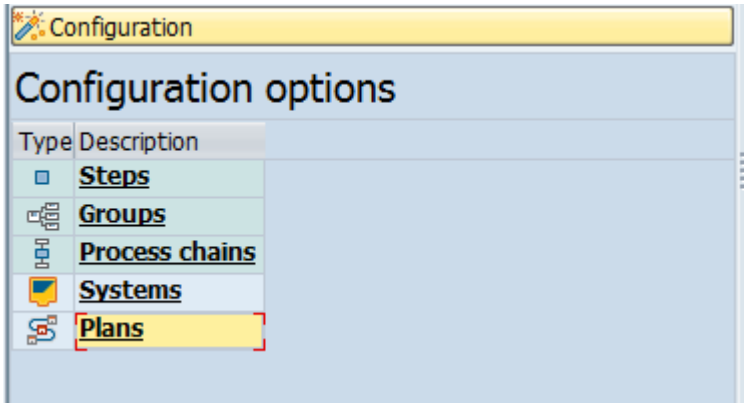
Press the “Execute checks” button, the checks are then run through and logs are produced for warnings or errors.



Select the plan and press the green tick button, note the status is currently ‘Active’. you are now ready to start with the execution of your plan.

Configuration

After executing the transaction “/BTR/CON” (if in the command bar use “/N/BTR/CON”), and navigating to the drawer “Configuration” you will have noted that other configuration items exist for Steps, Groups and Process Chains, these are not to be changed and have already been set up as required for the operation of the tool.



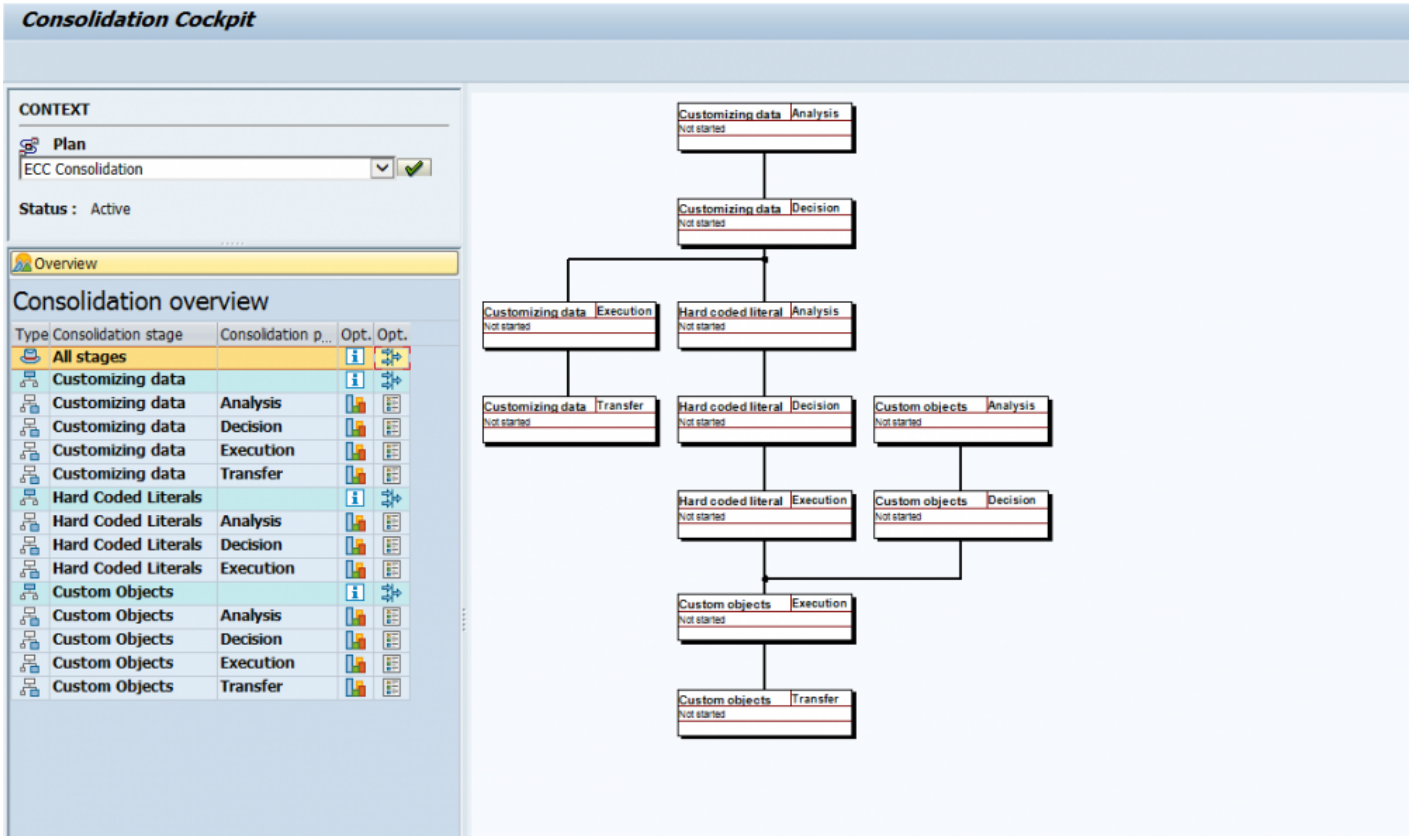
Usage

To start the operation of the tool the Setup should have been completed and a plan selected and with the green tick button pressed the plan shows as active as below.

To achieve the technical merge then the following stages have to be completed.

- Customizing Data
- Hard Code Literals
- Custom Objects

The diagram below reflects the order in which the phases should be completed, to view this diagram go to the ‘Overview’ drawer and click the  in the ‘All Stages’ row to produce the diagram as below.


Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Consolidation overview
Type Consolidation stage Consolidation p... Opt. Opt.
All stages
Customizing data
Customizing data Analysis
Customizing data Decision
Customizing data Execution
Customizing data Transfer
Hard Coded Literals
Hard Coded Literals Analysis
Hard Coded Literals Decision
Hard Coded Literals Execution
Custom Objects
Custom Objects Analysis
Custom Objects Decision
Custom Objects Execution
Custom Objects Transfer
Customizing data Analysis
Not started
Customizing data Decision
Not started
Customizing data Execution
Not started
Hard coded literal Analysis
Not started
Customizing data Transfer
Not started
Hard coded literal Decision
Not started
Custom objects Analysis
Not started
Hard coded literal Execution
Not started
Custom objects Decision
Not started
Custom objects Execution
Not started
Custom objects Transfer
Not started

Customizing Data

The customizing data stage is dealt with through four phases which are completed in the order below:

- Analysis Phase
- Decision Phase
- Execution Phase
- Transfer Phase

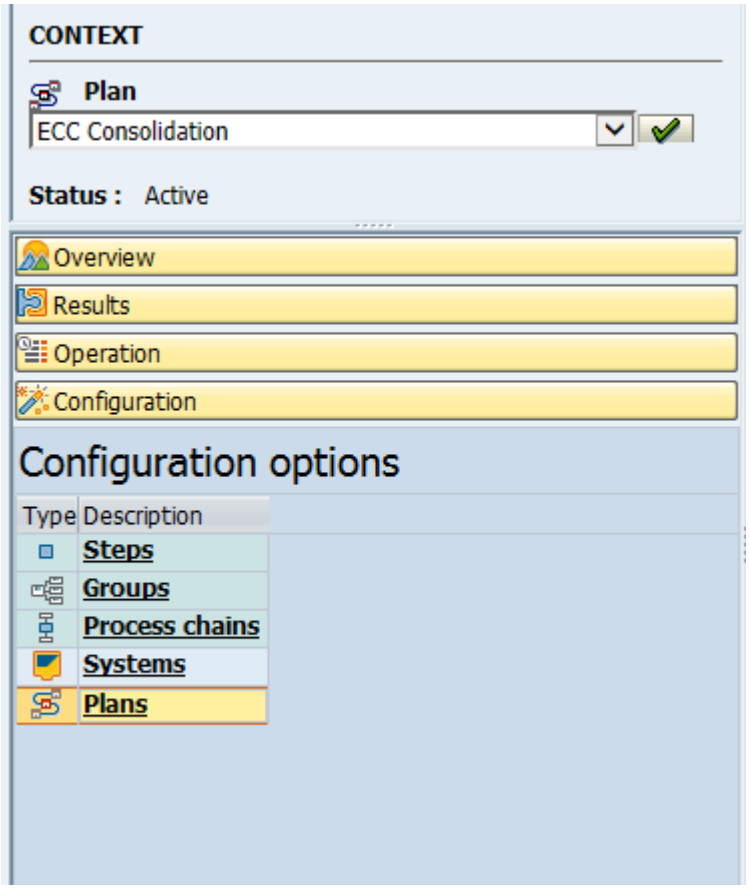
Analysis Phase

The Analysis phase is broken down into two section the operation of the run and then viewing the results.

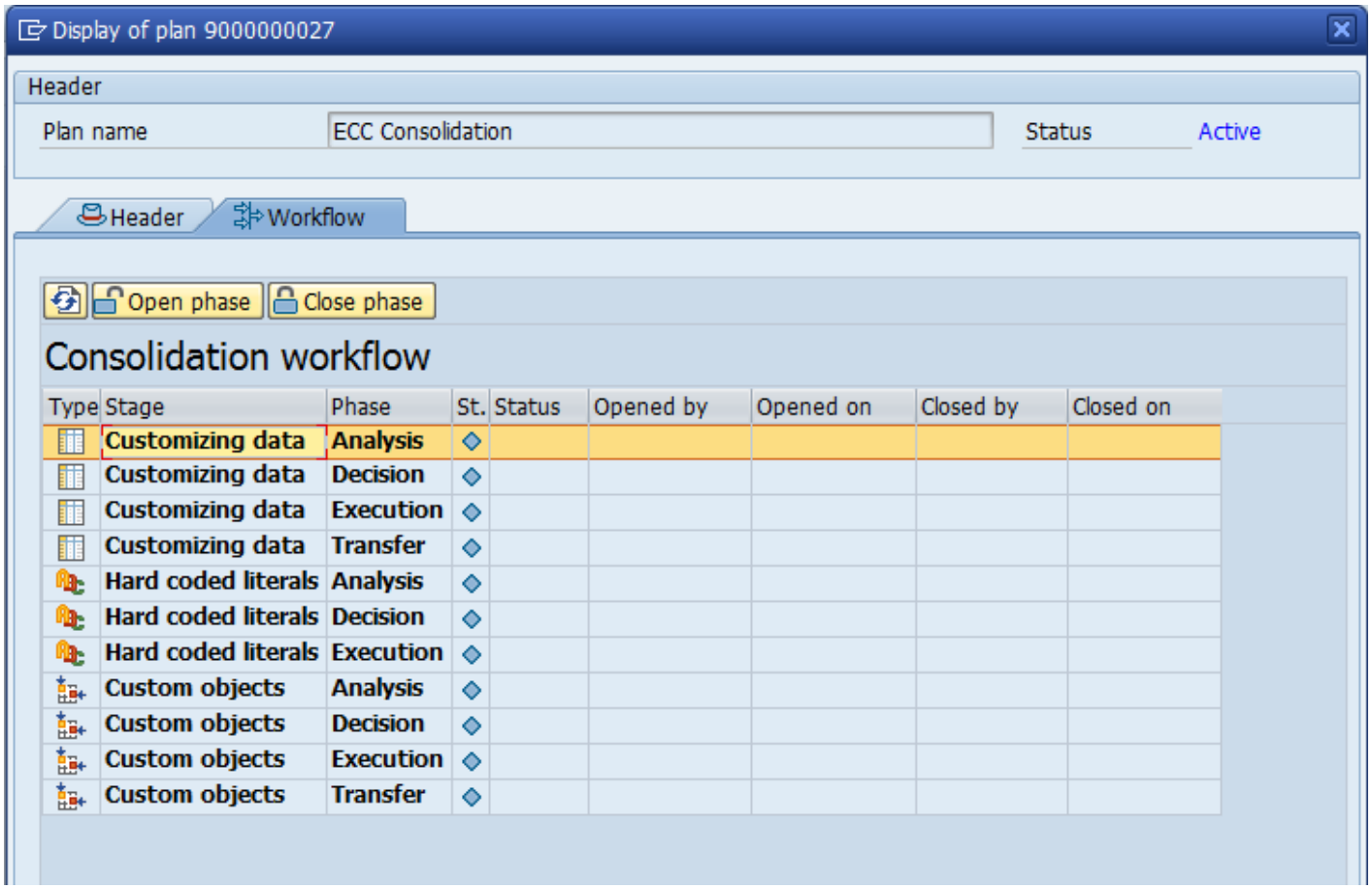
- Operation
- Results

Operation

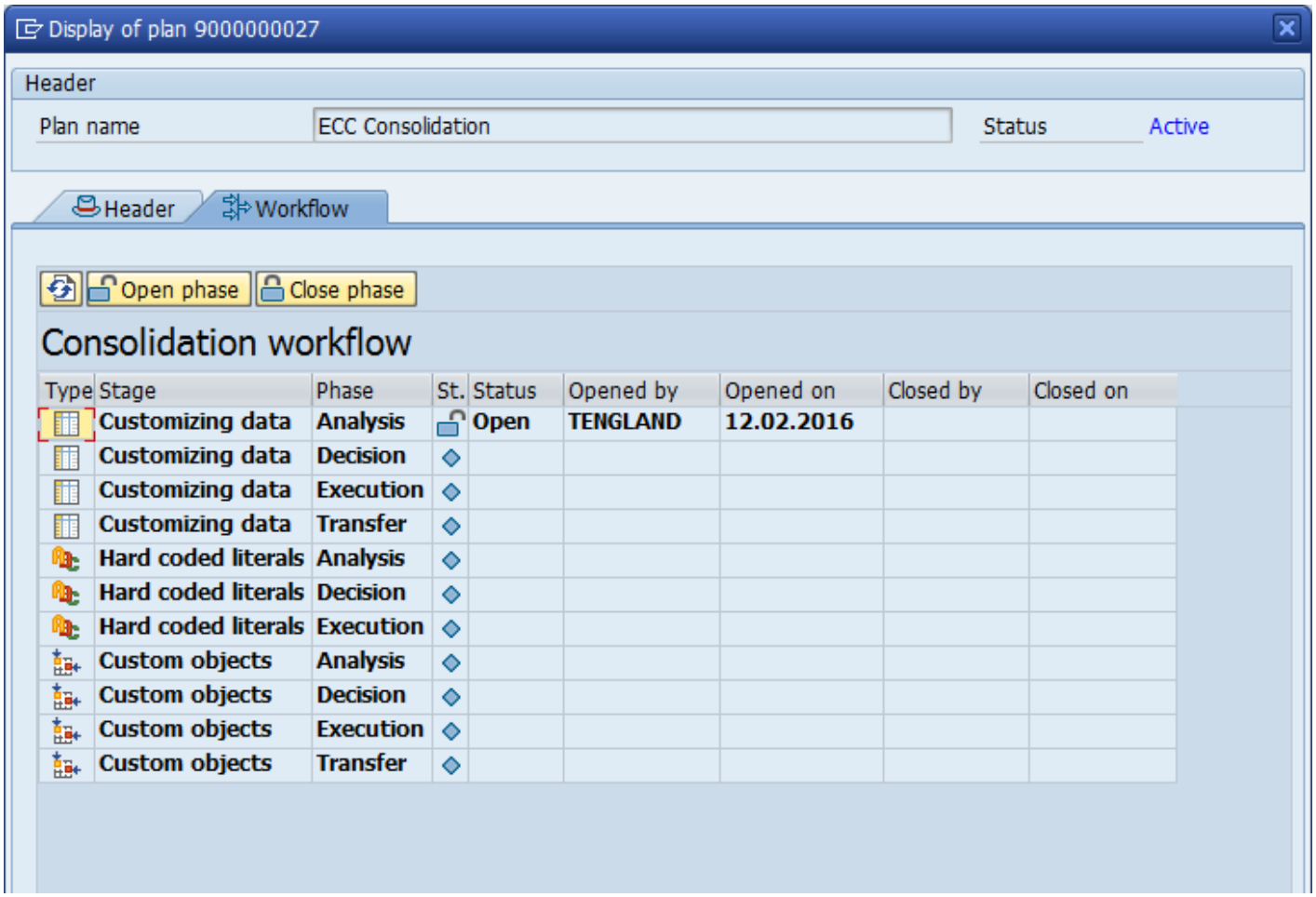
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



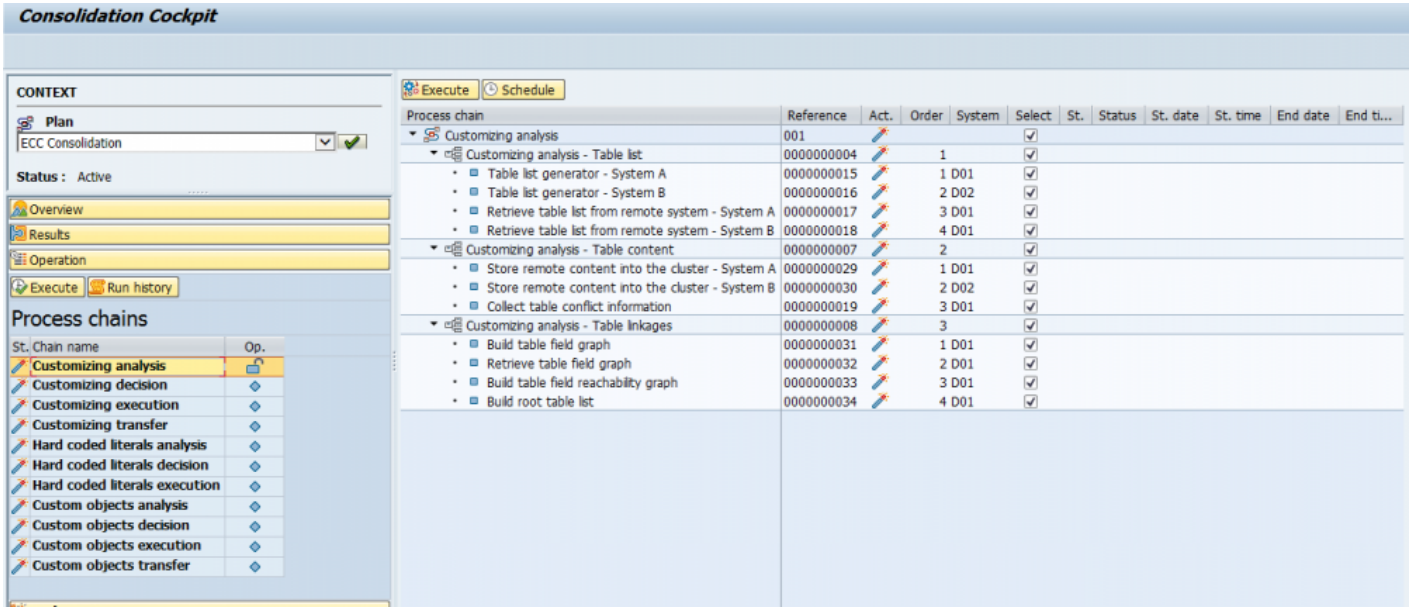
In the workflow tab select the stage ‘Customizing Data’ phase ‘Analysis’ and press the ‘Open Phase button.



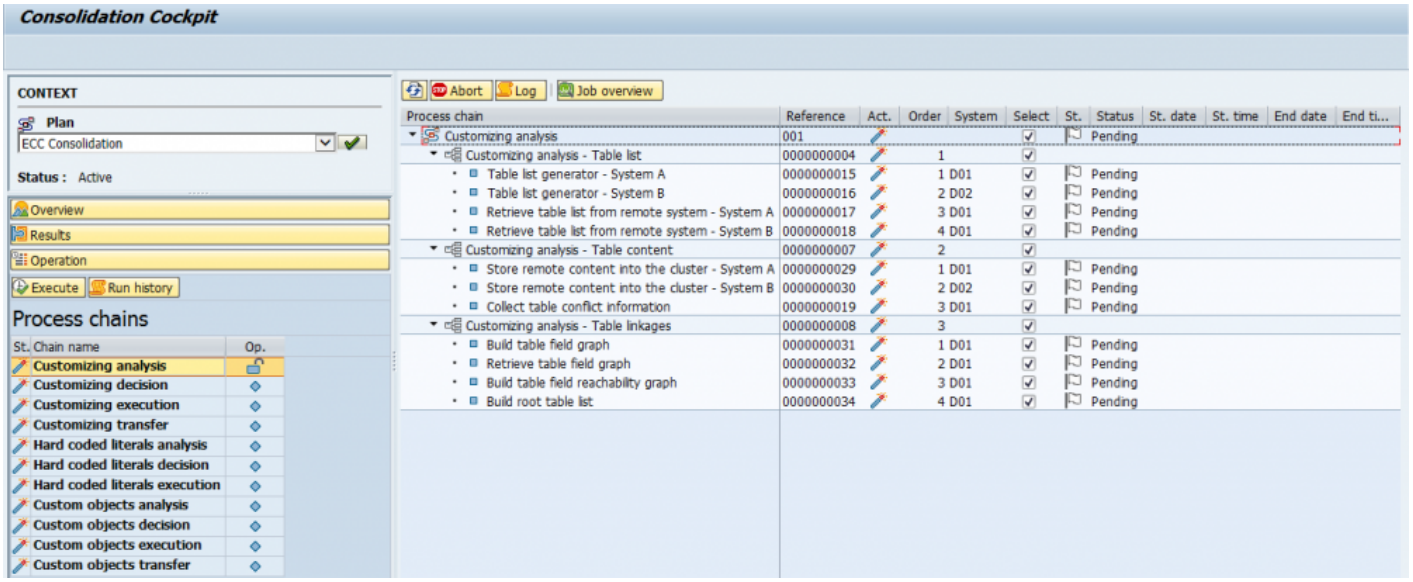
The phase is now open for operations.



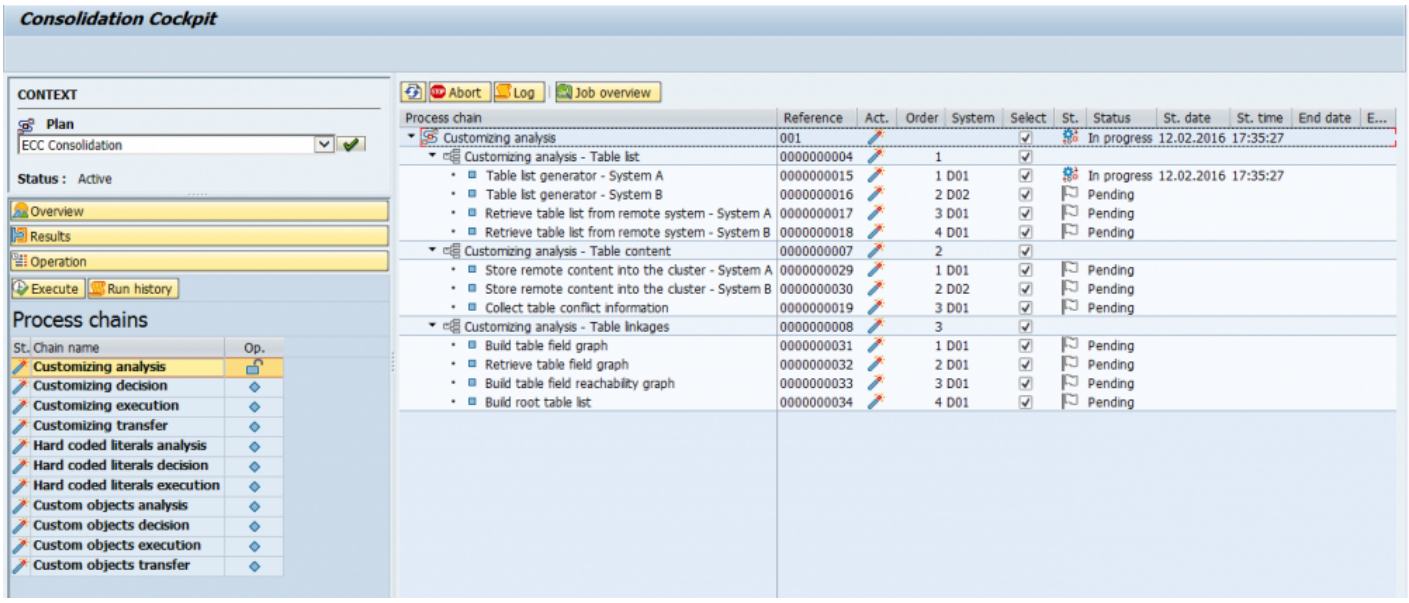
With the analysis phase now open go to the ‘Operation’ drawer and select the ‘Customizing analysis’ phase and press the ‘Execute’ button.



Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings.



Pressing the refresh button will show the progress of the analysis programs running.

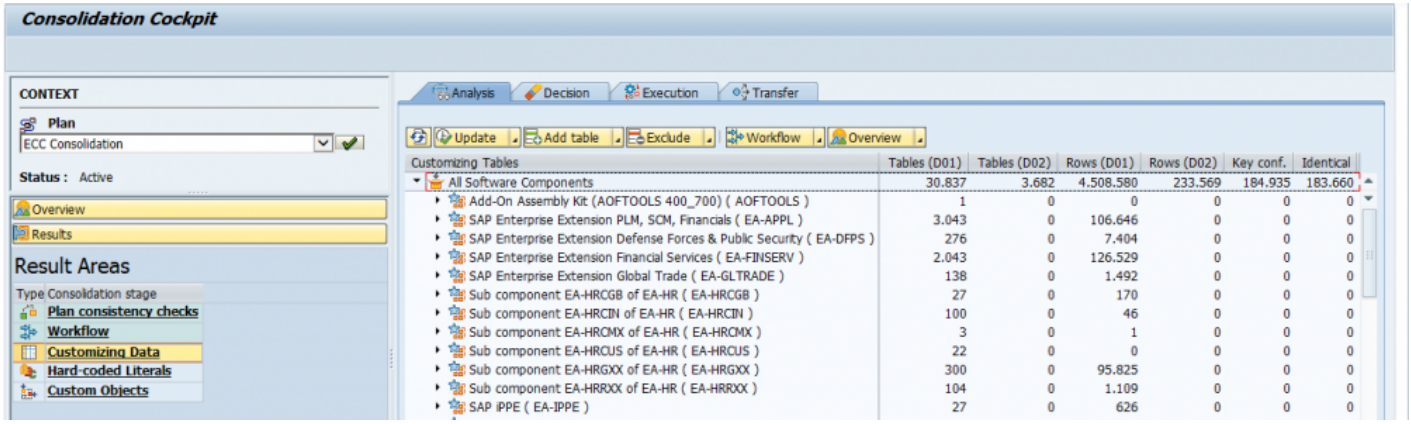

Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Abort
Log
Job overview
Process chain Reference Act. Order System Select St. Status St. date St. time End date E...
Customizing analysis 001 In progress 12.02.2016 17:35:27
Customizing analysis - Table list 0000000004 1
Table list generator - System A 0000000015 1 D01 In progress 12.02.2016 17:35:27
Table list generator - System B 0000000016 2 D02 Pending
Retrieve table list from remote system - System A 0000000017 3 D01 Pending
Retrieve table list from remote system - System B 0000000018 4 D01 Pending
Customizing analysis - Table content 0000000007 2
Store remote content into the cluster - System A 0000000029 1 D01 Pending
Store remote content into the cluster - System B 0000000030 2 D02 Pending
Collect table conflict information 0000000019 3 D01 Pending
Customizing analysis - Table linkages 0000000008 3
Build table field graph 0000000031 1 D01 Pending
Retrieve table field graph 0000000032 2 D01 Pending
Build table field reachability graph 0000000033 3 D01 Pending
Build root table list 0000000034 4 D01 Pending

Results

The Analysis phase of the Customizing Data stage will provide the number of configuration tables from each system, the number of rows of data involved and the number of conflicts that have been found.

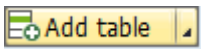
Once the Analysis programs have run from the Operation section it is time to view the results, go to the ‘Results’ drawer and select the ‘Customizing Data’.

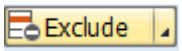
The results are broken down by software component and reveal the number of tables and rows of data in each system as well as identical rows and conflicts.

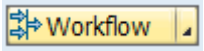


The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button  allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

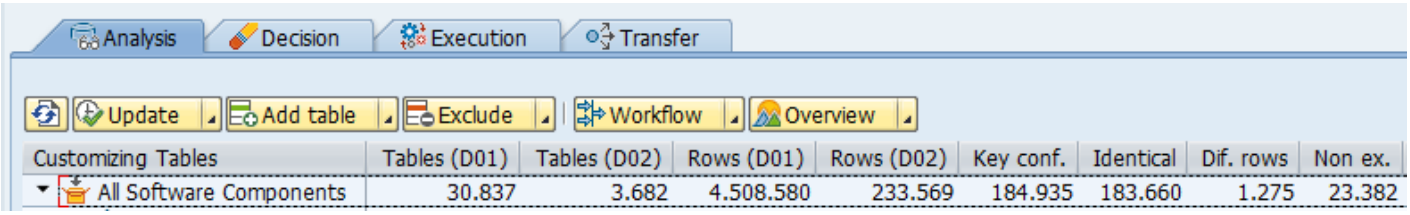
The ‘Add Table’ button  allows the user to add tables that are not of a delivery class of customising (C or G) that you want to bring into the Analysis. Tables can be added just to this plan or globally for any future consolidation plans.

The ‘Exclude’ button  allows the user to exclude tables from being considered in the rest of the consolidation process, they can also be added back in this phase if the decision needs to be reversed.

The ‘Workflow’ button  allows the user to open and close this phase.

The ‘Overview’ button  allows the user to view the reports for this phase, see the Reporting section for more details.

The table holds large amounts of information, broken into nodes at the software component level, the screenshot below shows data accumulated into the nodes. Explanations for what each column represents are provided below the screenshot.



Customizing Tables	Tables (D01)	Tables (D02)	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.
All Software Components	30.837	3.682	4.508.580	233.569	184.935	183.660	1.275	23.382

Tables – This contains the number of tables in each system for each node

Rows – This contains the number of tables in each system for each node

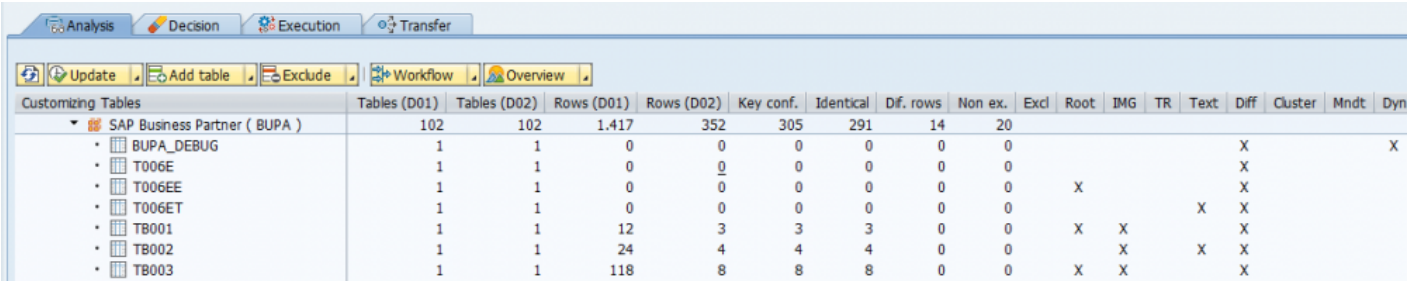
Key Conflict – This contains the number of rows with a conflicting key

Identical – This counts the number of identical rows between the two systems

Different Rows – Rows where the key conflicts, but the data is different

Non Ex. – Lines not existing in the target system

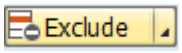
The screenshot below shows where the user has navigated to the SAP Business Partner node and opened it to reveal tables, while the columns above are still relevant the other columns may also now be populated. Explanations for what each column represents are provided below the screenshot.



Customizing Tables	Tables (D01)	Tables (D02)	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.	Excl	Root	IMG	TR	Text	Diff	Cluster	Mndt	Dyn
SAP Business Partner (BUPA)	102	102	1.417	352	305	291	14	20									
BUPA_DEBUG	1	1	0	0	0	0	0	0						X			X
T006E	1	1	0	0	0	0	0	0						X			
T006EE	1	1	0	0	0	0	0	0		X				X			
T006ET	1	1	0	0	0	0	0	0					X	X			
TB001	1	1	12	3	3	3	0	0		X	X			X			
TB002	1	1	24	4	4	4	0	0			X		X	X			
TB003	1	1	118	8	8	8	0	0		X	X			X			

Root – Indicates this table is a root table, this means that the key of this table is a foreign key for a number of other tables and therefore if we need to translate they key of the root table it will impact other tables. For example if plant 1100 exists in both systems, but represents plant therefore the root table (T001W) is

updated with plant 1100 from the source system translated to 9100. However, plant 9100 now has to be updated in the root table and all references in tables that link back to the root table.

Excl – This table has been excluded as per the button ‘Exclude’ button 

IMG – Is an IMG node

TR – The table is in a transport

Text – The table is a text table, a table holding different descriptions of a field in different languages and is linked to a table that holds technical setup details

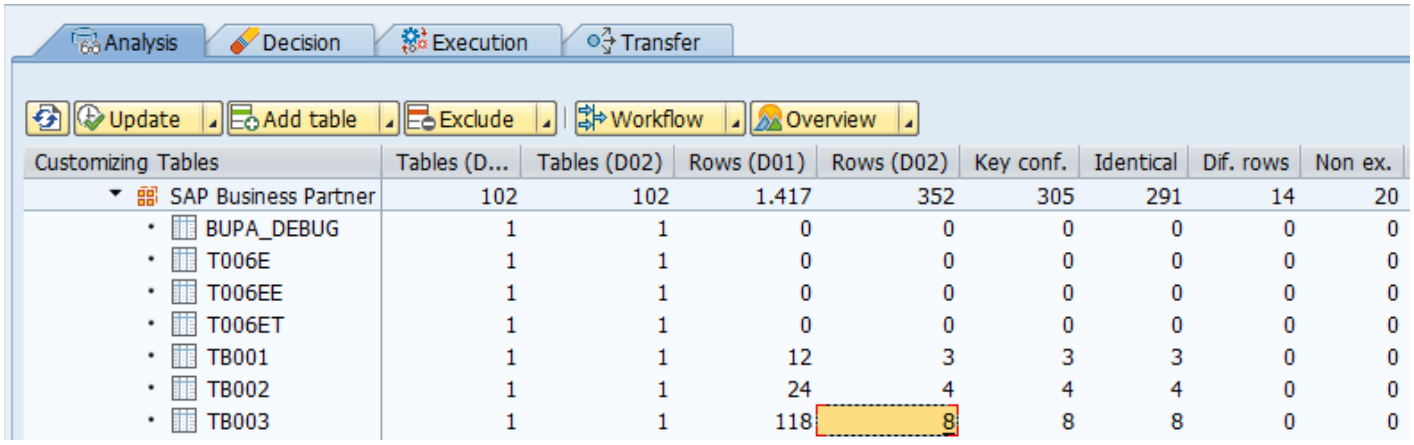
Diff – There are structural differences in this table when the two systems are compared

Cluster – The table is a cluster table

Mndt – Only has client (MANDT) as a key, so only one row of data can be held

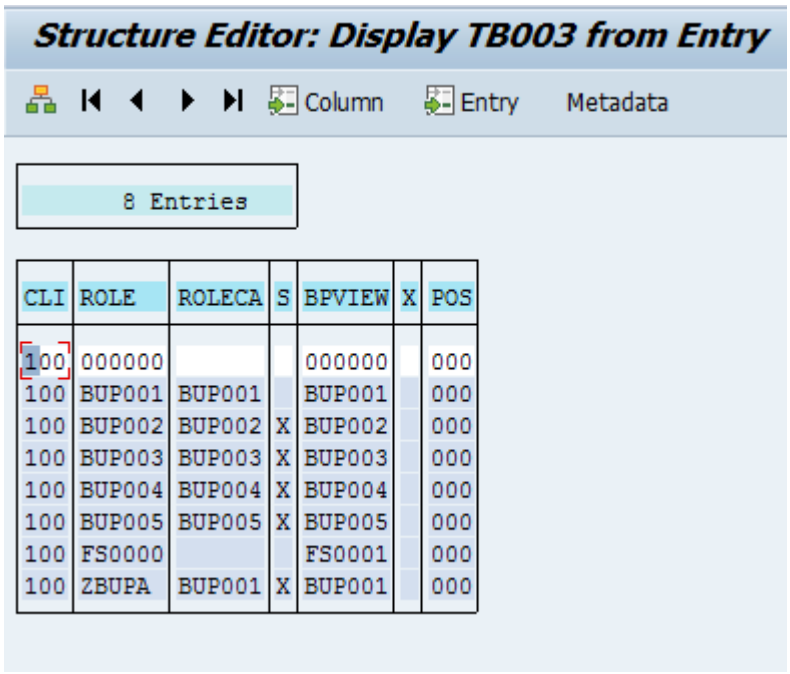
Dynamic Calls – This means the table contains, a field relating to a program name, a class name or a function module name. Therefore the references here may lead to dynamic calls to different code and this should be checked.

On a table row all of the numbers in the columns ‘Rows’, ‘Key Conflict’, ‘Identical’, ‘Different Rows’, and ‘Non Ex.’ can be clicked and results reviewed.



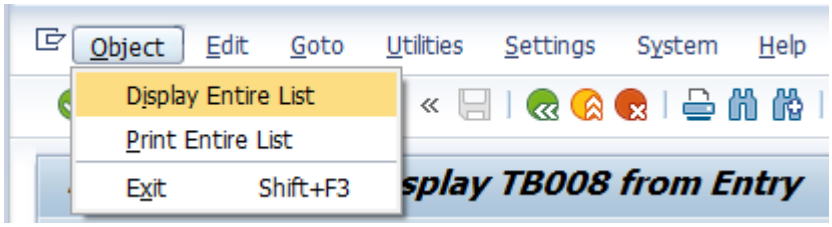
Customizing Tables	Tables (D...	Tables (D02)	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.
SAP Business Partner	102	102	1.417	352	305	291	14	20
BUPA_DEBUG	1	1	0	0	0	0	0	0
T006E	1	1	0	0	0	0	0	0
T006EE	1	1	0	0	0	0	0	0
T006ET	1	1	0	0	0	0	0	0
TB001	1	1	12	3	3	3	0	0
TB002	1	1	24	4	4	4	0	0
TB003	1	1	118	8	8	8	0	0

Example of results retrieved.



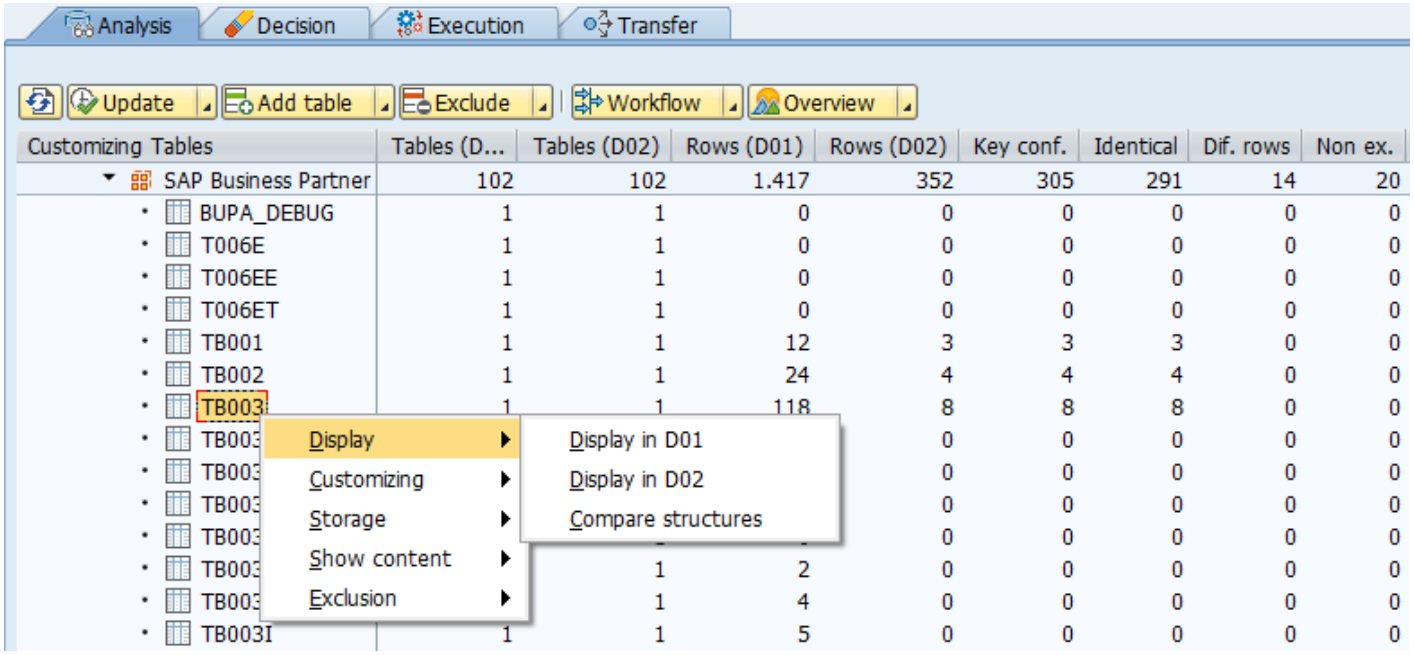
CLI	ROLE	ROLECA	S	BPVIEW	X	POS
100	000000			000000		000
100	BUP001	BUP001		BUP001		000
100	BUP002	BUP002	X	BUP002		000
100	BUP003	BUP003	X	BUP003		000
100	BUP004	BUP004	X	BUP004		000
100	BUP005	BUP005	X	BUP005		000
100	FS0000			FS0001		000
100	ZBUPA	BUP001	X	BUP001		000

Note that the standard SAP display does not display large numbers of entries, to see all entries, select ‘Object’ then ‘Display Entire List’ as below.



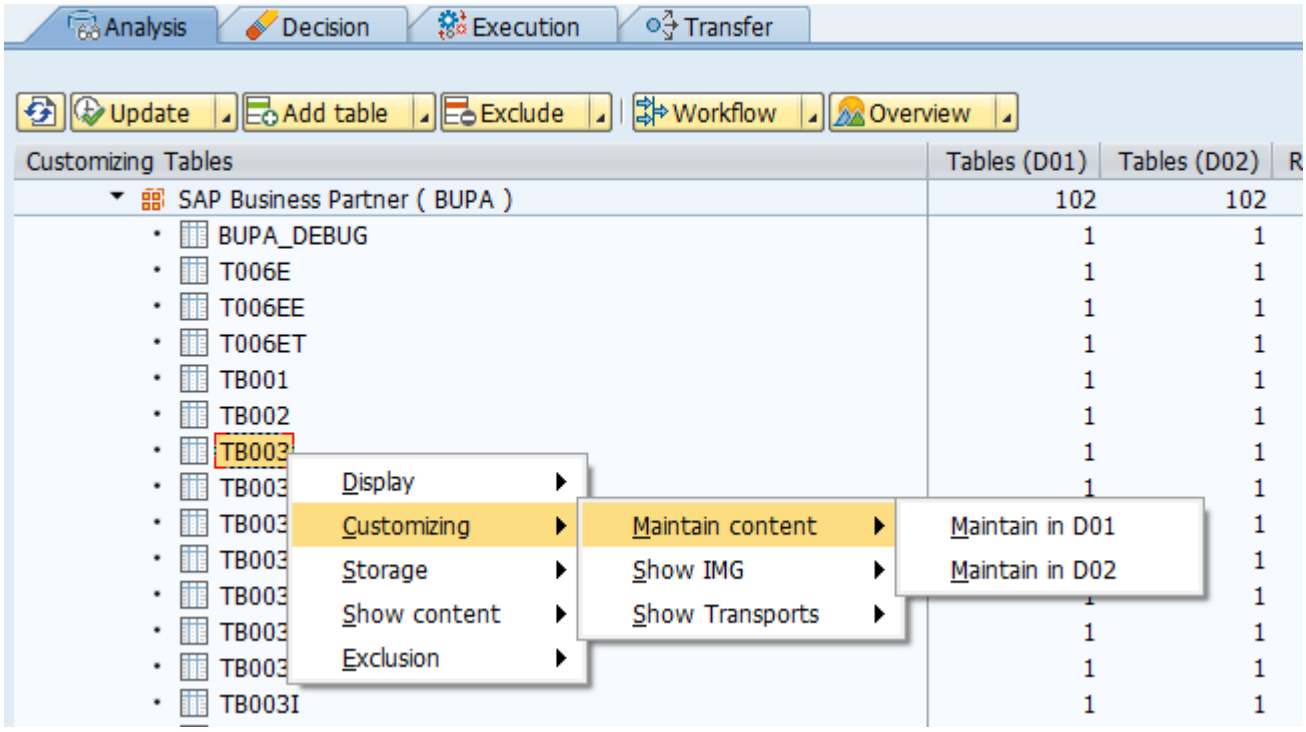
There are also a number of options seen by using a right mouse click on a table.

The ‘Display’ option allows the user to display the table structures in each system or to compare the structures.

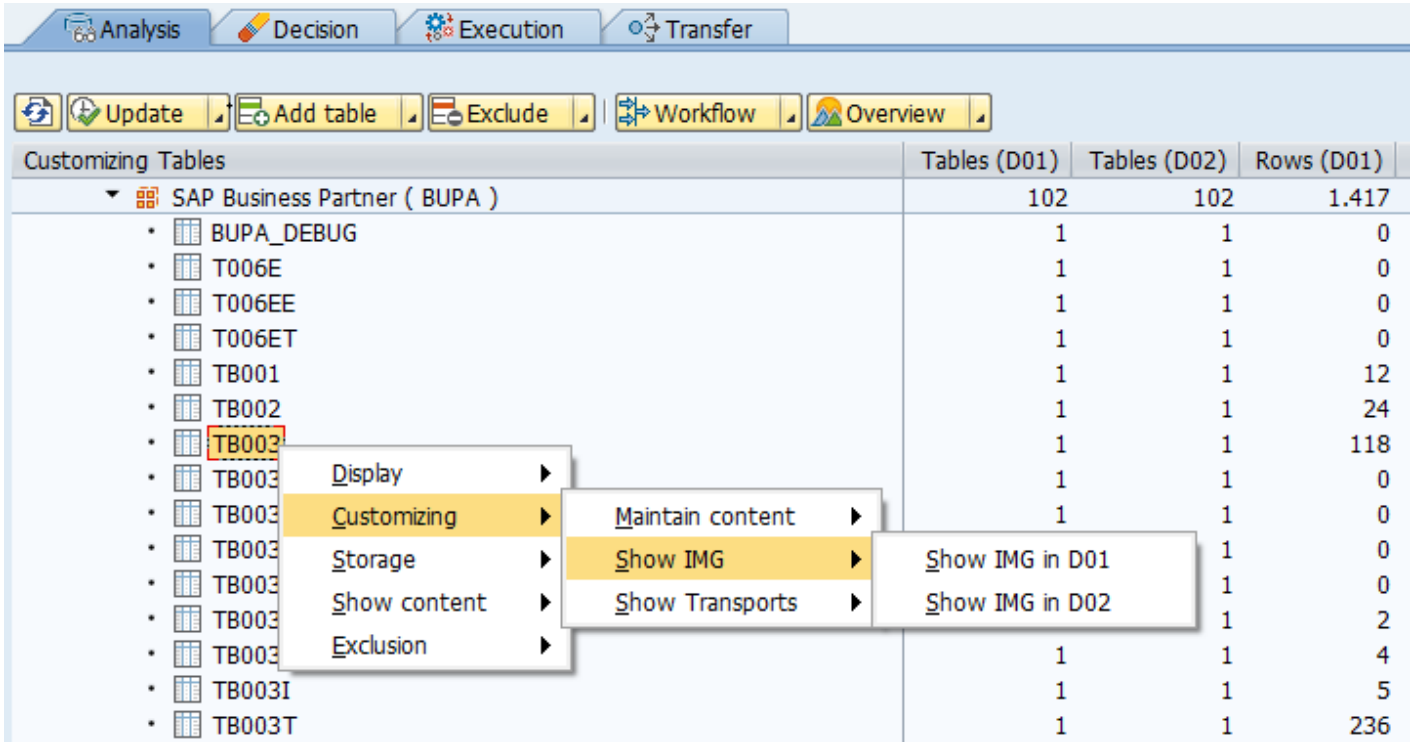


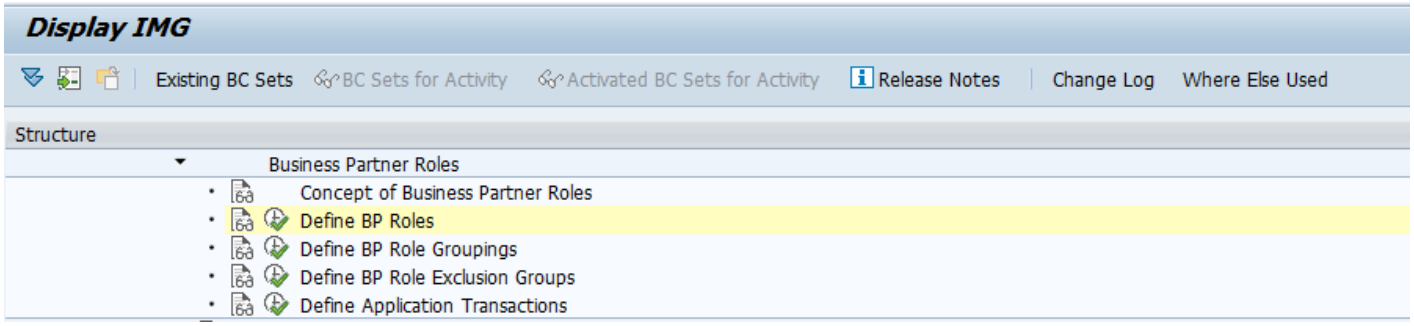
The ‘Customising’ option allows the user to have a number of options.

Including being taken to the maintenance screens if these exist.

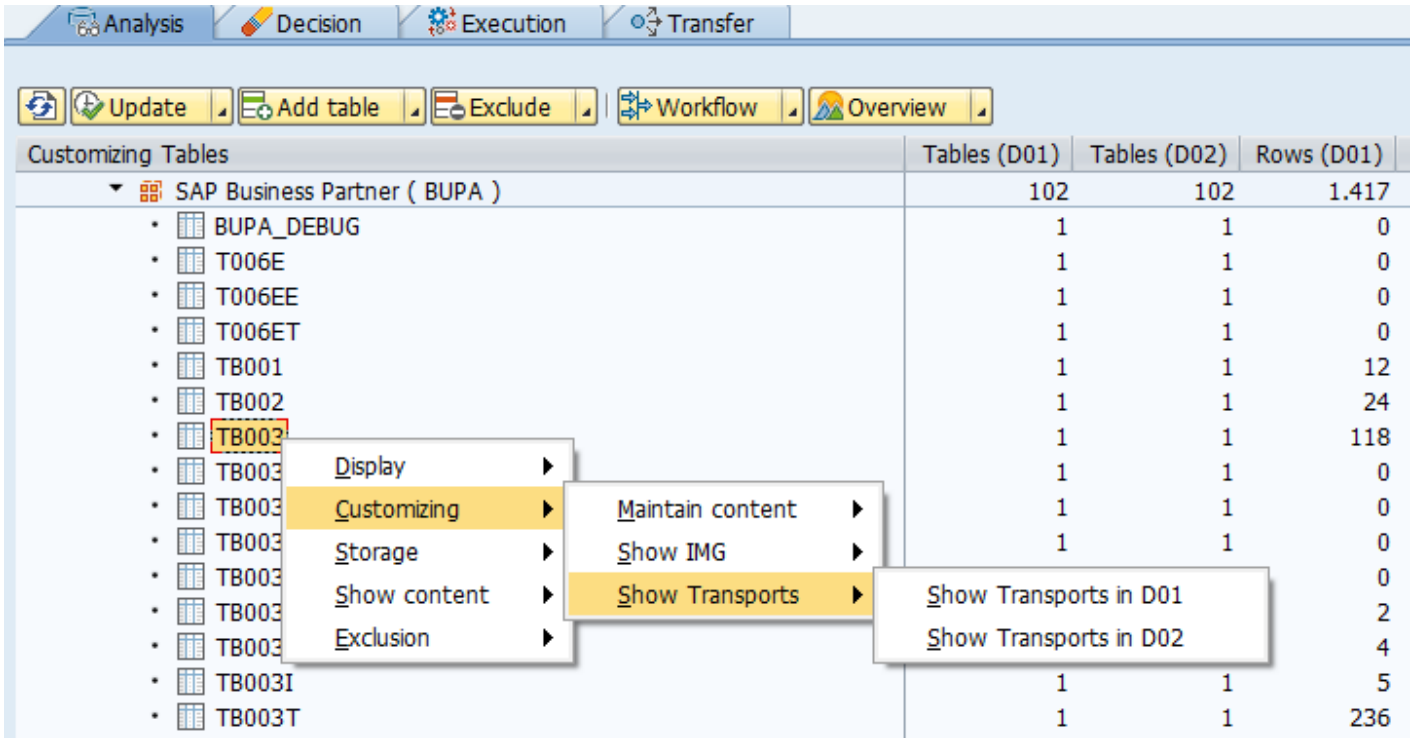


To be able to navigate to the IMG in the chosen system.

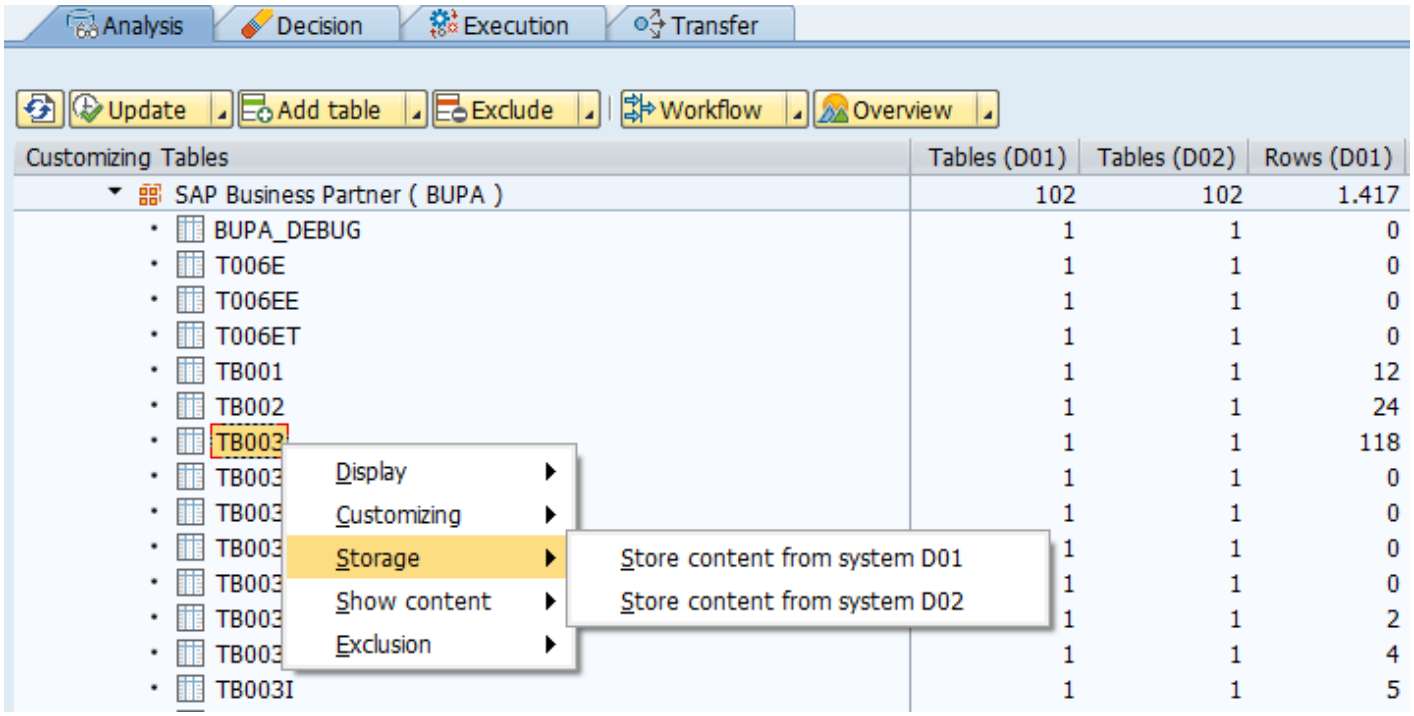




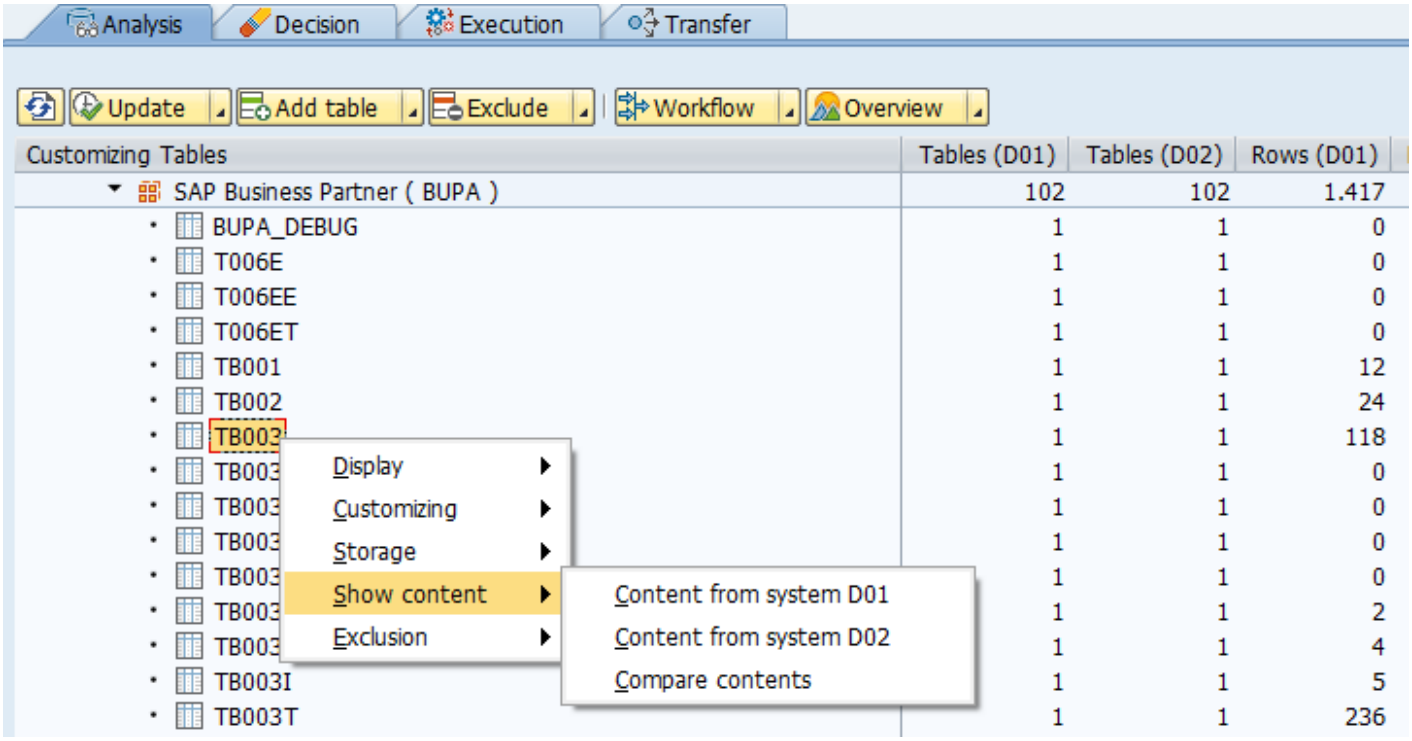
Or to be taken to transports that contain this configuration.



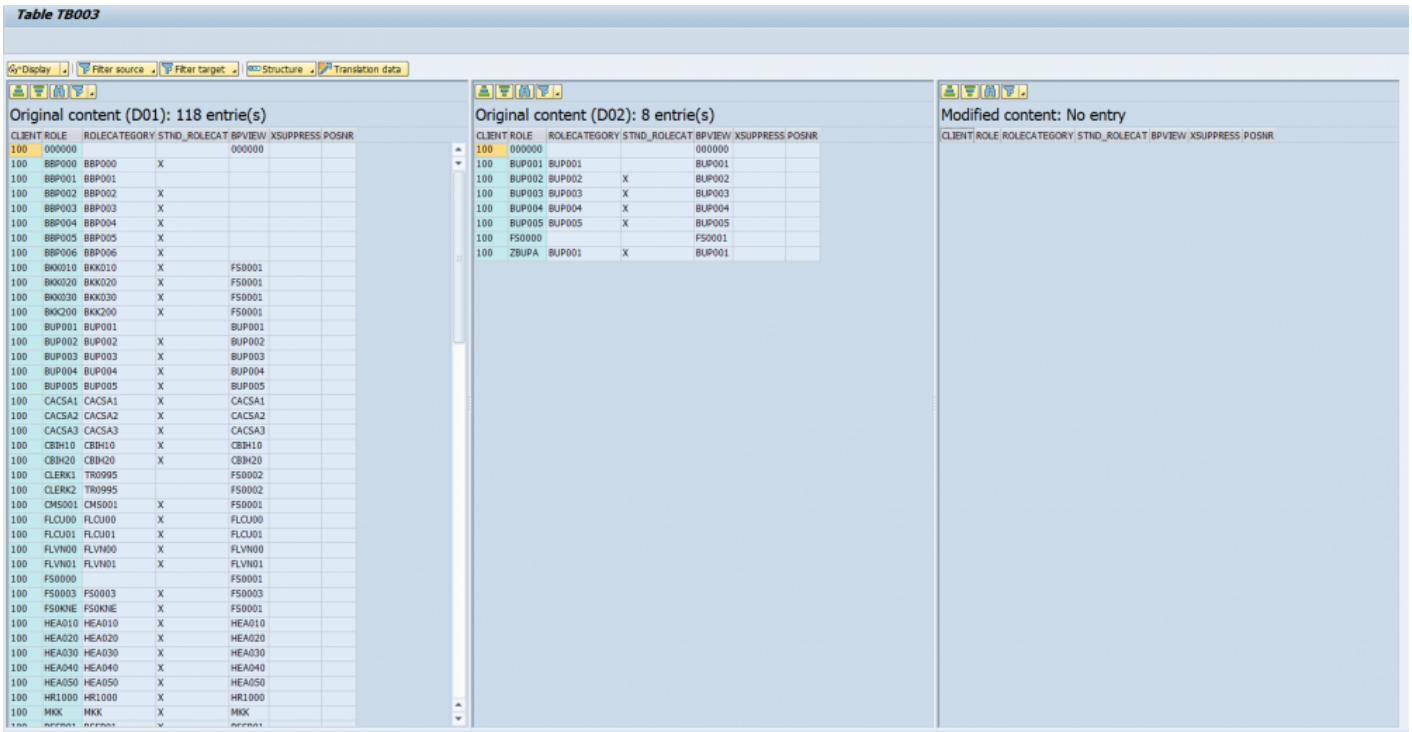
The ‘Storage’ option allows the user to bring the latest data in from the respective systems and store it into the controller system.

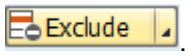


The ‘Show Content’ option allows the user to view the entries in each system or compare data.

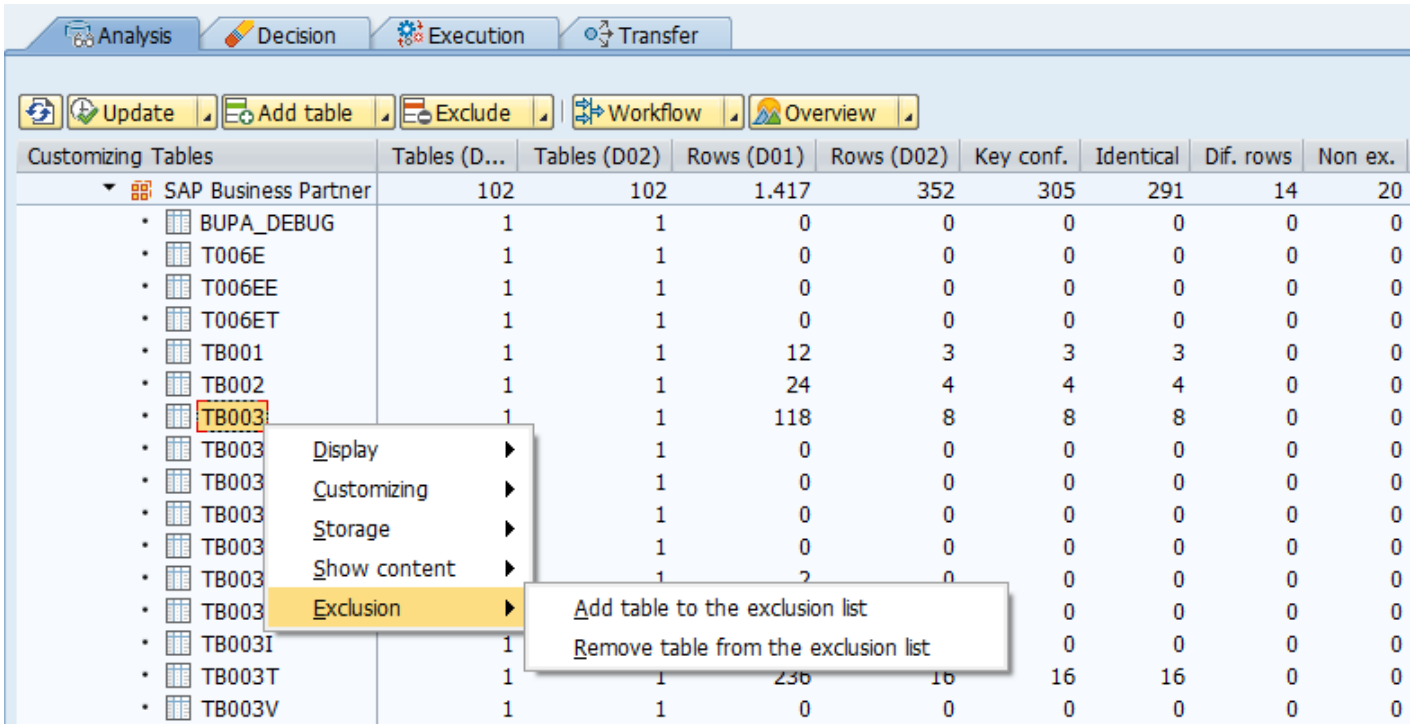


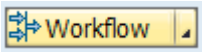
Data comparison option as below:



The ‘Exclude’ option allows the user to exclude tables from being considered in the rest of the consolidation process, they can also be added back in this phase if the decision needs to be reversed. This is the same as the ‘Exclude’ button 

.



When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button 

and select close phase. Continue to the next phase Decision Phase.

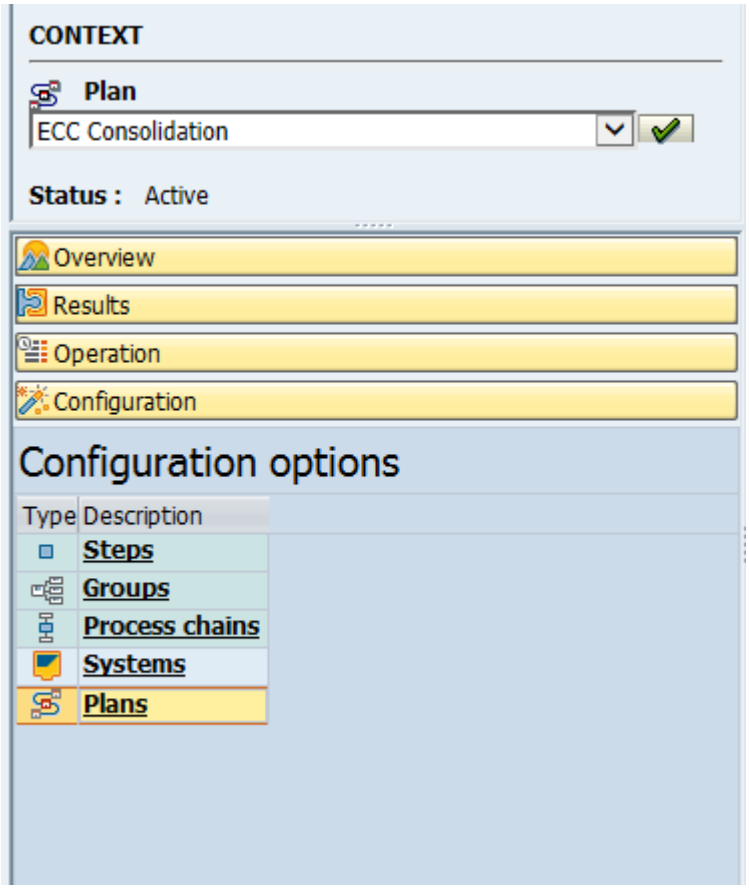
Decision Phase

The Decision phase is broken down into two section the operation of the run and then viewing the results.

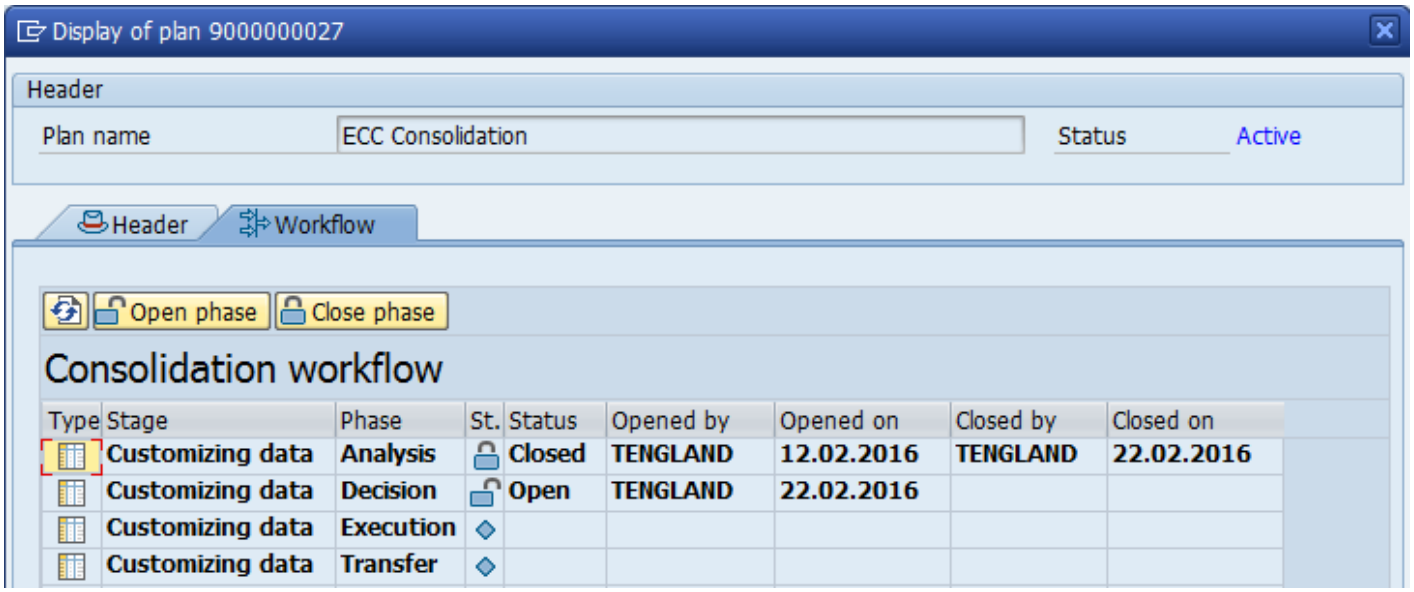
- Operation
- Results

Operation

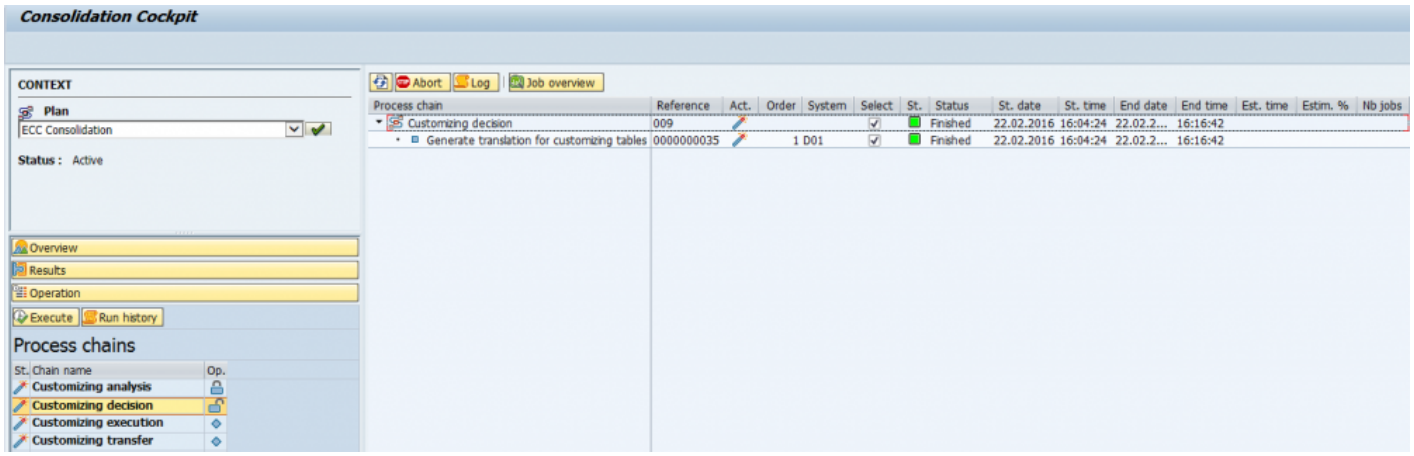
The first task is to open the decision phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



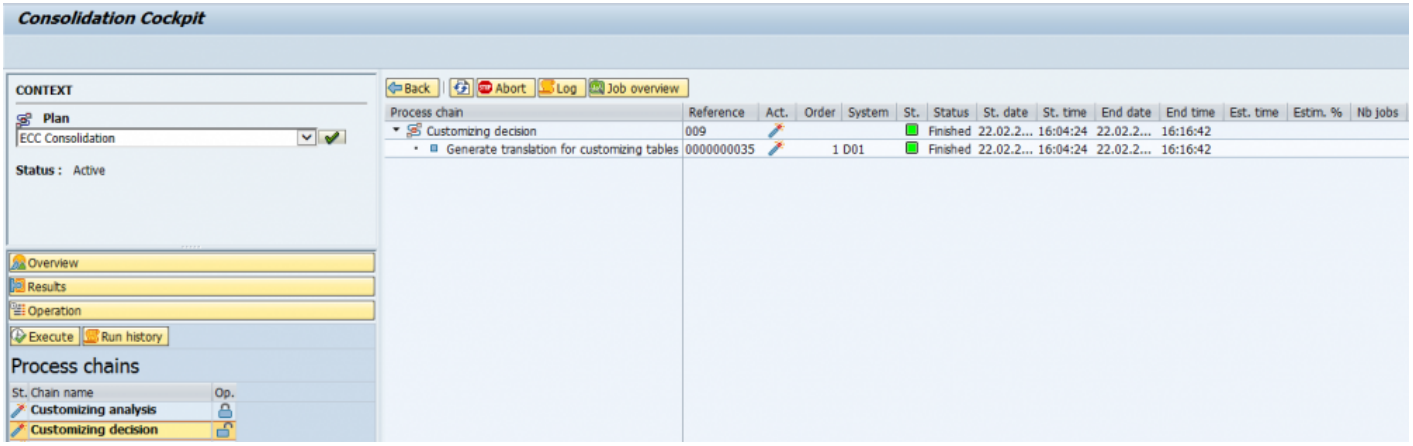
In the workflow tab select the stage ‘Customizing Data’ phase ‘Decision’ and press the ‘Open Phase button, the phase is now open for operations.



With the decision phase now open go to the ‘Operation’ drawer and select the ‘Customizing decision’ phase and press the ‘Execute’ button. Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings.



Pressing the refresh button will show the progress of the analysis programs running and they will have a status of finished when complete, you are now ready to progress to the results screen.


Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name
Op.
Customizing analysis
Customizing decision
Back
Abort
Log
Job overview
Process chain
Reference
Act.
Order
System
St.
Status
St. date
St. time
End date
End time
Est. time
Estim. %
Nb jobs
Customizing decision
009
Finished
22.02.2...
16:04:24
22.02.2...
16:16:42
Generate translation for customizing tables
0000000035
1 D01
Finished
22.02.2...
16:04:24
22.02.2...
16:16:42

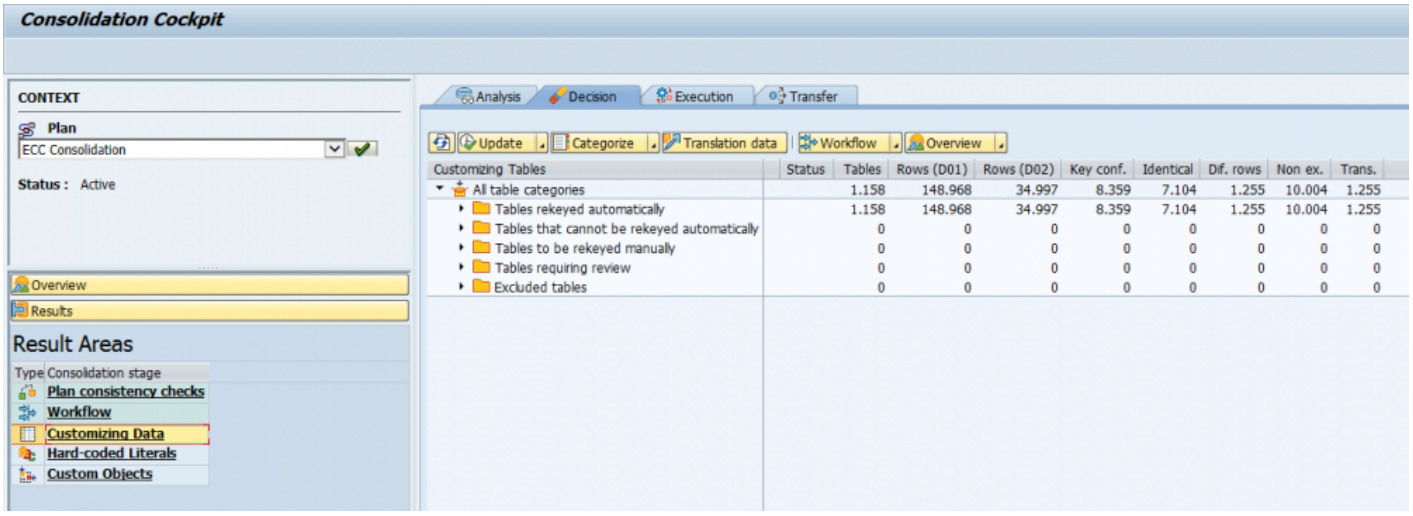
Results

The Decision phase of the Customizing Data stage will provide the number of configuration tables from each system, the number of rows of data involved and involves choices from the user to categorise the tables and confirm translations are correct.

Once the Analysis programs have run from the Operation section it is time to view the results, go to the ‘Results’ drawer and select the ‘Customizing Data’ and click the ‘Decision’ tab.

The results are broken down by the following categories, this phase only includes the root tables identified by Consolidator.

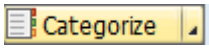
Tables rekeyed automatically – The table can be rekeyed automatically without any involvement from the user
Tables that cannot be rekeyed automatically – The table has a limit of keys that can be added, for example, tables that only have a key of client (MANDT) so only one entry per client is allowed
Tables to be rekeyed manually – The table has been identified as being required to be rekeyed manually
Tables requiring review – The table can be rekeyed automatically, however, it should be reviewed to ensure the integrity of the system
Excluded tables – Tables that were excluded during the Analysis phase



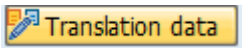
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button 

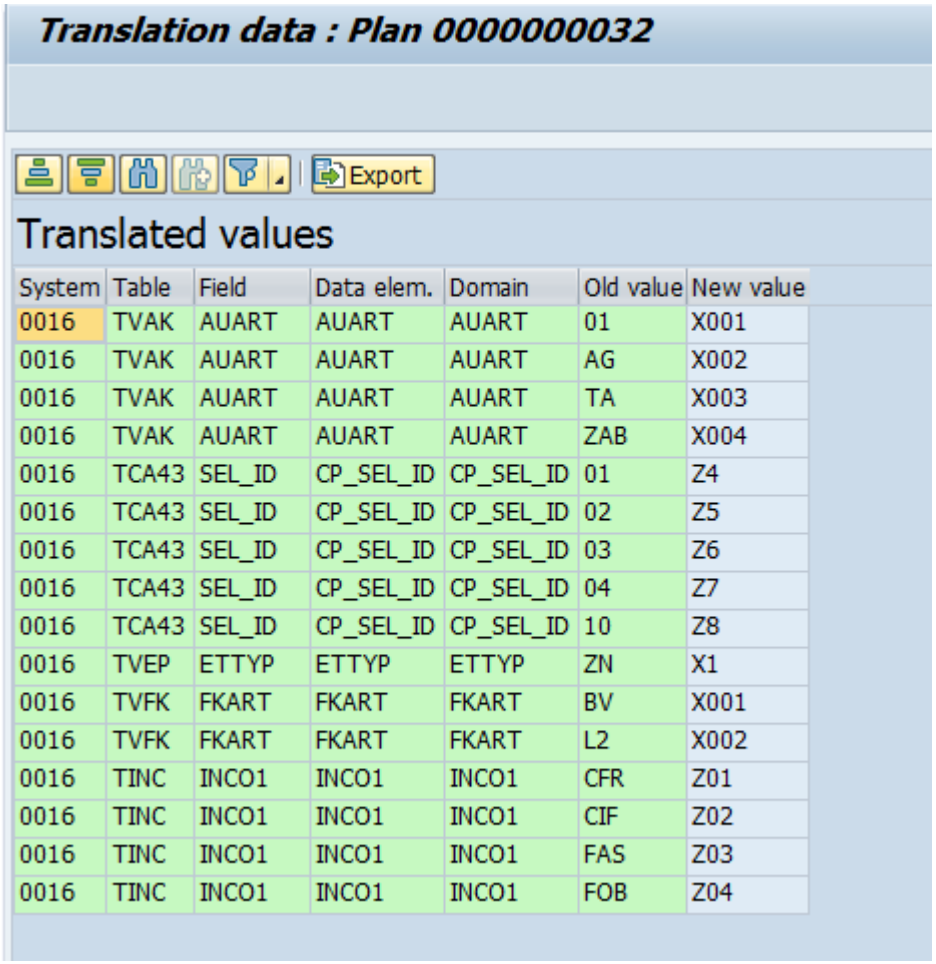
allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Categorize’ button 

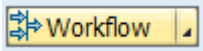
allows to to re-categorize a table by highlighting it and selecting the new category you require from the list.

The ‘Translation Data’ button 

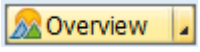
shows the data that has been translated during this phase as below, the most important part here is the old value and new value. The export option provides an extract of the grid in mandatory CSV format this allows a record of the translated data to be easily exported.



System	Table	Field	Data elem.	Domain	Old value	New value
0016	TVAK	AUART	AUART	AUART	01	X001
0016	TVAK	AUART	AUART	AUART	AG	X002
0016	TVAK	AUART	AUART	AUART	TA	X003
0016	TVAK	AUART	AUART	AUART	ZAB	X004
0016	TCA43	SEL_ID	CP_SEL_ID	CP_SEL_ID	01	Z4
0016	TCA43	SEL_ID	CP_SEL_ID	CP_SEL_ID	02	Z5
0016	TCA43	SEL_ID	CP_SEL_ID	CP_SEL_ID	03	Z6
0016	TCA43	SEL_ID	CP_SEL_ID	CP_SEL_ID	04	Z7
0016	TCA43	SEL_ID	CP_SEL_ID	CP_SEL_ID	10	Z8
0016	TVEP	ETTYP	ETTYP	ETTYP	ZN	X1
0016	TVFK	FKART	FKART	FKART	BV	X001
0016	TVFK	FKART	FKART	FKART	L2	X002
0016	TINC	INCO1	INCO1	INCO1	CFR	Z01
0016	TINC	INCO1	INCO1	INCO1	CIF	Z02
0016	TINC	INCO1	INCO1	INCO1	FAS	Z03
0016	TINC	INCO1	INCO1	INCO1	FOB	Z04

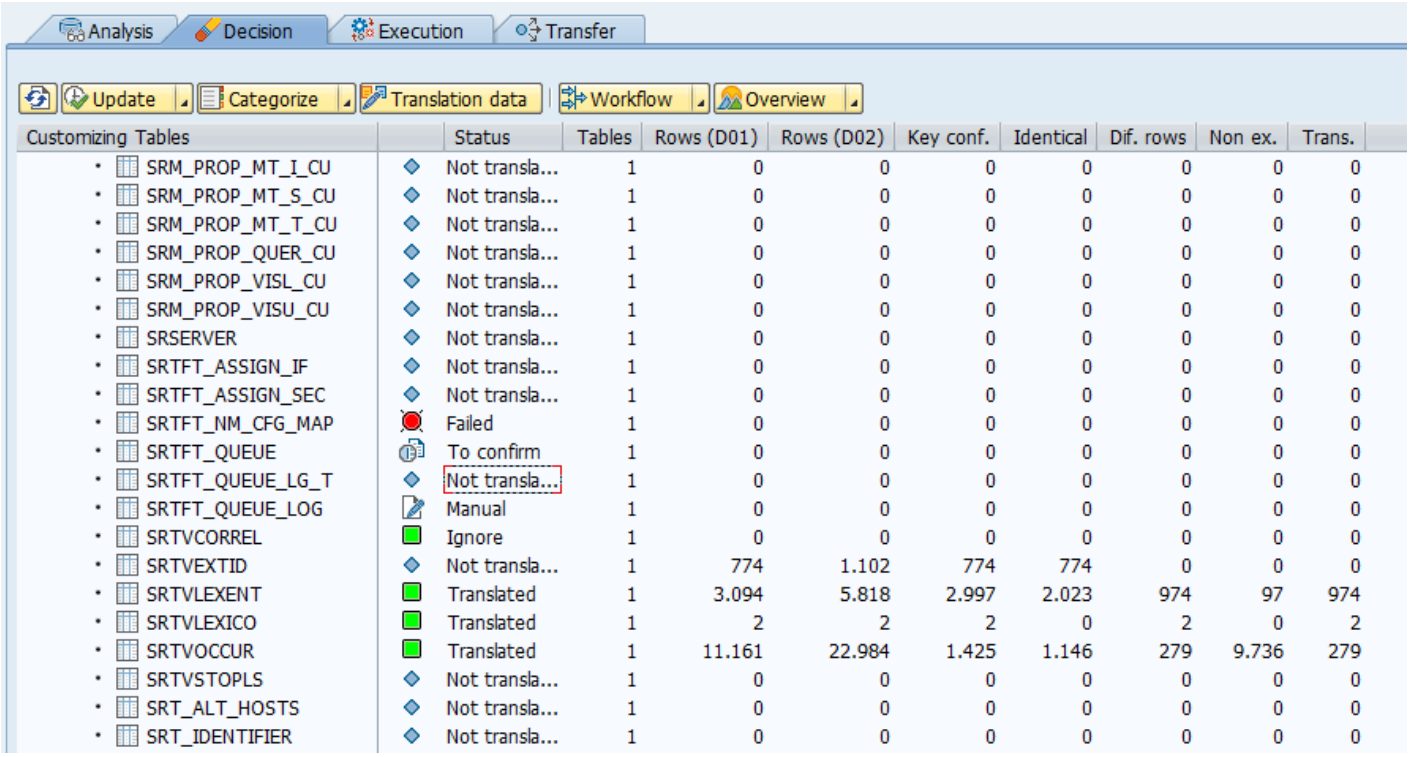
The ‘Workflow’ button 

allows the user to open and close this phase.

The ‘Overview’ button 

allows the user to view the reports for this phase, see the Reporting section for more details.

The tab holds information on all the table contents required to be translated, explanations for what each column represents are provided below the screenshot.



Customizing Tables	Status	Tables	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.	Trans.
SRM_PROP_MT_I_CU	Not transla...	1	0	0	0	0	0	0	0
SRM_PROP_MT_S_CU	Not transla...	1	0	0	0	0	0	0	0
SRM_PROP_MT_T_CU	Not transla...	1	0	0	0	0	0	0	0
SRM_PROP_QUER_CU	Not transla...	1	0	0	0	0	0	0	0
SRM_PROP_VISL_CU	Not transla...	1	0	0	0	0	0	0	0
SRM_PROP_VISU_CU	Not transla...	1	0	0	0	0	0	0	0
SRSERVER	Not transla...	1	0	0	0	0	0	0	0
SRTFT_ASSIGN_IF	Not transla...	1	0	0	0	0	0	0	0
SRTFT_ASSIGN_SEC	Not transla...	1	0	0	0	0	0	0	0
SRTFT_NM_CFG_MAP	Failed	1	0	0	0	0	0	0	0
SRTFT_QUEUE	To confirm	1	0	0	0	0	0	0	0
SRTFT_QUEUE_LG_T	Not transla...	1	0	0	0	0	0	0	0
SRTFT_QUEUE_LOG	Manual	1	0	0	0	0	0	0	0
SRTVCORREL	Ignore	1	0	0	0	0	0	0	0
SRTVEXTID	Not transla...	1	774	1.102	774	774	0	0	0
SRTVLEXENT	Translated	1	3.094	5.818	2.997	2.023	974	97	974
SRTVLEXICO	Translated	1	2	2	2	0	2	0	2
SRTVOCCUR	Translated	1	11.161	22.984	1.425	1.146	279	9.736	279
SRTVSTOPLS	Not transla...	1	0	0	0	0	0	0	0
SRT_ALT_HOSTS	Not transla...	1	0	0	0	0	0	0	0
SRT_IDENTIFIER	Not transla...	1	0	0	0	0	0	0	0

Status – This contains the status of the translation, all of the options are seen in the screenshot above with explanations below

- Not Translated – this has not been translated
- Translated – this has been translated
- Failed – the translation failed
- Ignore – this can be ignored
- To confirm – Acts as a reminder that details are to be confirmed
- Manual – to be completed manually

Tables – This contains the number of tables

Rows – This contains the number of rows of data

Key Conflict – This contains the number of rows with a conflicting key

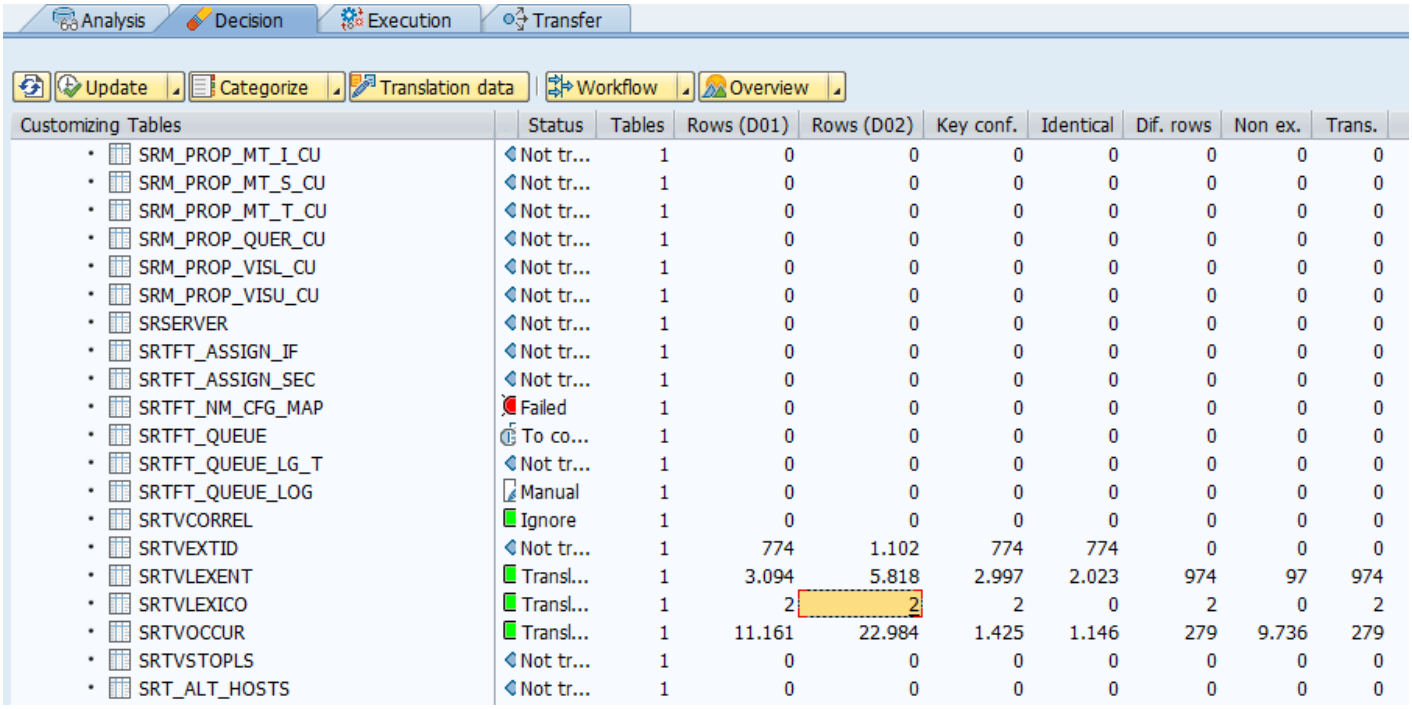
Identical – This counts the number of identical rows between the two systems

Different Rows – Rows where the key conflicts, but the data is different

Non Ex. – Lines not existing in the target system

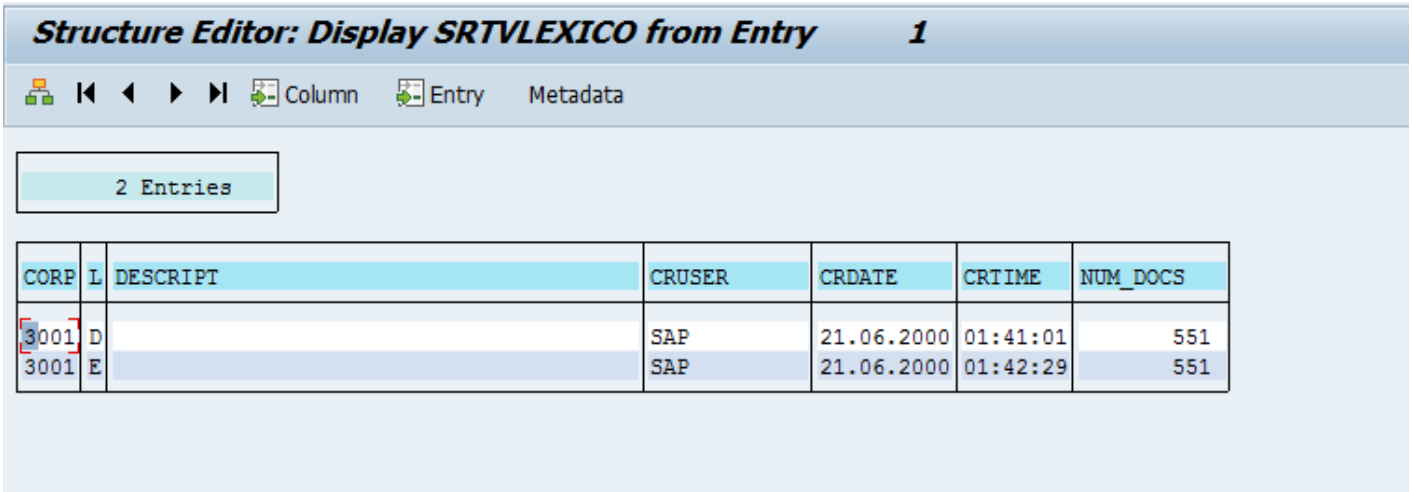
Trans. – The number of translations

On a table row all of the numbers in the columns apart from ‘Table’ the data can be clicked and reviewed.



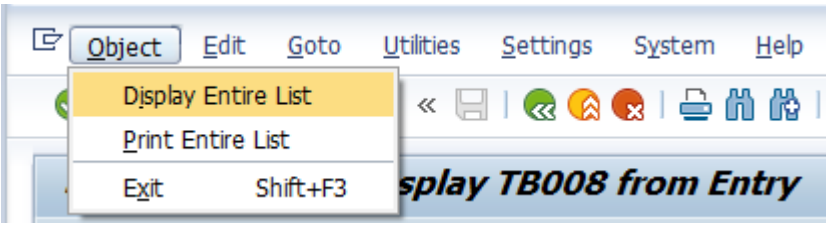
Customizing Tables	Status	Tables	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.	Trans.
SRM_PROP_MT_I_CU	Not tr...	1	0	0	0	0	0	0	0
SRM_PROP_MT_S_CU	Not tr...	1	0	0	0	0	0	0	0
SRM_PROP_MT_T_CU	Not tr...	1	0	0	0	0	0	0	0
SRM_PROP_QUER_CU	Not tr...	1	0	0	0	0	0	0	0
SRM_PROP_VISL_CU	Not tr...	1	0	0	0	0	0	0	0
SRM_PROP_VISU_CU	Not tr...	1	0	0	0	0	0	0	0
SRSERVER	Not tr...	1	0	0	0	0	0	0	0
SRTFT_ASSIGN_IF	Not tr...	1	0	0	0	0	0	0	0
SRTFT_ASSIGN_SEC	Not tr...	1	0	0	0	0	0	0	0
SRTFT_NM_CFG_MAP	Failed	1	0	0	0	0	0	0	0
SRTFT_QUEUE	To co...	1	0	0	0	0	0	0	0
SRTFT_QUEUE_LG_T	Not tr...	1	0	0	0	0	0	0	0
SRTFT_QUEUE_LOG	Manual	1	0	0	0	0	0	0	0
SRTVCORREL	Ignore	1	0	0	0	0	0	0	0
SRTVEXTID	Not tr...	1	774	1.102	774	774	0	0	0
SRTVLEXENT	Transl...	1	3.094	5.818	2.997	2.023	974	97	974
SRTVLEXICO	Transl...	1	2	2	2	0	2	0	2
SRTVOCCUR	Transl...	1	11.161	22.984	1.425	1.146	279	9.736	279
SRTVSTOPLS	Not tr...	1	0	0	0	0	0	0	0
SRT_ALT_HOSTS	Not tr...	1	0	0	0	0	0	0	0

Example of results retrieved.



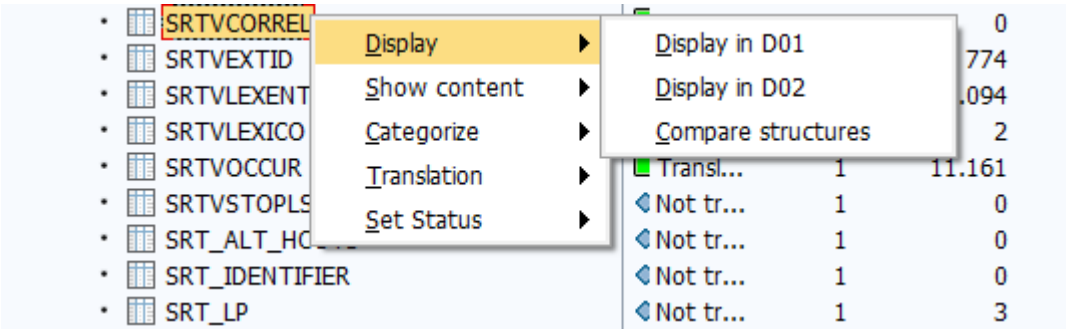
CORP	L	DESCRIPT	CRUSER	CRDATE	CRTIME	NUM_DOCS
3001	D		SAP	21.06.2000	01:41:01	551
3001	E		SAP	21.06.2000	01:42:29	551

Note that the standard SAP display does not display large numbers of entries, to see all entries, select ‘Object’ then ‘Display Entire List’ as below.

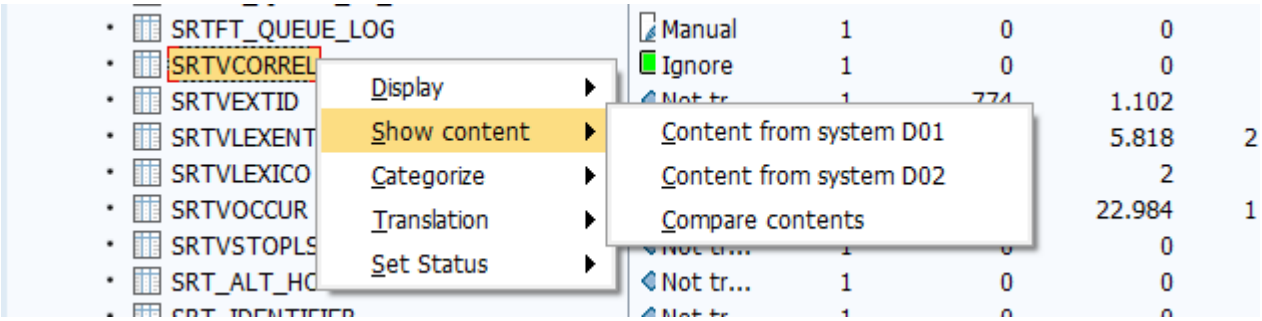


There are also a number of options seen by using a right mouse click on a table.

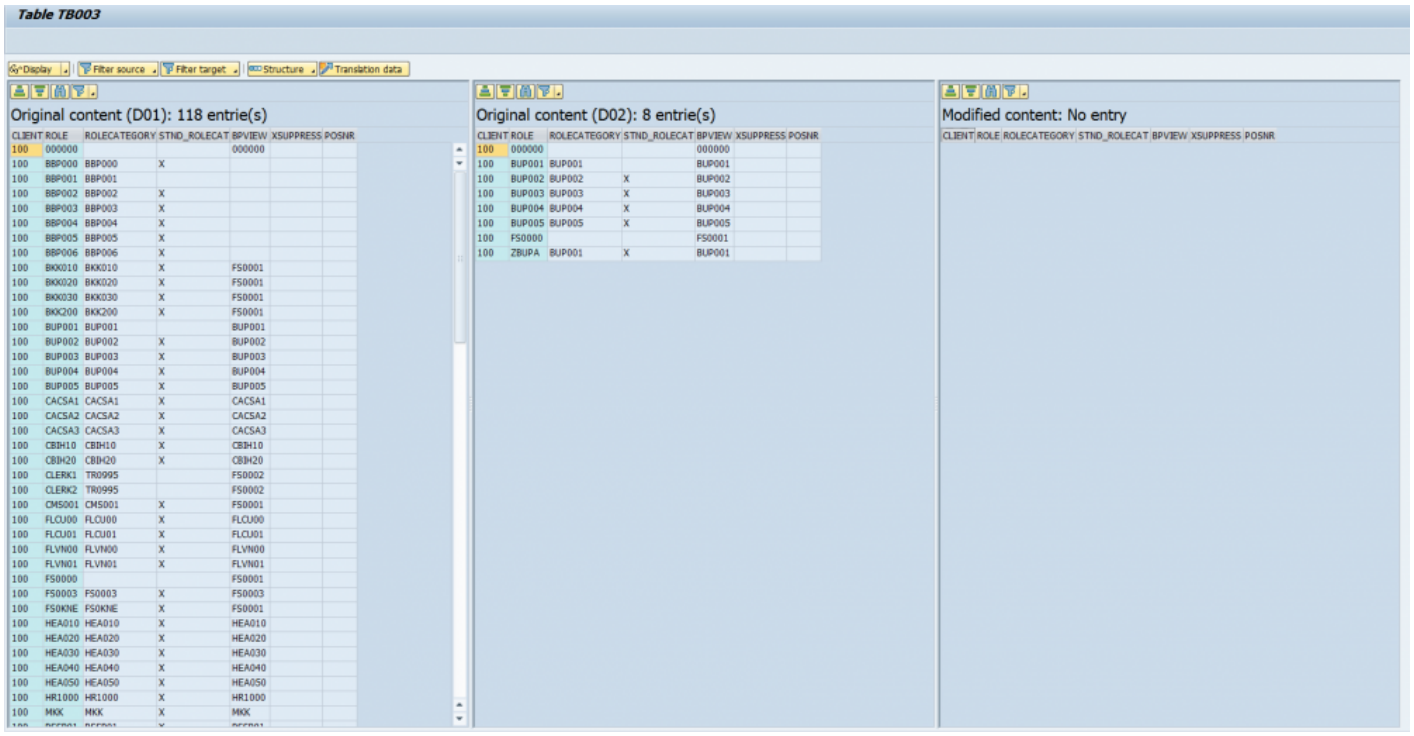
The ‘Display’ option allows the user to display the table structures in each system or to compare the structures.

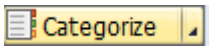


The ‘Show Content’ option allows the user to view the entries in each system or compare data.

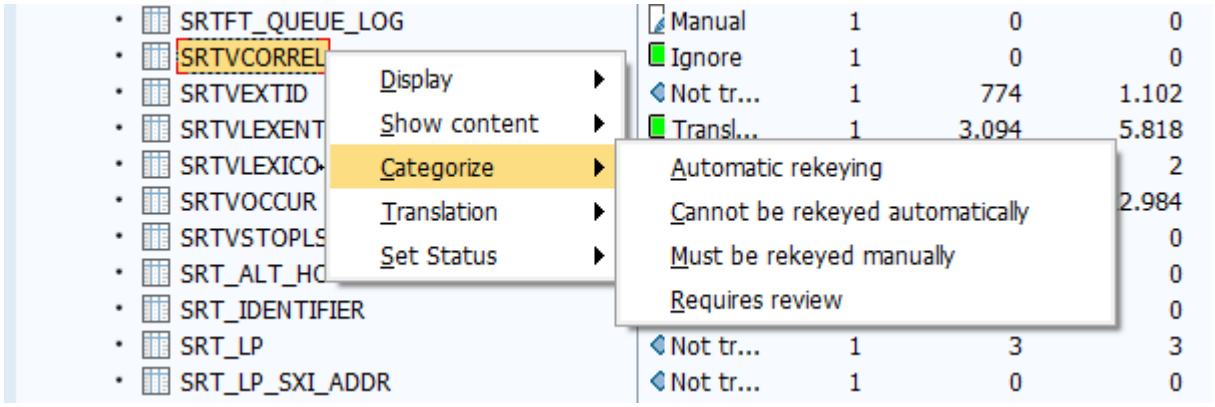


Data comparison option as below:

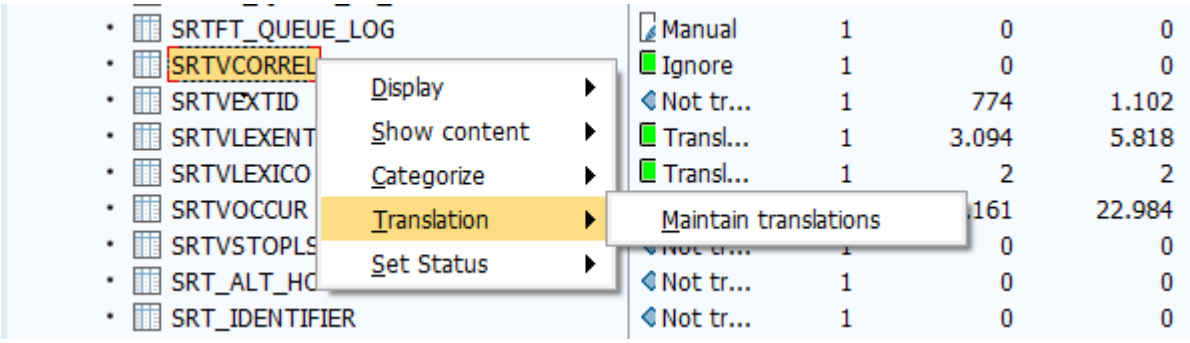


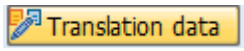
The ‘Categorise’ option allows the user to re-categorize a table by highlighting it and selecting the new category you require from the list. This is the same as the ‘Categorize’ button 

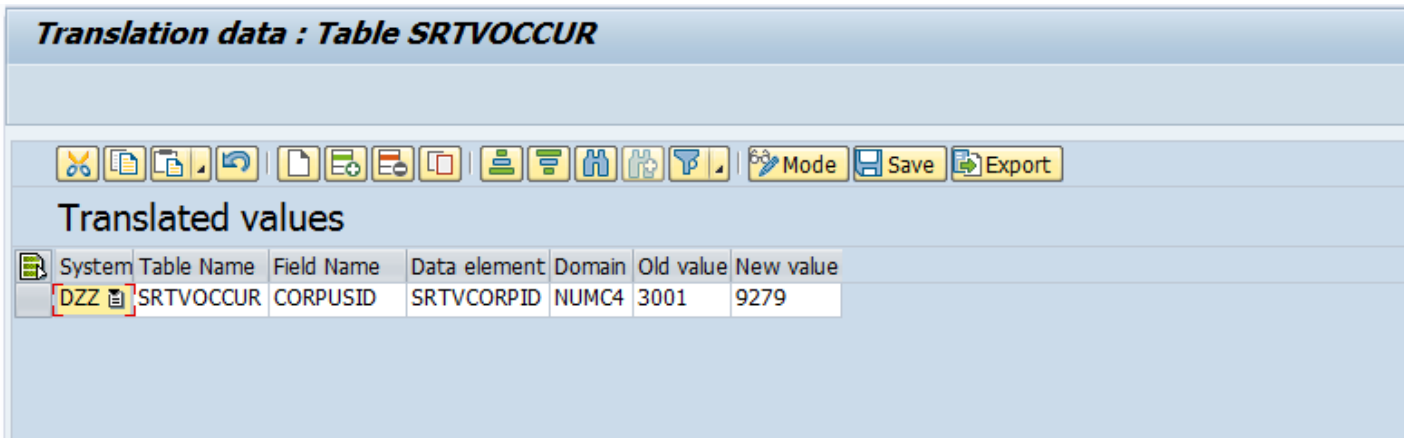
.



The ‘Translation’ option allows the user to view the data that is going to be translated.

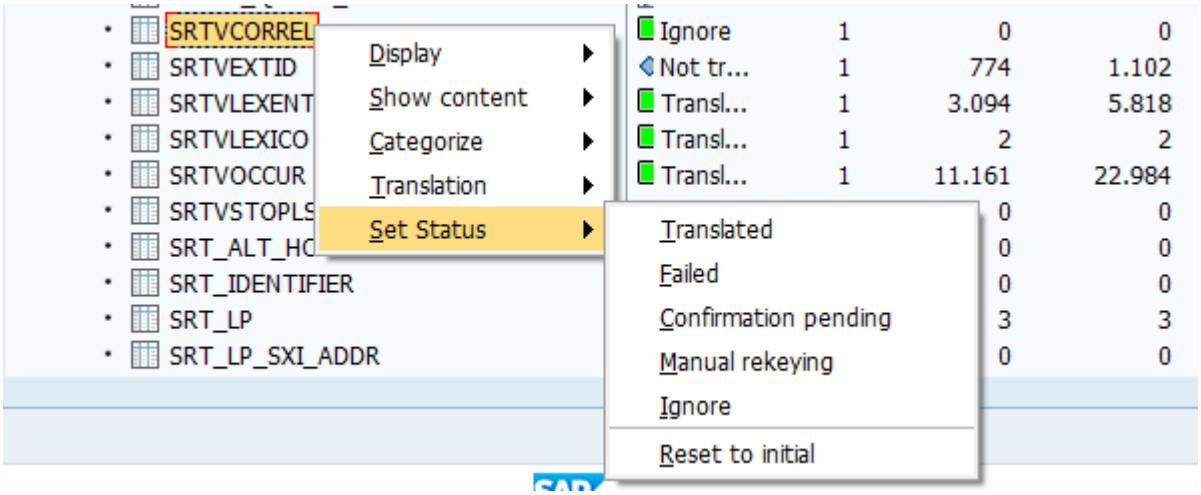


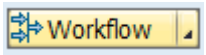
When selecting ‘Maintain translations’ the translations for this table are displayed and translated can be created and changed, this is similar to the ‘Translation Data’ button  which shows all the data translated in this phase.



The ‘Set status’ option allows the user to set the status for this table, the details for each option are as below:

- Translated – this has been translated
- Failed – the translation failed
- Ignore – this can be ignored
- To confirm – Acts as a reminder that details are to be confirmed
- Manual – to be completed manually
- Reset to initial – resets the value to the original one



When you have reviewed the translations and are certain you are ready to close the phase use the  option on the ‘Workflow’ button 

and select close phase. Continue to the next phase Execution Phase

Upon closure of this phase the Hard Code Literals stage can start.

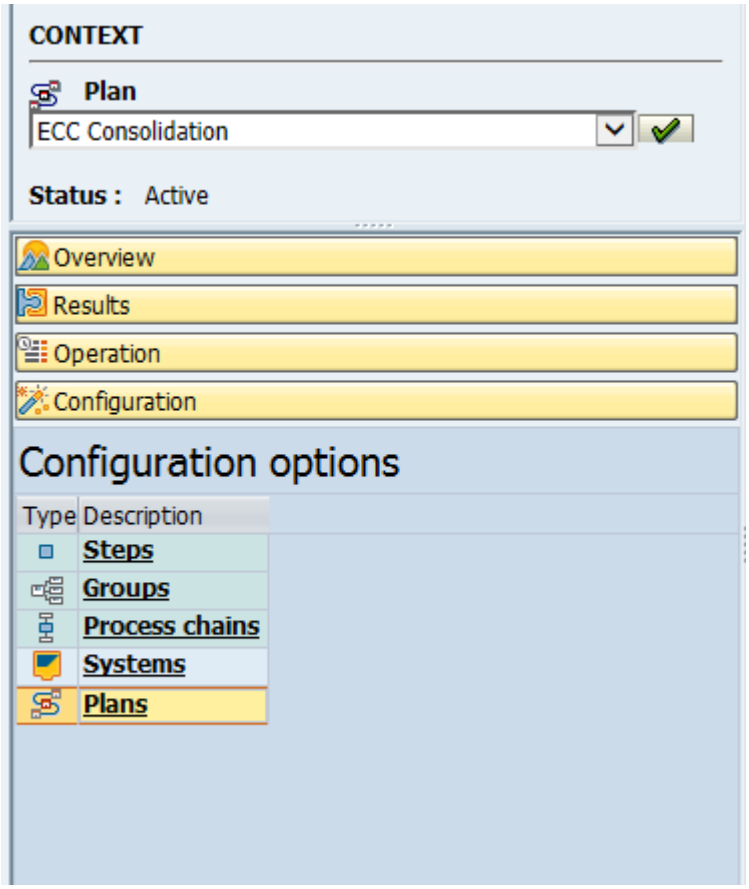
Execution Phase

The Execution phase is broken down into two section the operation of the run and then viewing the results.

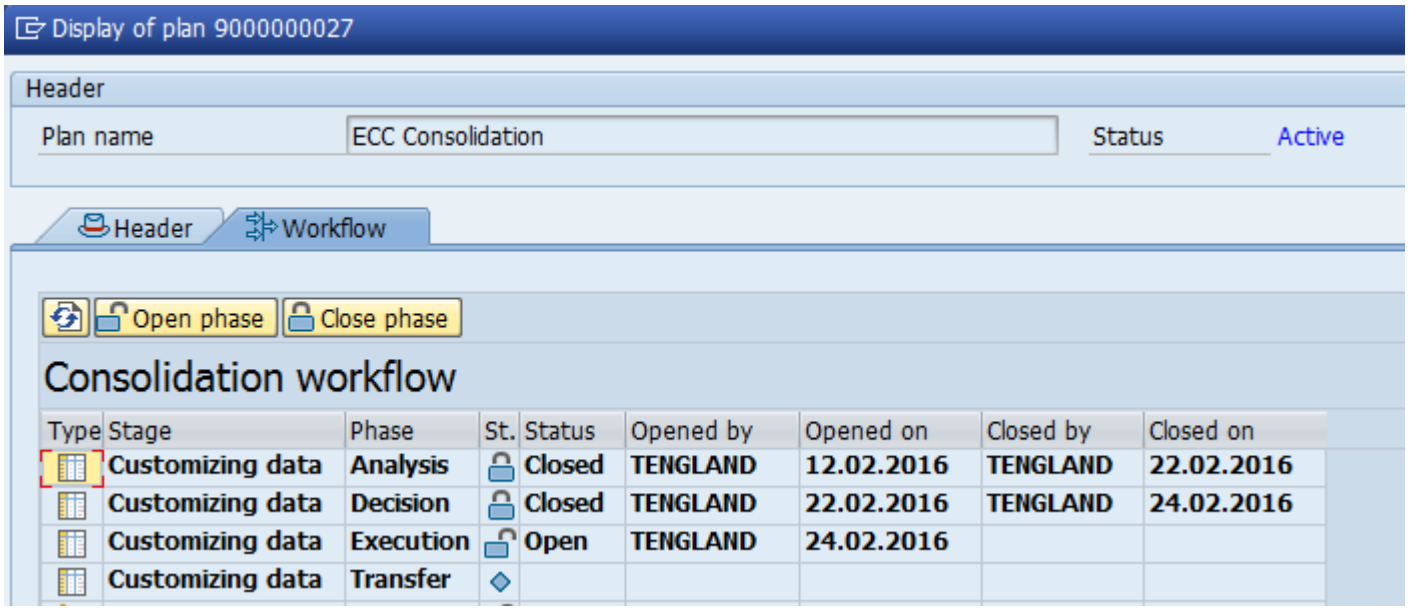
- Operation
- Results

Operation

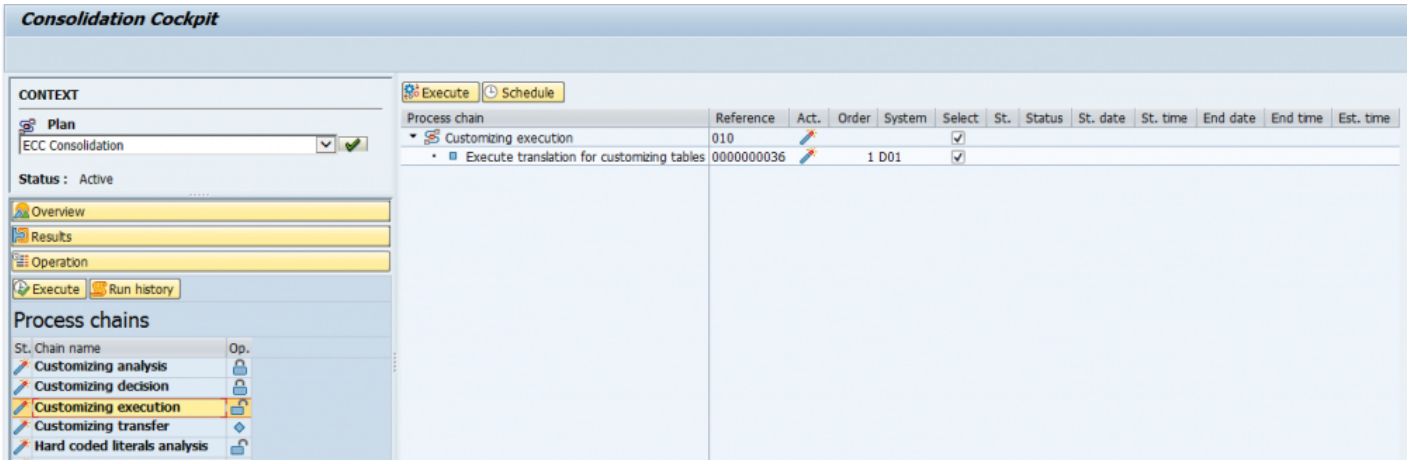
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



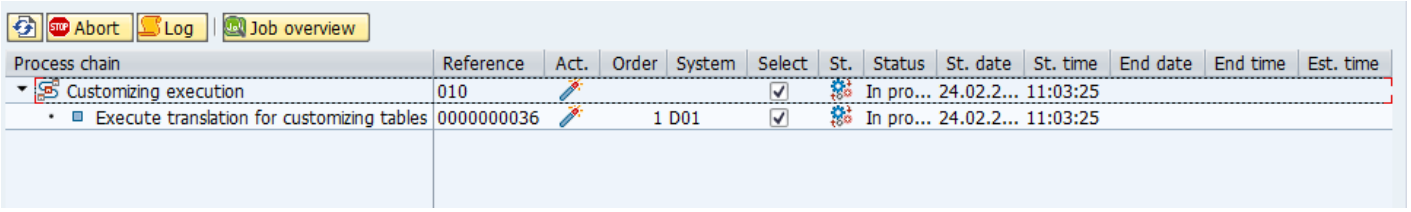
In the workflow tab select the stage ‘Customizing Data’ phase ‘Execution’ and press the ‘Open Phase button, the phase is now open for operations.



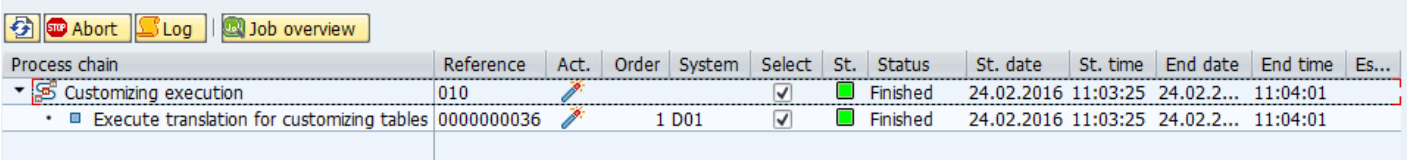
With the execution phase now open go to the ‘Operation’ drawer and select the ‘Customizing execution’ phase and press the ‘Execute’ button.



Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings, pressing the refresh button will show the progress of the analysis programs running.



Once complete the programs will have a status of finished, you are now ready to progress to the results screen.



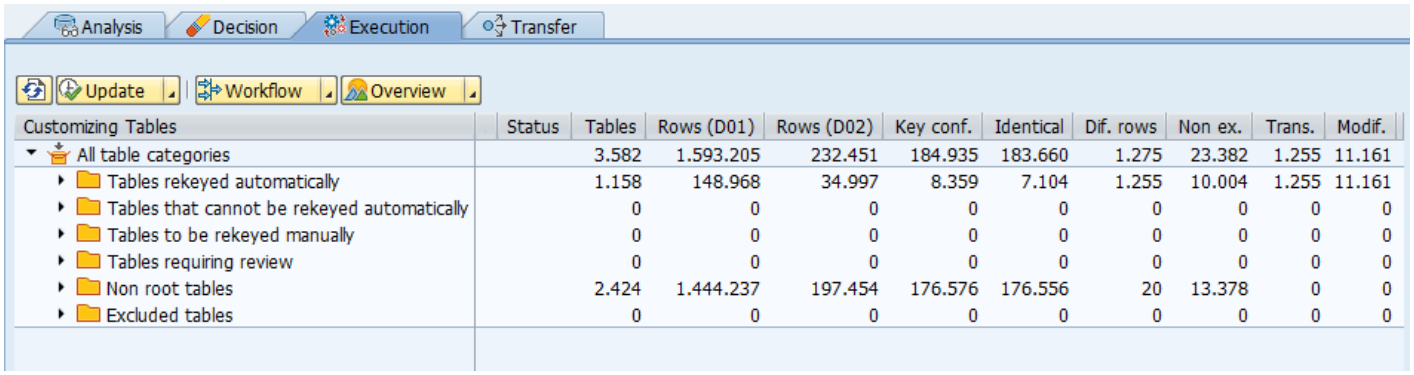
Results

The Execution phase of the Customizing Data stage allows you to view the changes that have been made to the Customizing Data.

Once the Execution programs have run from the Operation section it is time to view the results, go to the ‘Results’ drawer and select the ‘Customizing Data’ and click the ‘Execution’ tab.

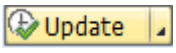
The results are broken down by the following categories, this phase only includes the root tables identified by Consolidator.

Tables rekeyed automatically – The table can be rekeyed automatically without any involvement from the user
Tables that cannot be rekeyed automatically – The table has a limit of keys that can be added, for example, tables that only have a key of client (MANDT) so only one entry per client is allowed
Tables to be rekeyed manually – The table has been identified as being required to be rekeyed manually
Tables requiring review – The table can be rekeyed automatically, however, it should be reviewed to ensure the integrity of the system
Non root tables – The non root tables
Excluded tables – Tables that were excluded during the Analysis phase

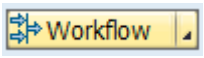


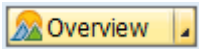
Customizing Tables	Status	Tables	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.	Trans.	Modif.
All table categories		3.582	1.593.205	232.451	184.935	183.660	1.275	23.382	1.255	11.161
Tables rekeyed automatically		1.158	148.968	34.997	8.359	7.104	1.255	10.004	1.255	11.161
Tables that cannot be rekeyed automatically		0	0	0	0	0	0	0	0	0
Tables to be rekeyed manually		0	0	0	0	0	0	0	0	0
Tables requiring review		0	0	0	0	0	0	0	0	0
Non root tables		2.424	1.444.237	197.454	176.576	176.556	20	13.378	0	0
Excluded tables		0	0	0	0	0	0	0	0	0

The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

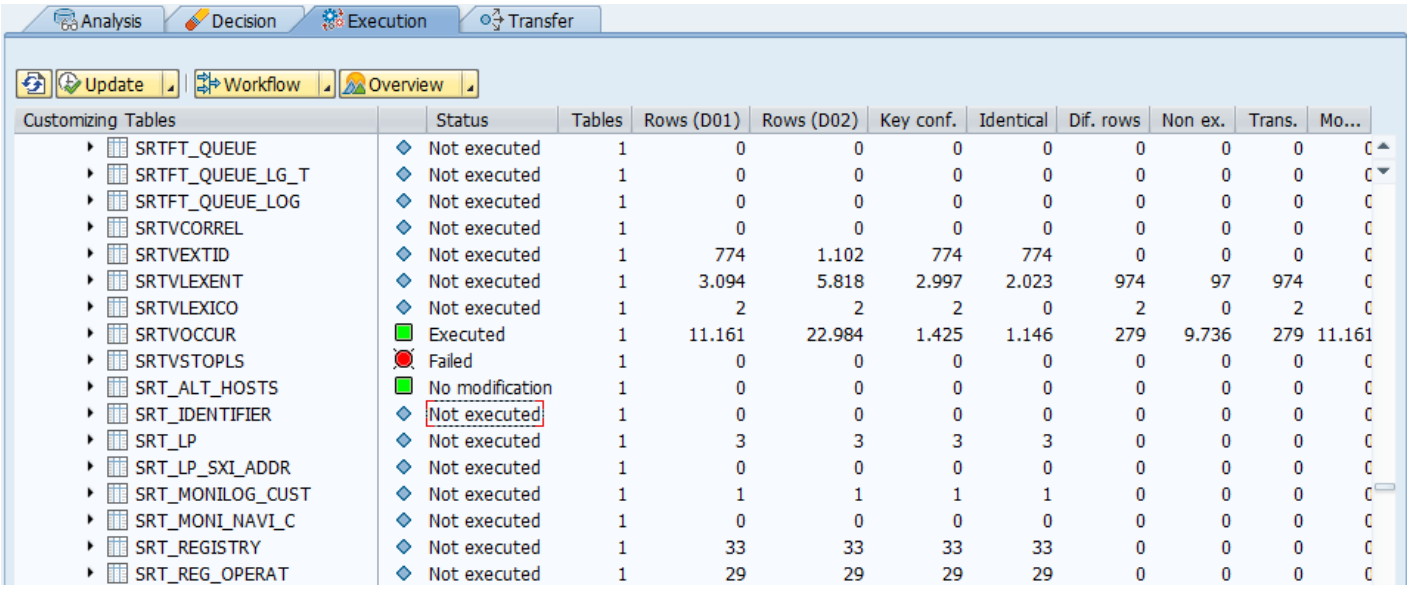
The ‘Update’ button 

allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Workflow’ button  allows the user to open and close this phase.

The ‘Overview’ button  allows the user to view the reports for this phase, see the Reporting section for more details.

The tab holds information on all the tables and what happened through the execution, explanations for what each column represents are provided below the screenshot.



Customizing Tables	Status	Tables	Rows (D01)	Rows (D02)	Key conf.	Identical	Dif. rows	Non ex.	Trans.	Mo...
SRTFT_QUEUE	Not executed	1	0	0	0	0	0	0	0	0
SRTFT_QUEUE_LG_T	Not executed	1	0	0	0	0	0	0	0	0
SRTFT_QUEUE_LOG	Not executed	1	0	0	0	0	0	0	0	0
SRTVCORREL	Not executed	1	0	0	0	0	0	0	0	0
SRTVEXTID	Not executed	1	774	1.102	774	774	0	0	0	0
SRTVLEXENT	Not executed	1	3.094	5.818	2.997	2.023	974	97	974	0
SRTVLEXICO	Not executed	1	2	2	2	0	2	0	2	0
SRTVOCCUR	Executed	1	11.161	22.984	1.425	1.146	279	9.736	279	11.161
SRTVSTOPLS	Failed	1	0	0	0	0	0	0	0	0
SRT_ALT_HOSTS	No modification	1	0	0	0	0	0	0	0	0
SRT_IDENTIFIER	Not executed	1	0	0	0	0	0	0	0	0
SRT_LP	Not executed	1	3	3	3	3	0	0	0	0
SRT_LP_SXI_ADDR	Not executed	1	0	0	0	0	0	0	0	0
SRT_MONILOG_CUST	Not executed	1	1	1	1	1	0	0	0	0
SRT_MONI_NAVI_C	Not executed	1	0	0	0	0	0	0	0	0
SRT_REGISTRY	Not executed	1	33	33	33	33	0	0	0	0
SRT_REG_OPERAT	Not executed	1	29	29	29	29	0	0	0	0

Status – This contains the status of the execution, all of the options are seen in the screenshot above with explanations below

- Not Executed – this has not been executed, if no data needs to be executed this status is correct
- Executed – this has been executed
- Failed – there has been a failure and this needs to be looked into
- No Modification – the translation failed

Tables – This contains the number of tables

Rows – This contains the number of rows of data

Key Conflict – This contains the number of rows with a conflicting key

Identical – This counts the number of identical rows between the two systems

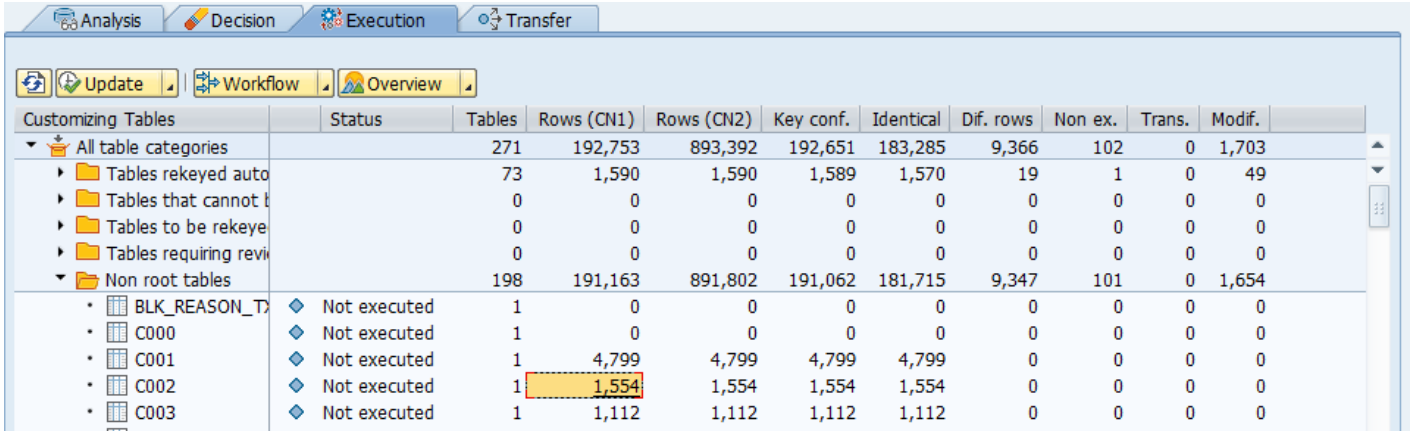
Different Rows – Rows where the key conflicts, but the data is different

Non Ex. – Lines not existing in the target system

Trans. – The number of translations

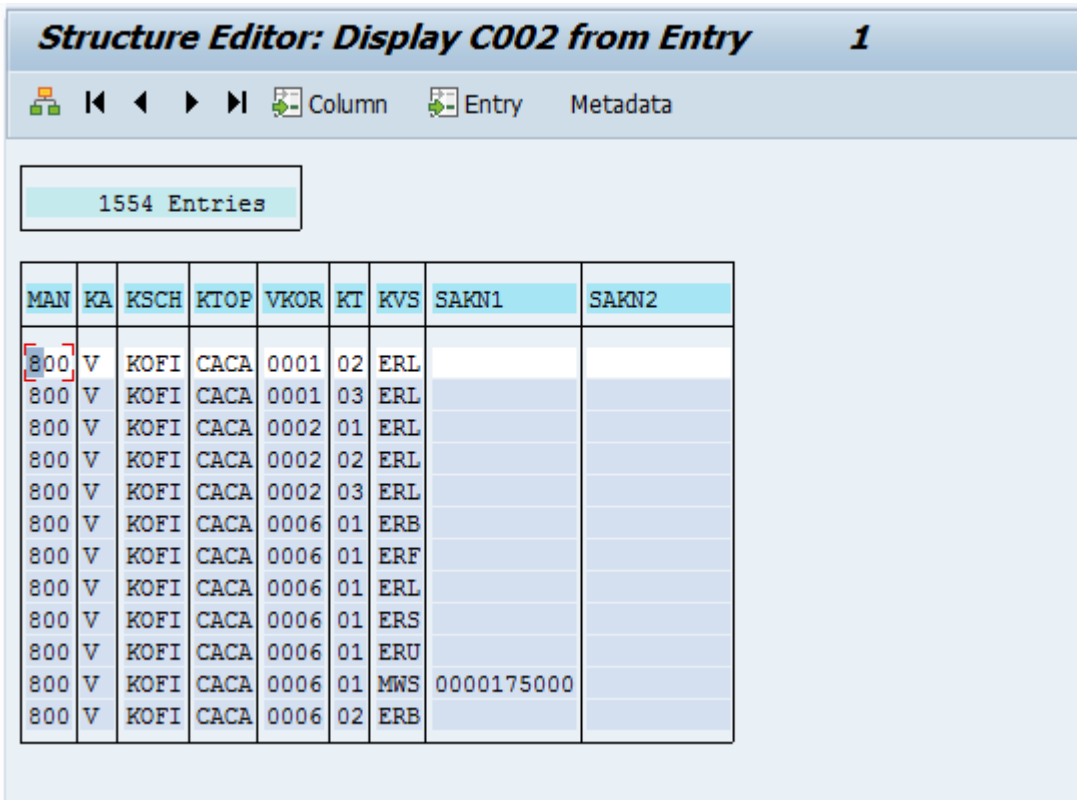
Modif. – The number of modifications that have been made in the controller system

On a table row all of the numbers in the columns apart from ‘Table’ the data can be clicked and reviewed.



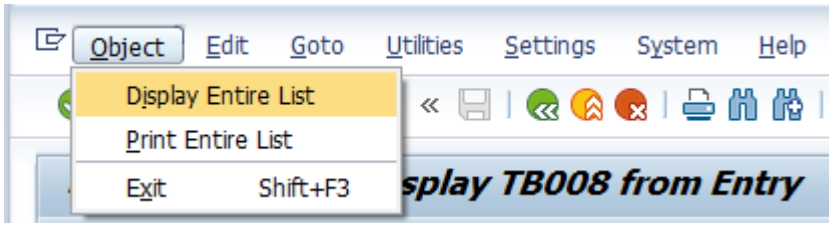
Customizing Tables	Status	Tables	Rows (CN1)	Rows (CN2)	Key conf.	Identical	Dif. rows	Non ex.	Trans.	Modif.
All table categories		271	192,753	893,392	192,651	183,285	9,366	102	0	1,703
Tables rekeyed auto		73	1,590	1,590	1,589	1,570	19	1	0	49
Tables that cannot b		0	0	0	0	0	0	0	0	0
Tables to be rekeye		0	0	0	0	0	0	0	0	0
Tables requiring revi		0	0	0	0	0	0	0	0	0
Non root tables		198	191,163	891,802	191,062	181,715	9,347	101	0	1,654
BLK_REASON_TX	Not executed	1	0	0	0	0	0	0	0	0
C000	Not executed	1	0	0	0	0	0	0	0	0
C001	Not executed	1	4,799	4,799	4,799	4,799	0	0	0	0
C002	Not executed	1	1,554	1,554	1,554	1,554	0	0	0	0
C003	Not executed	1	1,112	1,112	1,112	1,112	0	0	0	0

Example of results retrieved.

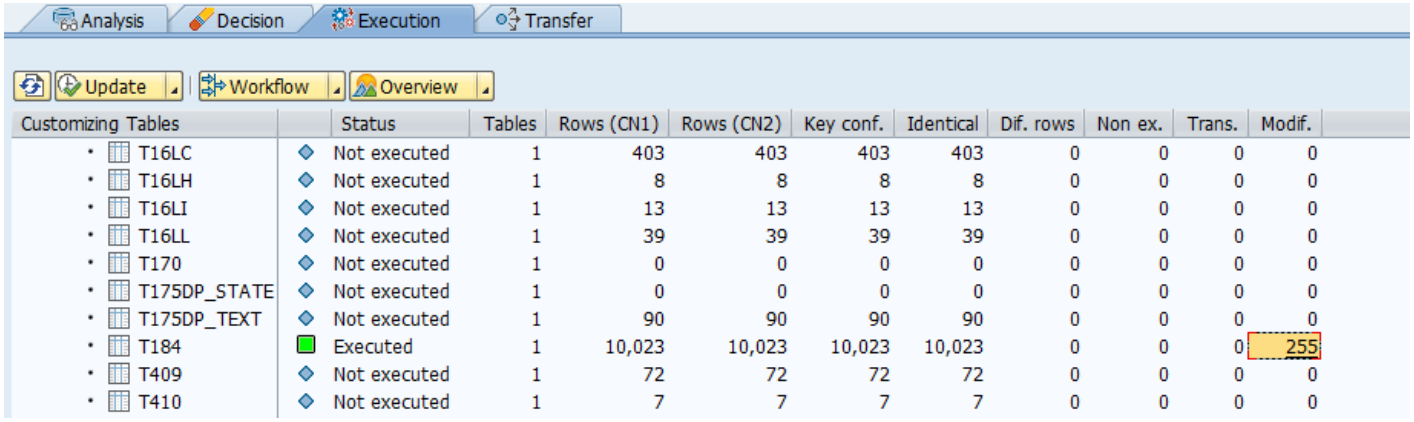


MAN	KA	KSCH	KTOP	VKOR	KT	KVS	SAKN1	SAKN2
800	V	KOFI	CACA	0001	02	ERL		
800	V	KOFI	CACA	0001	03	ERL		
800	V	KOFI	CACA	0002	01	ERL		
800	V	KOFI	CACA	0002	02	ERL		
800	V	KOFI	CACA	0002	03	ERL		
800	V	KOFI	CACA	0006	01	ERB		
800	V	KOFI	CACA	0006	01	ERF		
800	V	KOFI	CACA	0006	01	ERL		
800	V	KOFI	CACA	0006	01	ERS		
800	V	KOFI	CACA	0006	01	ERU		
800	V	KOFI	CACA	0006	01	MWS	0000175000	
800	V	KOFI	CACA	0006	02	ERB		

Note that the standard SAP display does not display large numbers of entries, to see all entries, select ‘Object’ then ‘Display Entire List’ as below.

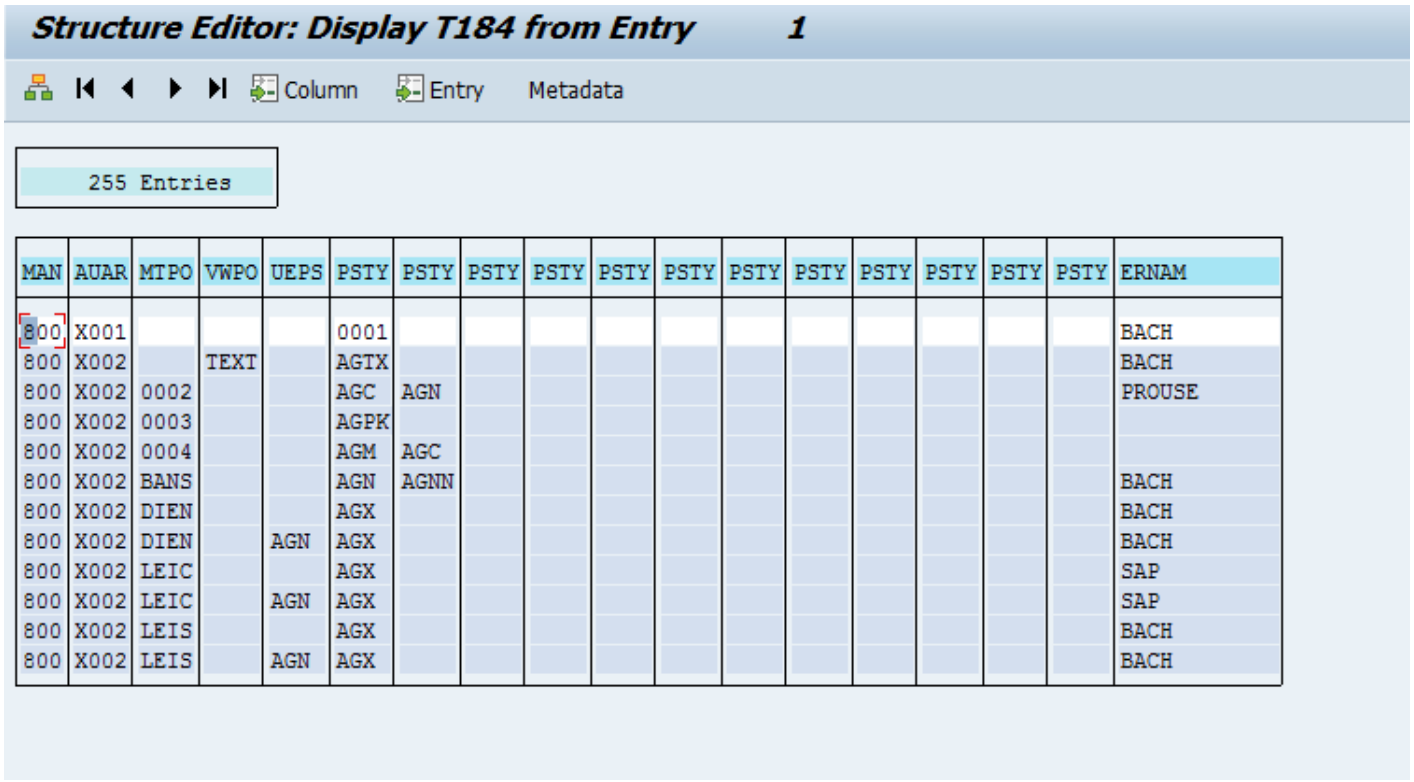


In the same manner the modified rows can be clicked and reviewed.



Customizing Tables		Status	Tables	Rows (CN1)	Rows (CN2)	Key conf.	Identical	Dif. rows	Non ex.	Trans.	Modif.
T16LC		Not executed	1	403	403	403	403	0	0	0	0
T16LH		Not executed	1	8	8	8	8	0	0	0	0
T16LI		Not executed	1	13	13	13	13	0	0	0	0
T16LL		Not executed	1	39	39	39	39	0	0	0	0
T170		Not executed	1	0	0	0	0	0	0	0	0
T175DP_STATE		Not executed	1	0	0	0	0	0	0	0	0
T175DP_TEXT		Not executed	1	90	90	90	90	0	0	0	0
T184		Executed	1	10,023	10,023	10,023	10,023	0	0	0	255
T409		Not executed	1	72	72	72	72	0	0	0	0
T410		Not executed	1	7	7	7	7	0	0	0	0

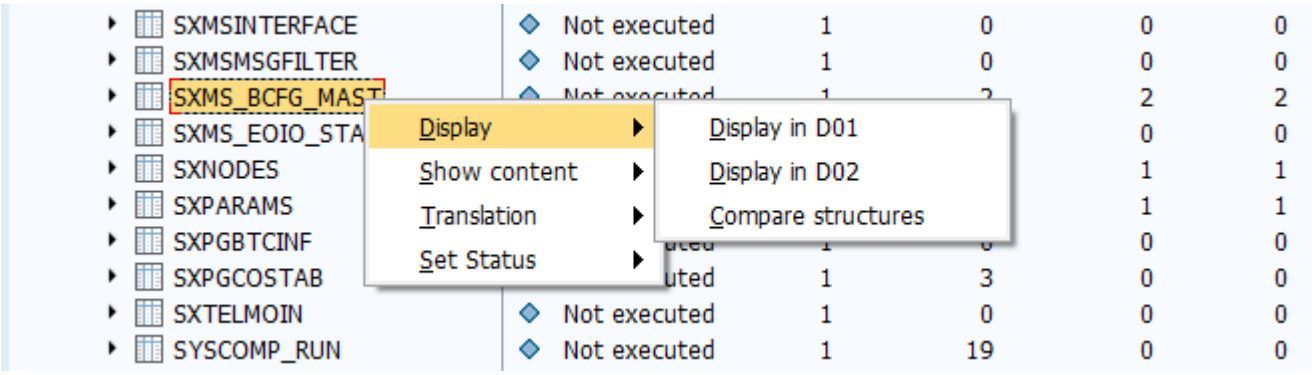
Example of results retrieved.



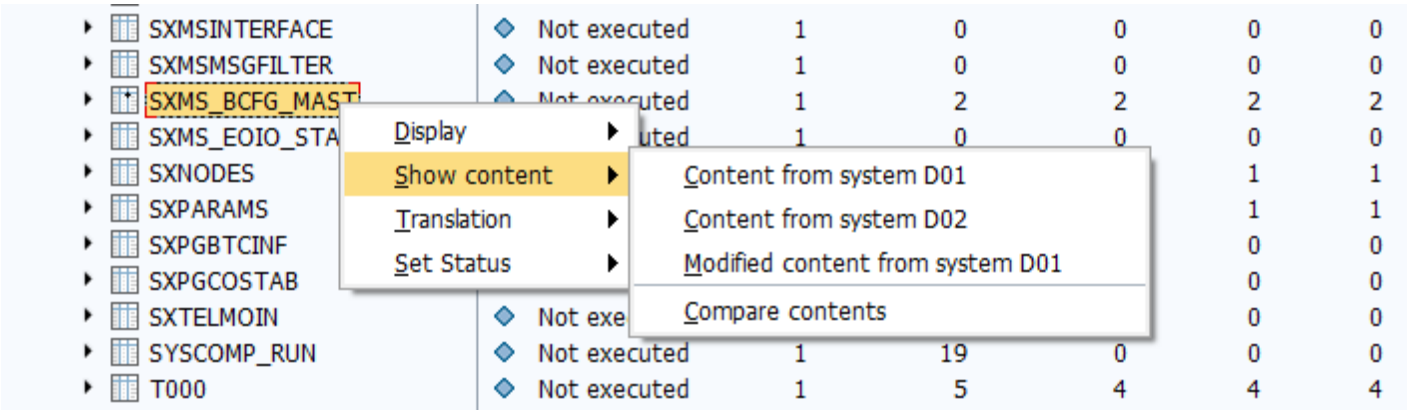
MAN	AUAR	MTPO	VWPO	UEPS	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	ERNAM
800	X001				0001												BACH
800	X002		TEXT		AGTX												BACH
800	X002	0002			AGC	AGN											PROUSE
800	X002	0003			AGPK												
800	X002	0004			AGM	AGC											
800	X002	BANS			AGN	AGNN											BACH
800	X002	DIEN			AGX												BACH
800	X002	DIEN		AGN	AGX												BACH
800	X002	LEIC			AGX												SAP
800	X002	LEIC		AGN	AGX												SAP
800	X002	LEIS			AGX												BACH
800	X002	LEIS		AGN	AGX												BACH

There are also a number of options seen by using a right mouse click on a table.

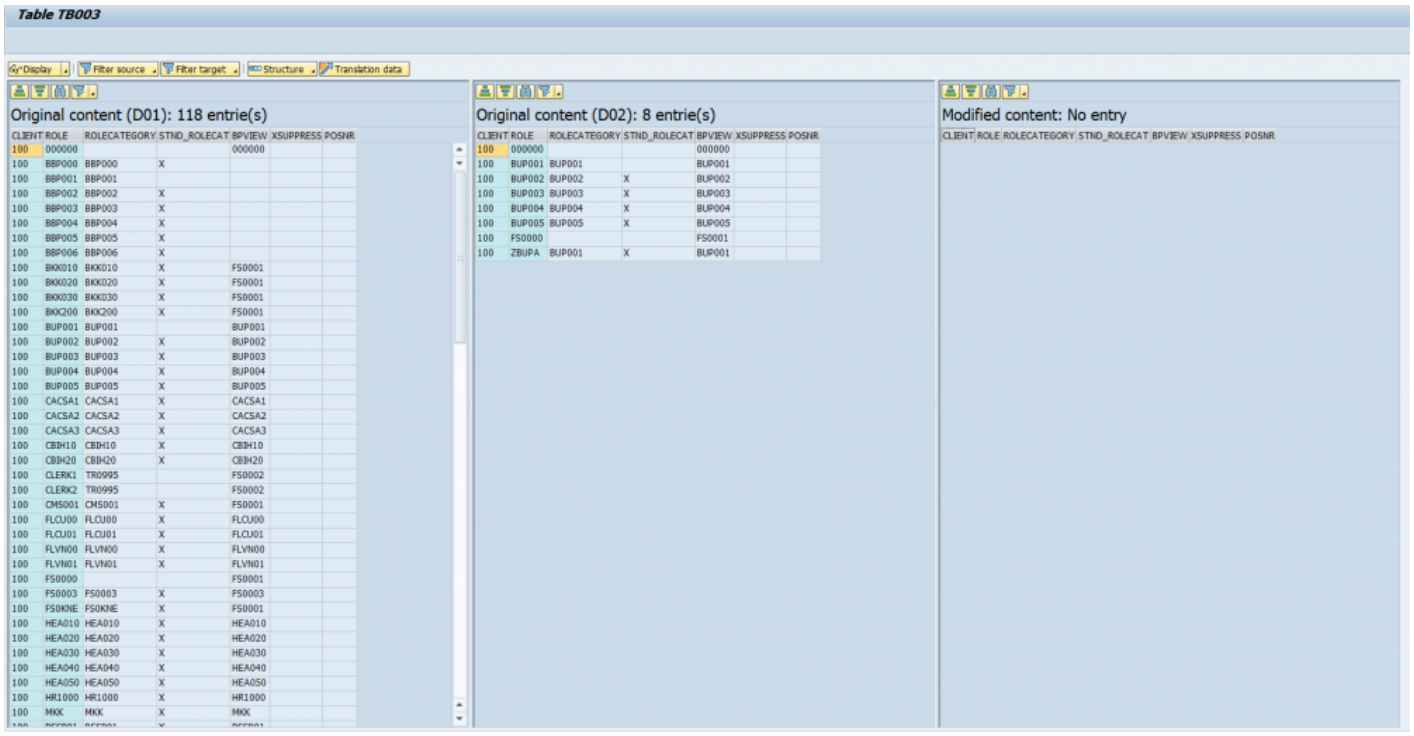
The ‘Display’ option allows the user to display the table structures in each system or to compare the structures.



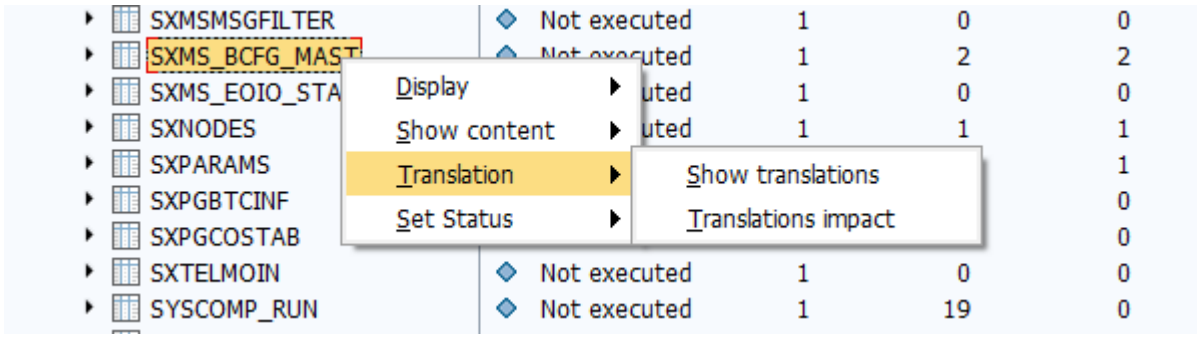
The ‘Show Content’ option allows the user to view the entries in each system or compare data.



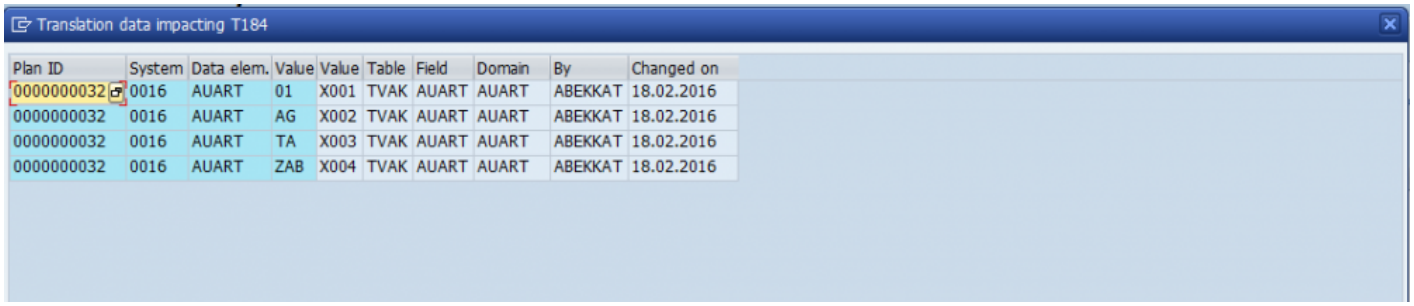
Compare data option as below:



The ‘Translation’ option allows the user to view the data that has been translated and the impact.

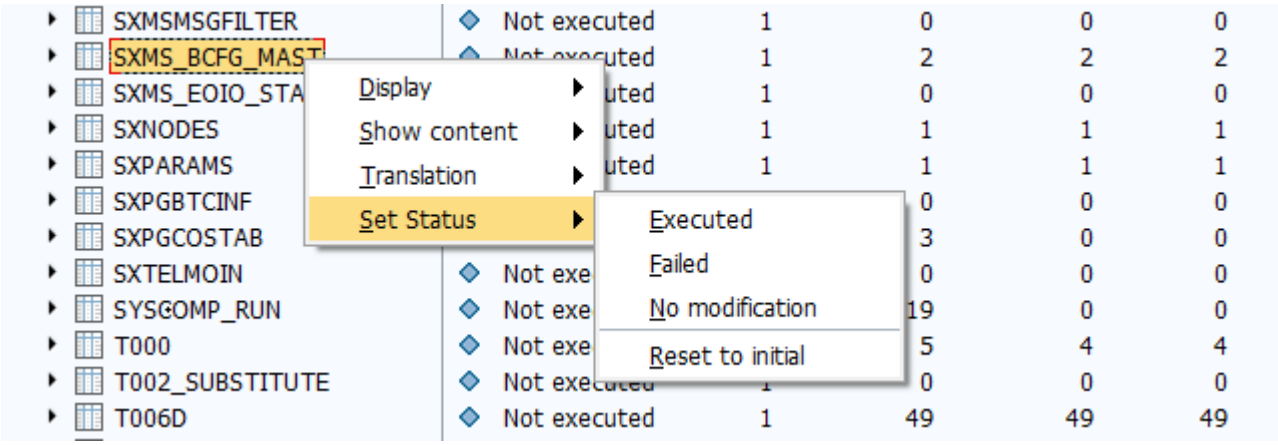


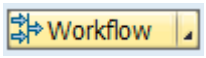
The translation impact.



The ‘Set status’ option allows the user to set the status for this table, the details for each option are as below:

- Executed – this has been executed
- Failed – there has been a failure and this needs to be looked into
- No Modification – the translation failed
- Reset to initial – resets the value to the original one



When you have reviewed the translations and are certain you are ready to close the phase use the  option on the ‘Workflow’ button 

and select close phase. Continue to the next phase Transfer Phase

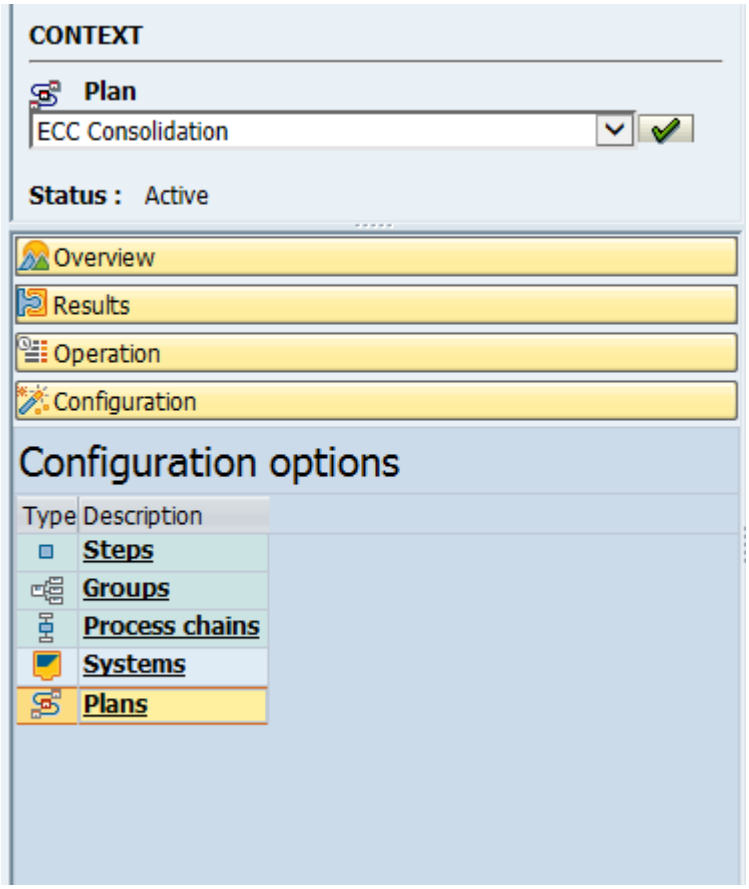
Transfer Phase

The Execution phase is broken down into two section the operation of the run and then viewing the results.

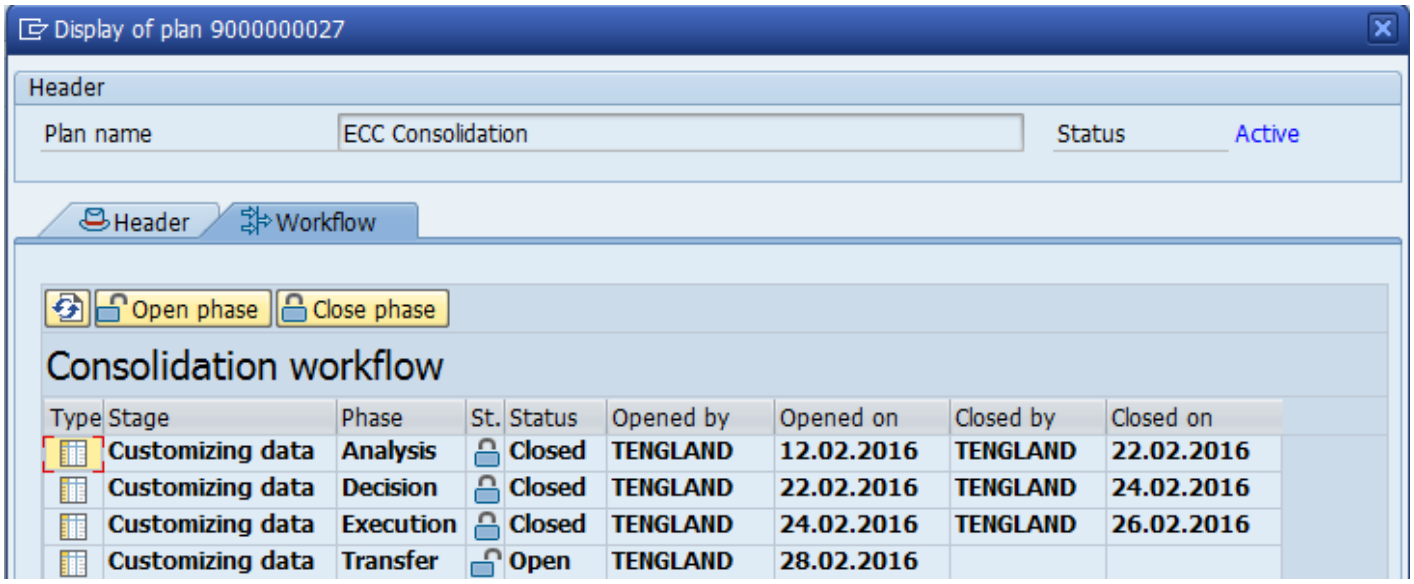
- Operation
- Results

Operation

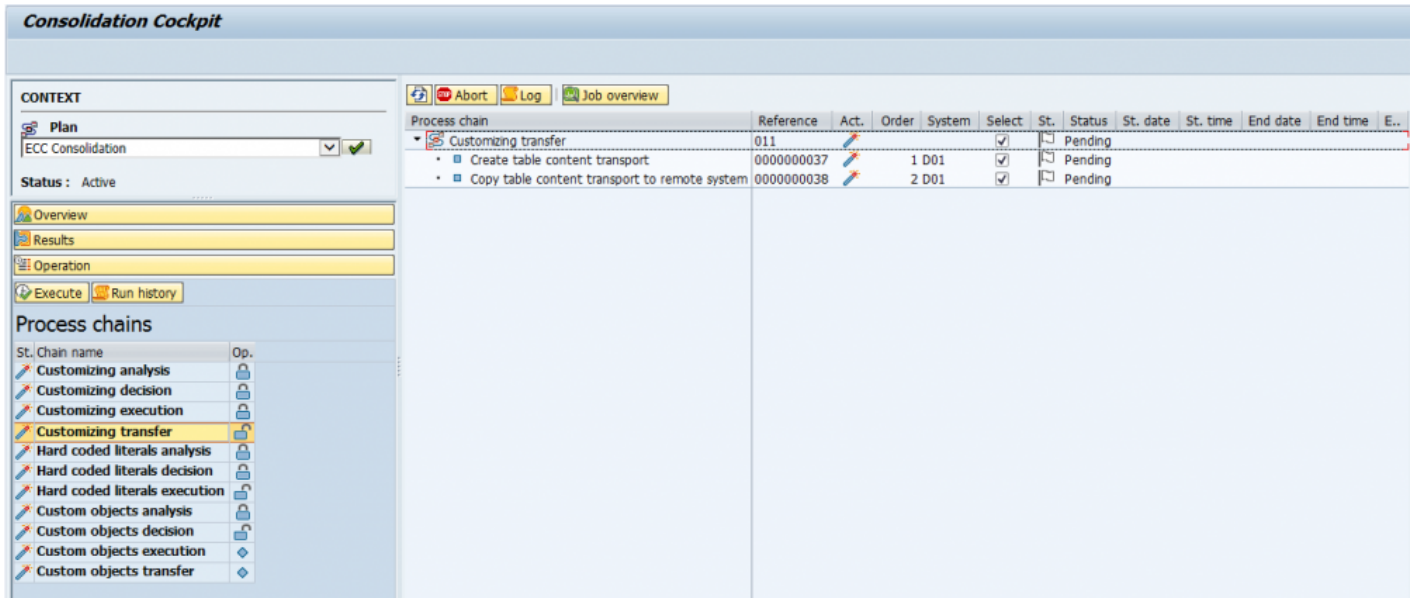
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



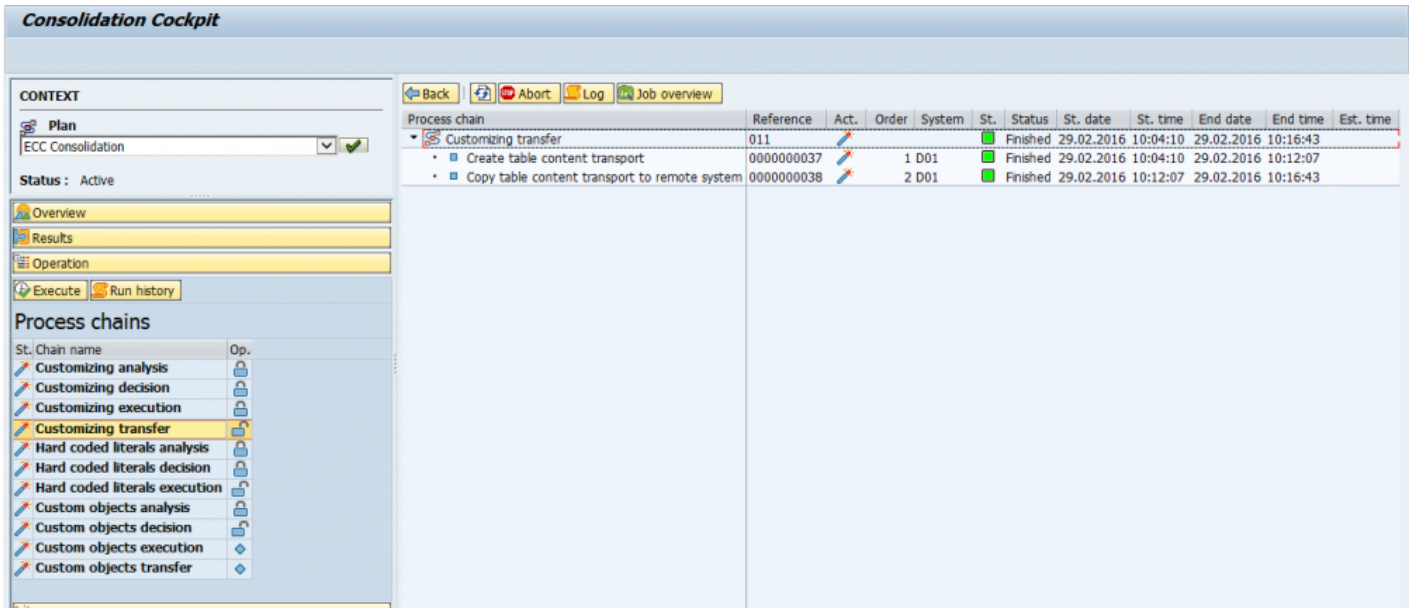
In the workflow tab select the stage ‘Customizing Data’ phase ‘Transfer’ and press the ‘Open Phase’ button, the phase is now open for operations.



With the execution phase now open go to the ‘Operation’ drawer and select the ‘Customizing transfer’ phase and press the ‘Execute’ button.



Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings, pressing the refresh button will show the progress of the analysis programs running. Once complete the programs will have a status of finished, you are now ready to progress to the Results screen.


Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Back
Abort
Log
Job overview
Process chain Reference Act. Order System St. Status St. date St. time End date End time Est. time
Customizing transfer 011 Finished 29.02.2016 10:04:10 29.02.2016 10:16:43
Create table content transport 0000000037 1 D01 Finished 29.02.2016 10:04:10 29.02.2016 10:12:07
Copy table content transport to remote system 0000000038 2 D01 Finished 29.02.2016 10:12:07 29.02.2016 10:16:43

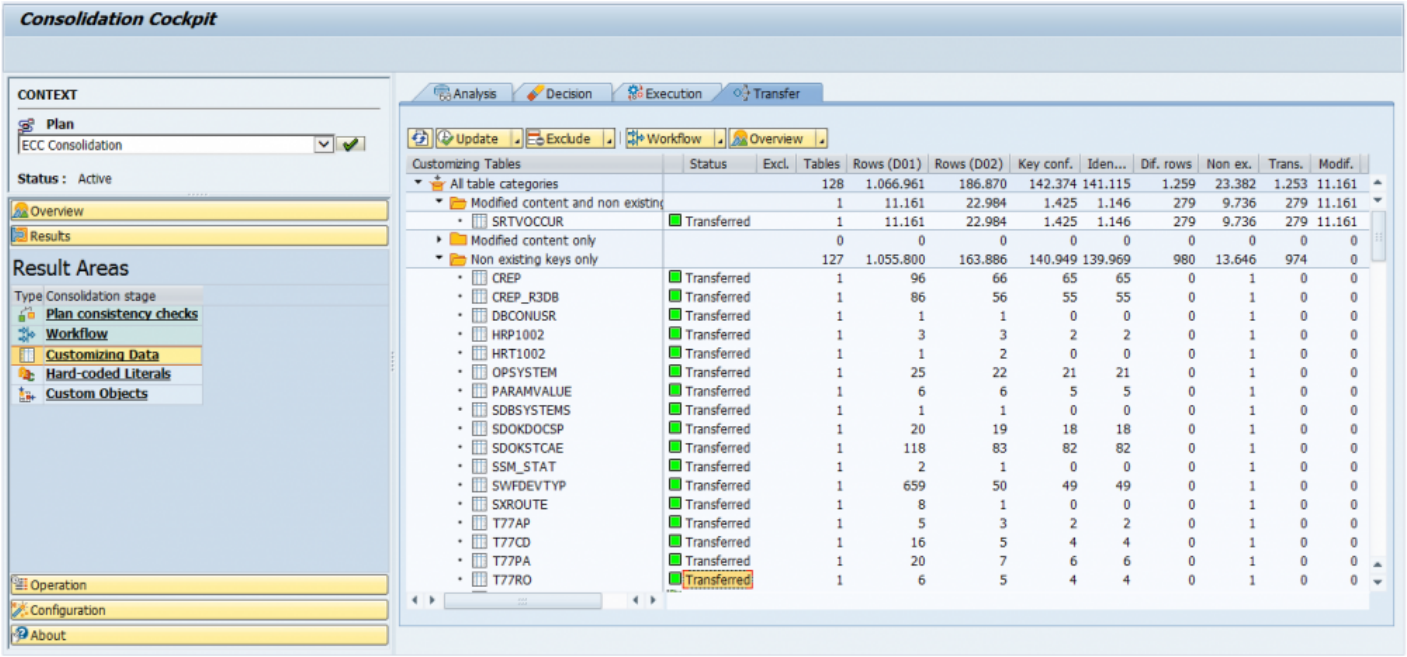
Results

The Transfer phase of the Customizing Data stage is the final stage as transports are completed and can then be deployed to the destination system.

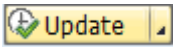
Once the Execution programs have run from the Operation section it is time to view the results, go to the ‘Results’ drawer and select the ‘Customizing Data’ and click the ‘Transfer’ tab.

The results are broken down by the following categories, this phase only includes the root tables identified by Consolidator.

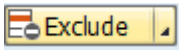
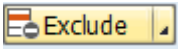
Modified Content and non existing keys – Records which did not exist with the non key data modified
Modified Content – Records with keys that existed with the non key data modified
Non-existing keys only – Records which did not exist in the target ready to be transferred

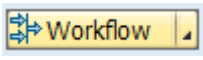


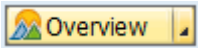
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button 

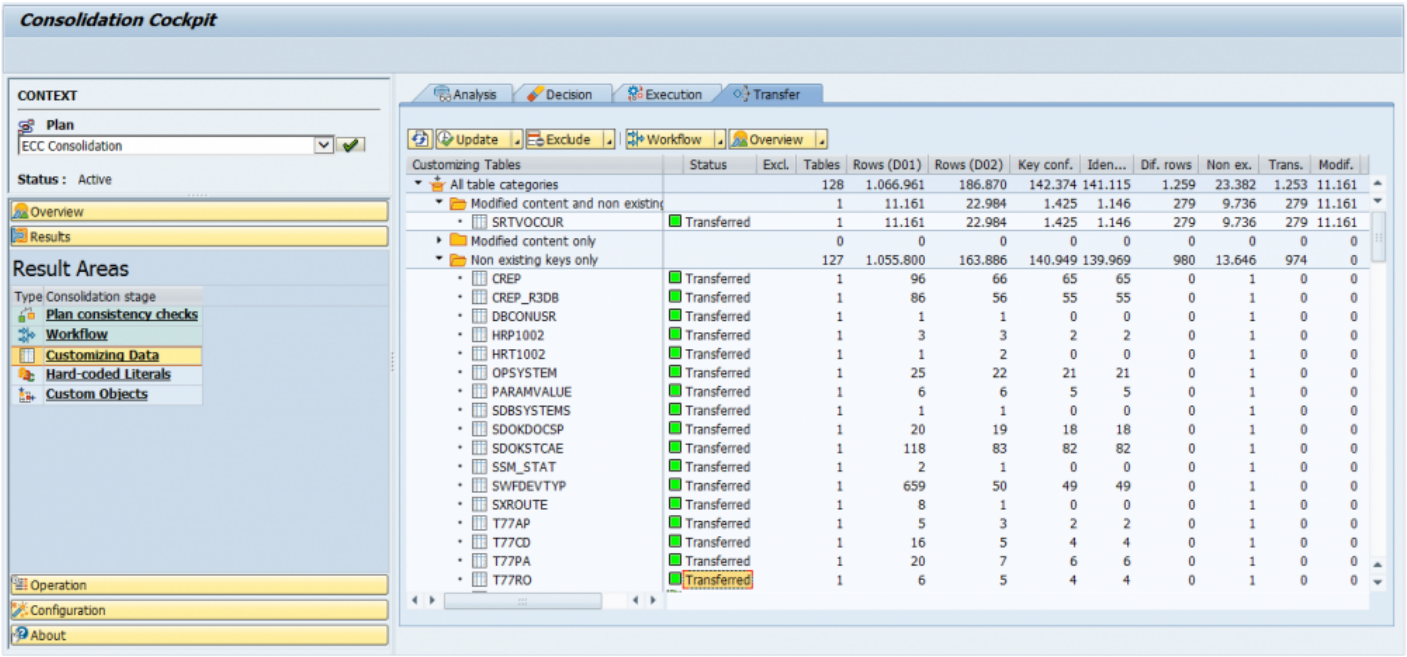
allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Exclude’ button  allows the user to exclude tables from being transferred, they can also be added back in this phase if the decision needs to be reversed. Note this is different to the ‘Exclude’ button  in the analysis phase.

The ‘Workflow’ button  allows the user to open and close this phase.

The ‘Overview’ button  allows the user to view the reports for this phase, see the Reporting section for more details.

The tab holds information on all the tables and what happened through the execution, explanations for what each column represents are provided below the screenshot.



Status – This contains the status of the execution, all of the options are seen in the screenshot above with explanations below

- In Progress – this data not been transferred, if no data needs to be transferred this status is correct
- Transferred – this has been transferred
- Failed – there has been a failure and this needs to be looked into

Tables – This contains the number of tables

Rows – This contains the number of rows of data

Key Conflict – This contains the number of rows with a conflicting key

Identical – This counts the number of identical rows between the two systems

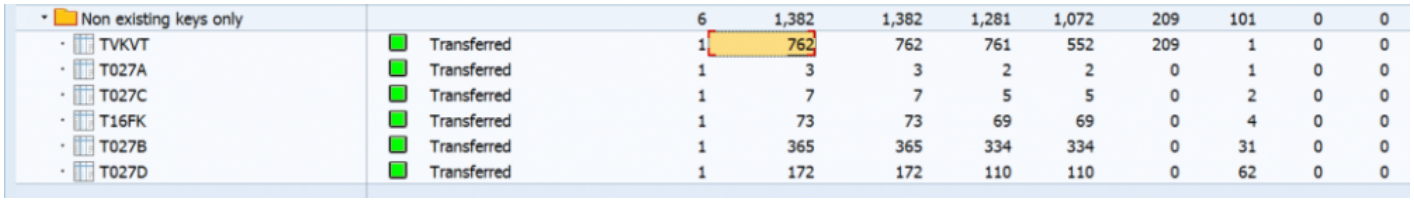
Different Rows – Rows where the key conflicts, but the data is different

Non Ex. – Lines not existing in the target system

Trans. – The number of translations

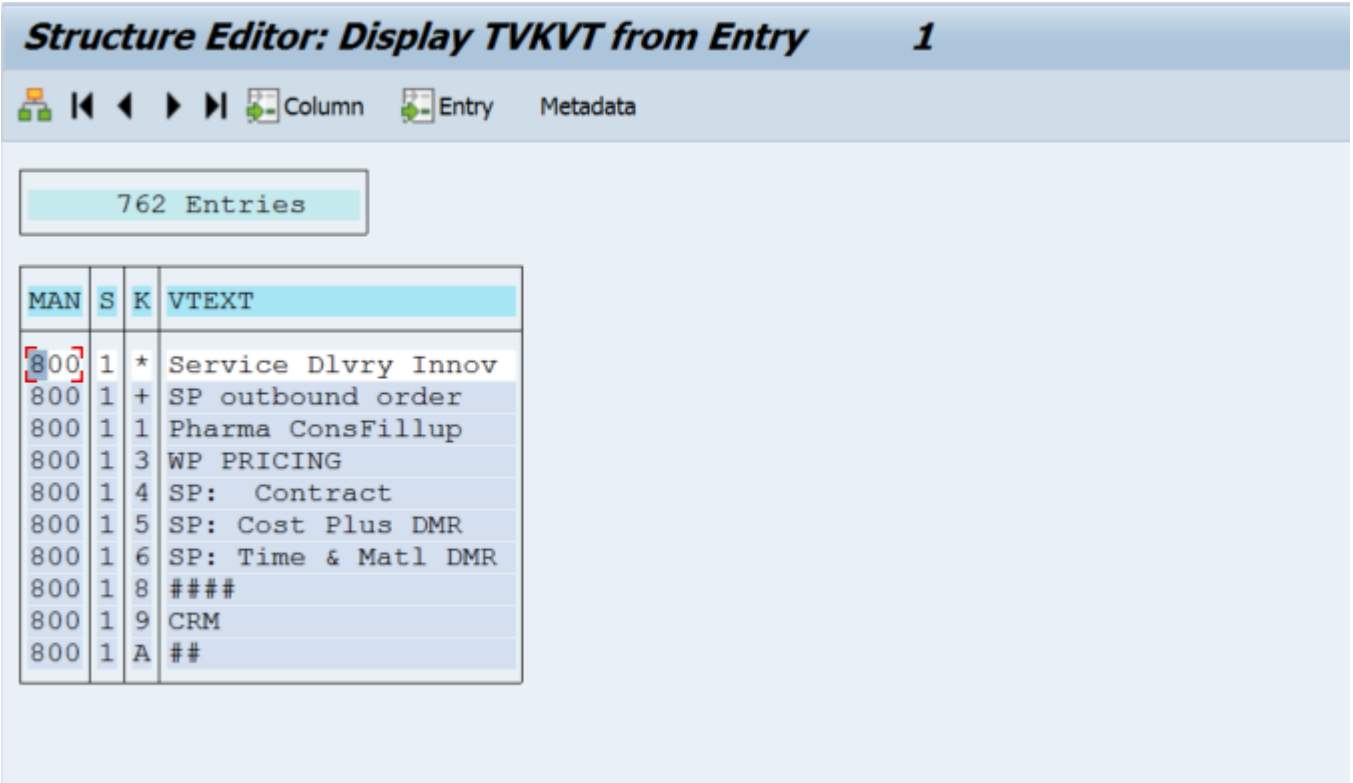
Modif. – The number of modifications that have been made in the controller system

On a table row all of the numbers in the columns apart from ‘Table’ the data can be clicked and reviewed.

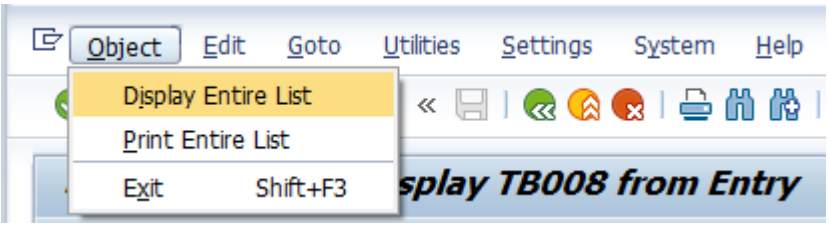


Non existing keys only		6	1,382	1,382	1,281	1,072	209	101	0	0
TVKVT	Transferred	1	762	762	761	552	209	1	0	0
T027A	Transferred	1	3	3	2	2	0	1	0	0
T027C	Transferred	1	7	7	5	5	0	2	0	0
T16FK	Transferred	1	73	73	69	69	0	4	0	0
T027B	Transferred	1	365	365	334	334	0	31	0	0
T027D	Transferred	1	172	172	110	110	0	62	0	0

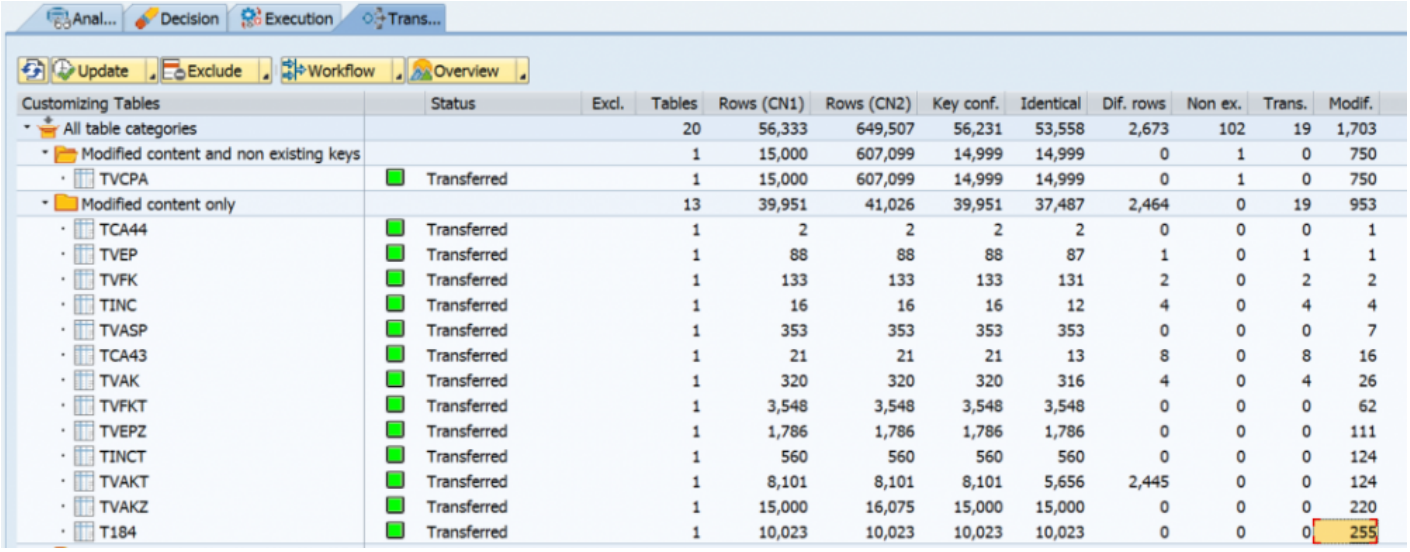
Example of results retrieved.



Note that the standard SAP display does not display large numbers of entries, to see all entries, select ‘Object’ then ‘Display Entire List’ as below.

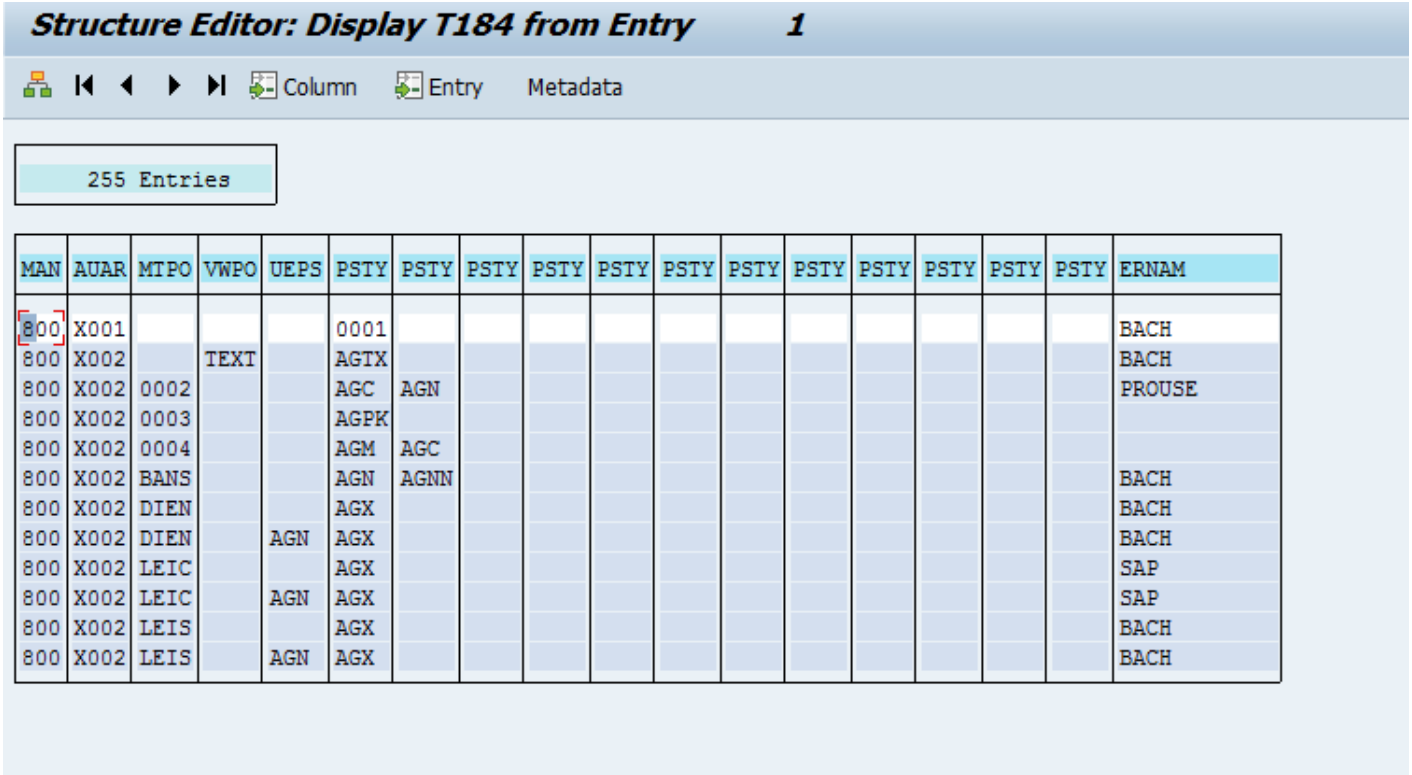


In the same manner the modified rows can be clicked and reviewed.



Customizing Tables		Status	Excl.	Tables	Rows (CN1)	Rows (CN2)	Key conf.	Identical	Dif. rows	Non ex.	Trans.	Modif.
All table categories				20	56,333	649,507	56,231	53,558	2,673	102	19	1,703
Modified content and non existing keys				1	15,000	607,099	14,999	14,999	0	1	0	750
TVCPA		Transferred		1	15,000	607,099	14,999	14,999	0	1	0	750
Modified content only				13	39,951	41,026	39,951	37,487	2,464	0	19	953
TCA44		Transferred		1	2	2	2	2	0	0	0	1
TVEP		Transferred		1	88	88	88	87	1	0	1	1
TVFK		Transferred		1	133	133	133	131	2	0	2	2
TINC		Transferred		1	16	16	16	12	4	0	4	4
TVASP		Transferred		1	353	353	353	353	0	0	0	7
TCA43		Transferred		1	21	21	21	13	8	0	8	16
TVAK		Transferred		1	320	320	320	316	4	0	4	26
TVFKT		Transferred		1	3,548	3,548	3,548	3,548	0	0	0	62
TVEPZ		Transferred		1	1,786	1,786	1,786	1,786	0	0	0	111
TINCT		Transferred		1	560	560	560	560	0	0	0	124
TVAKT		Transferred		1	8,101	8,101	8,101	5,656	2,445	0	0	124
TVAKZ		Transferred		1	15,000	16,075	15,000	15,000	0	0	0	220
T184		Transferred		1	10,023	10,023	10,023	10,023	0	0	0	255

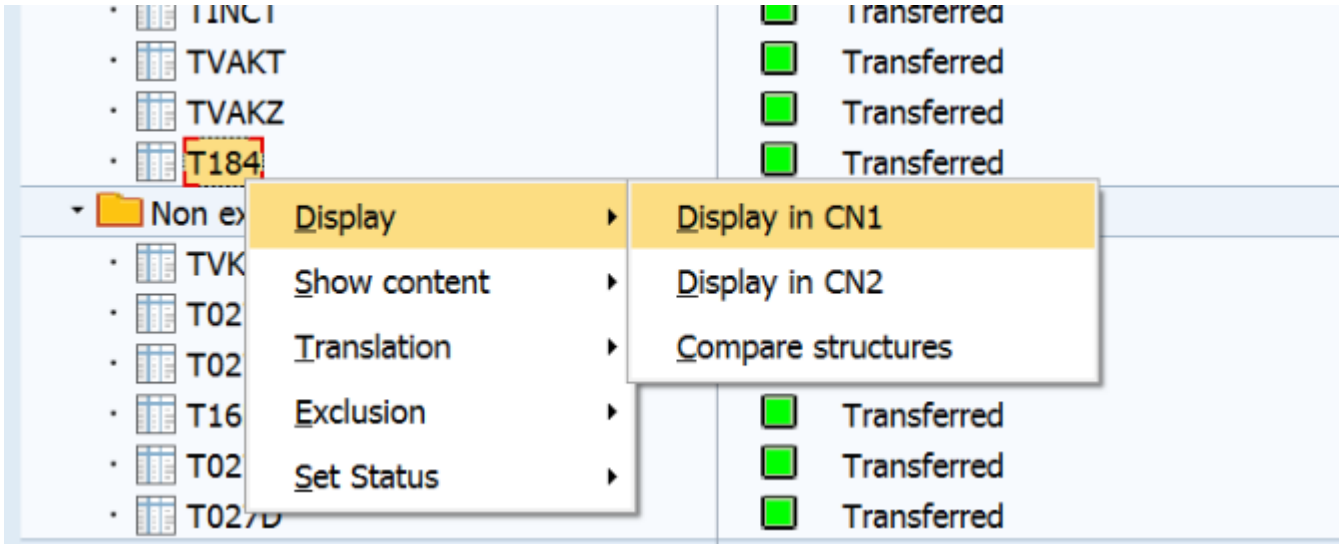
Example of results retrieved.



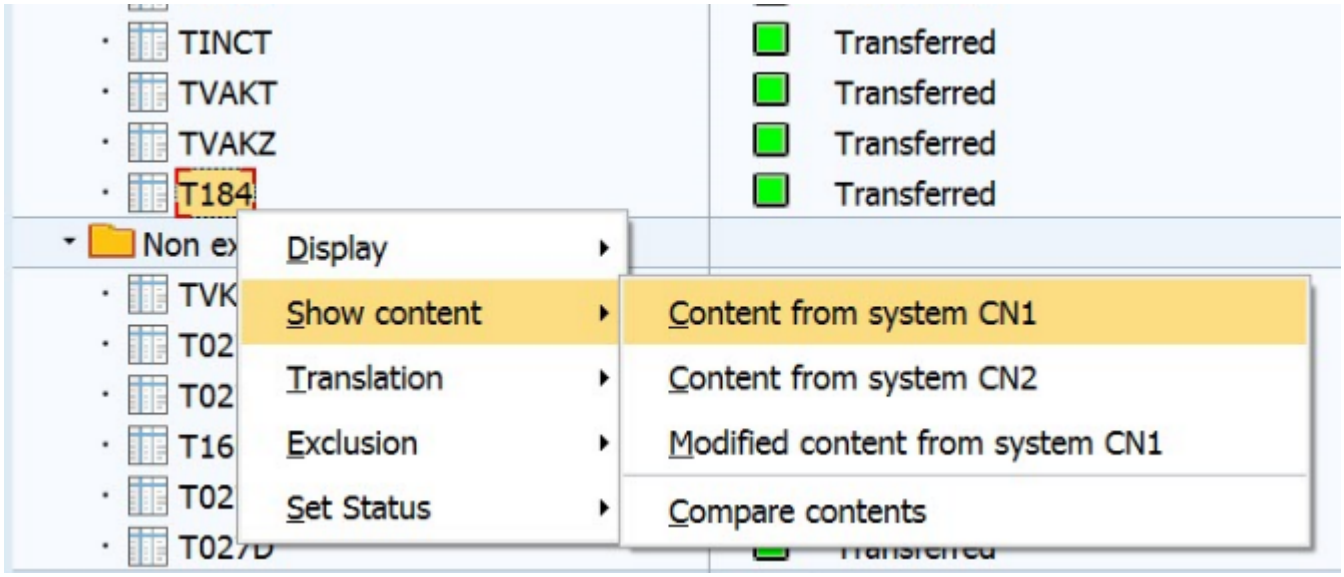
MAN	AUAR	MTPO	VWPO	UEPS	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	PSTY	ERNAM
800	X001				0001												BACH
800	X002		TEXT		AGTX												BACH
800	X002	0002			AGC	AGN											PROUSE
800	X002	0003			AGPK												
800	X002	0004			AGM	AGC											
800	X002	BANS			AGN	AGNN											BACH
800	X002	DIEN			AGX												BACH
800	X002	DIEN		AGN	AGX												BACH
800	X002	LEIC			AGX												SAP
800	X002	LEIC		AGN	AGX												SAP
800	X002	LEIS			AGX												BACH
800	X002	LEIS		AGN	AGX												BACH

There are also a number of options seen by using a right mouse click on a table.

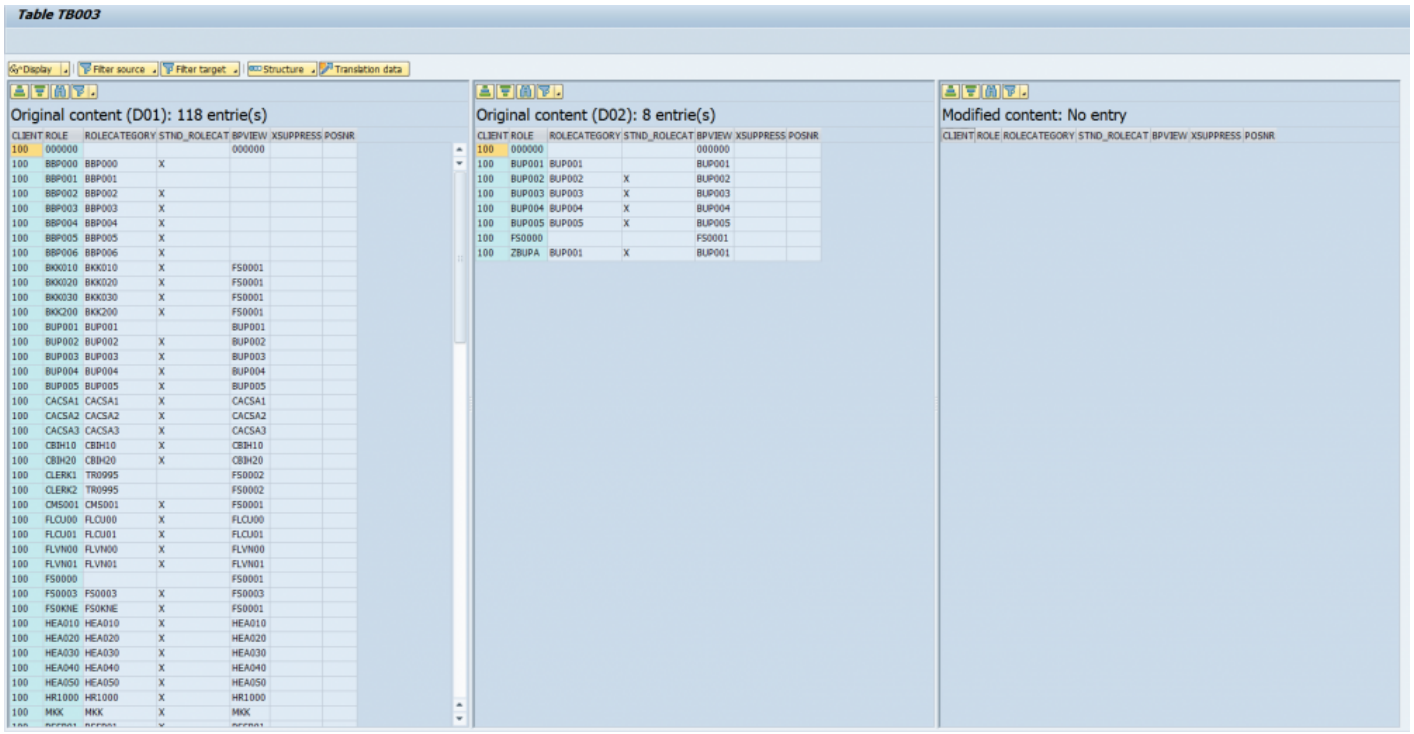
The ‘Display’ option allows the user to display the table structures in each system or to compare the structures.



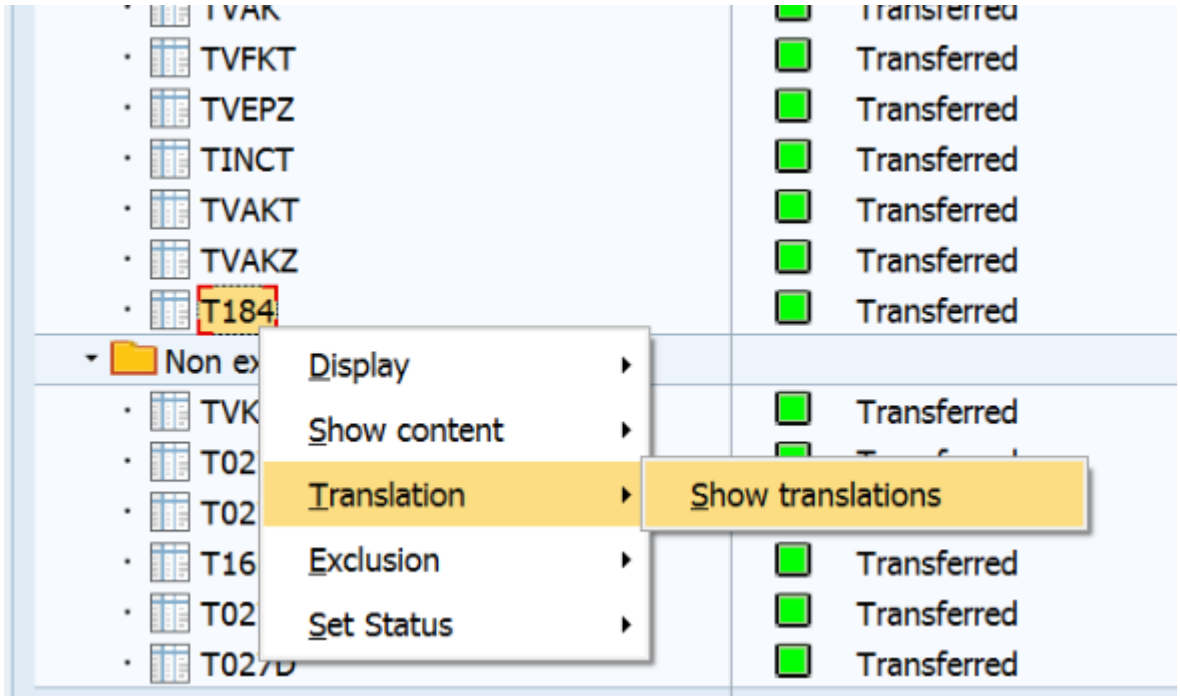
The ‘Show Content’ option allows the user to view the entries in each system or compare data.



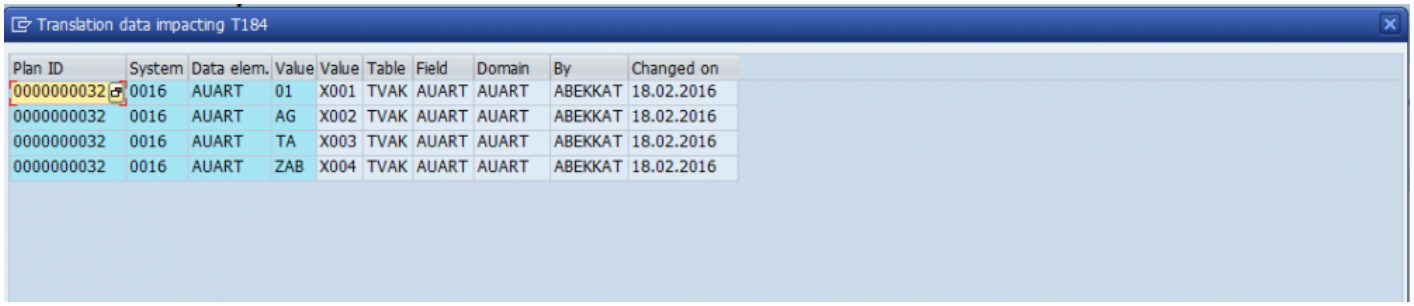
Compare data option as below:



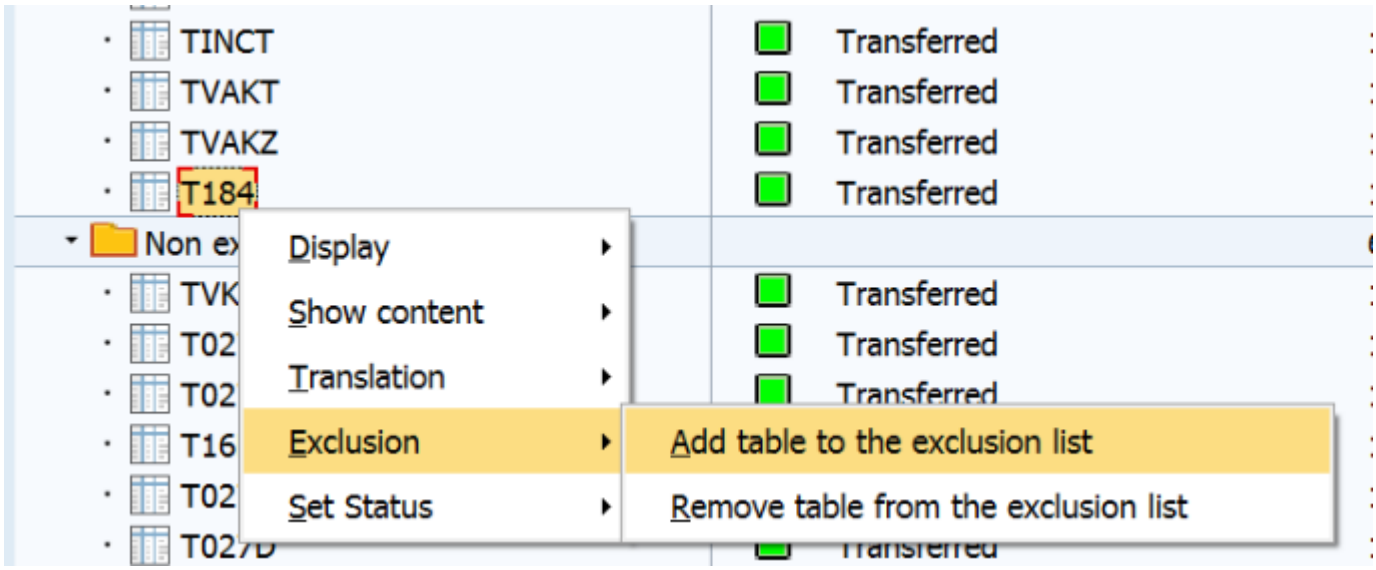
The ‘Translation’ option allows the user to view the data that has been translated and the impact.



The translation impact.

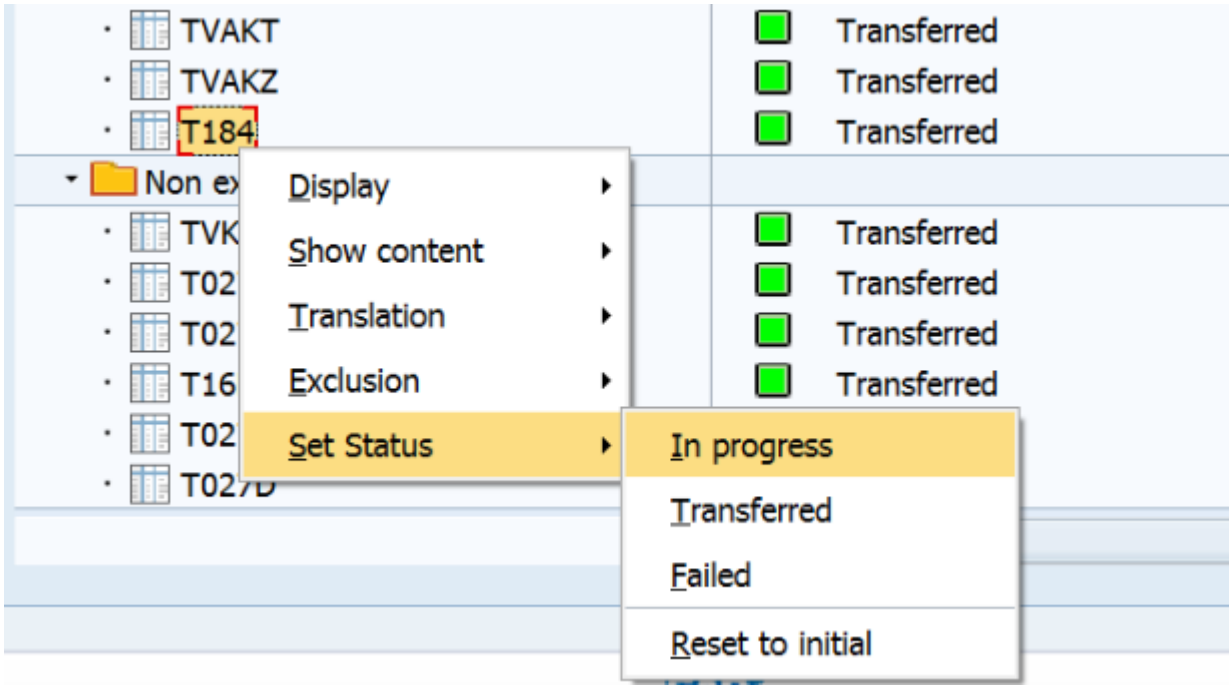


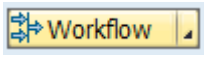
The ‘Exclusion’ option allows the user to exclude tables from the transfer.



The ‘Set status’ option allows the user to set the status for this table, the details for each option are as below:

- In Progress – this hhas not yet been transferred
- Transferred – the transfer was successful
- Failed – there has been a failure and this needs to be looked into
- Reset to initial – resets the value to the original one



When you have reviewed the translations and are certain you are ready to close the phase use the option on the ‘Workflow’ button 

and select close phase.

Hard Code Literals

* Note this stage should not start until the Customizing Data has completed the Decision Phase

The hard code literal stage is dealt with through three phases which are completed in the order below:

- Analysis Phase
- Decision Phase
- Execution Phase

* Note that the transfer phase is not relevant for the stage ‘Hard Code Literals’ as all of change to correct the hard coded literals is held against the Custom Objects and therefore the transfer occurs as a part of the custom objects phase.

Analysis Phase

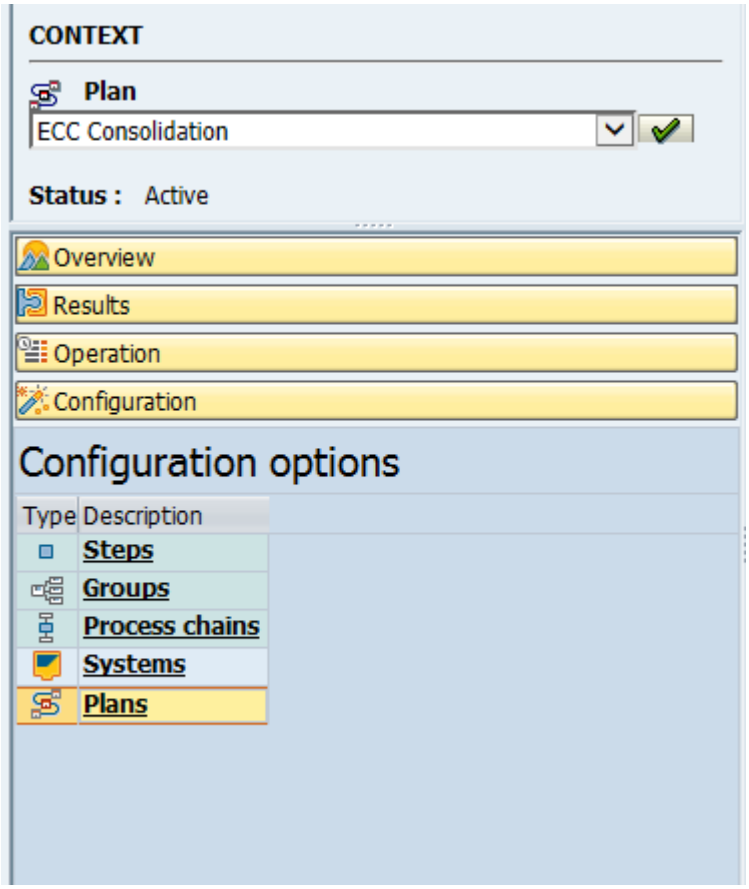
The Analysis phase is broken down into two section the operation of the run and then viewing the results.

- Operation
- Results

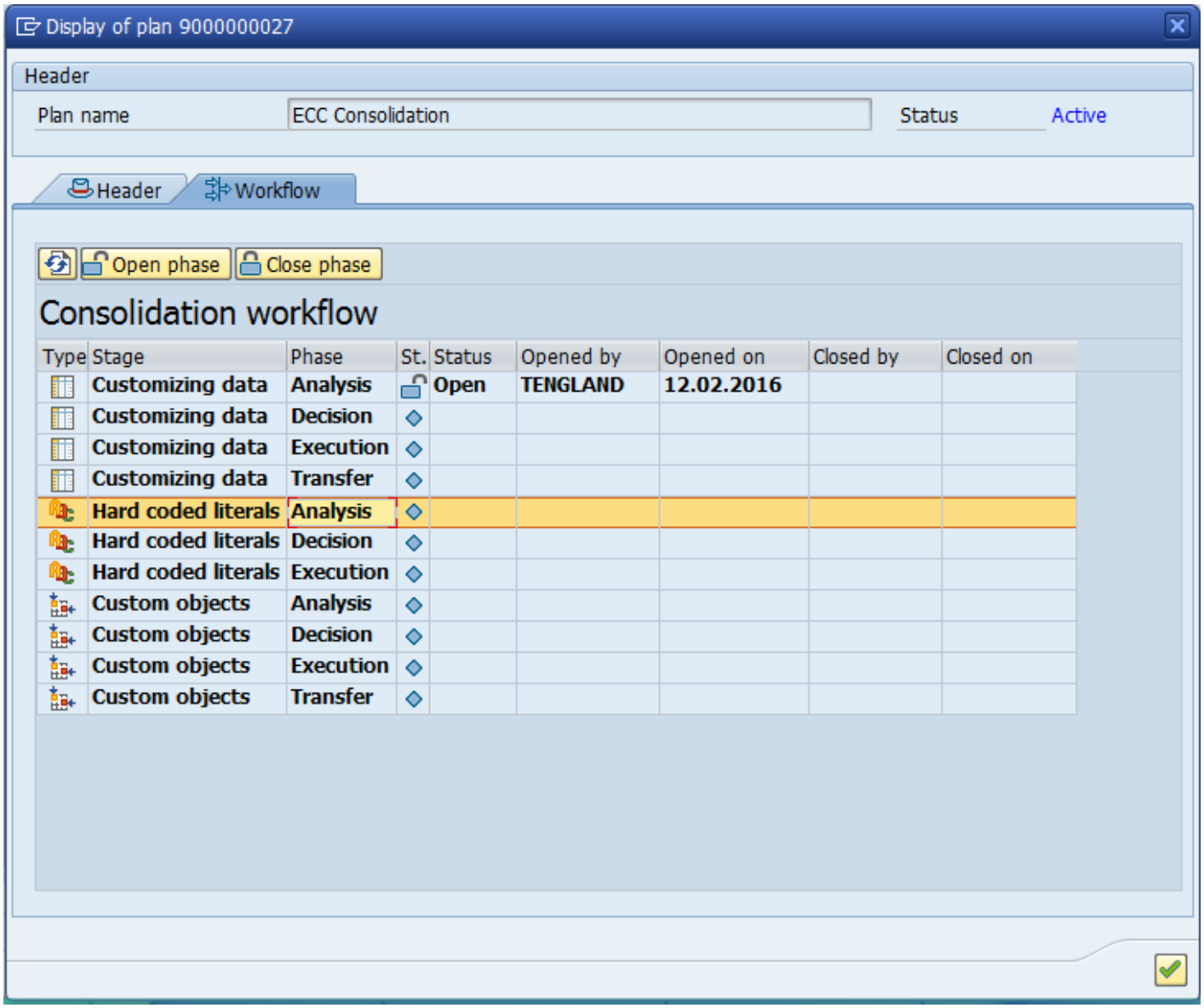
Operation

The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.

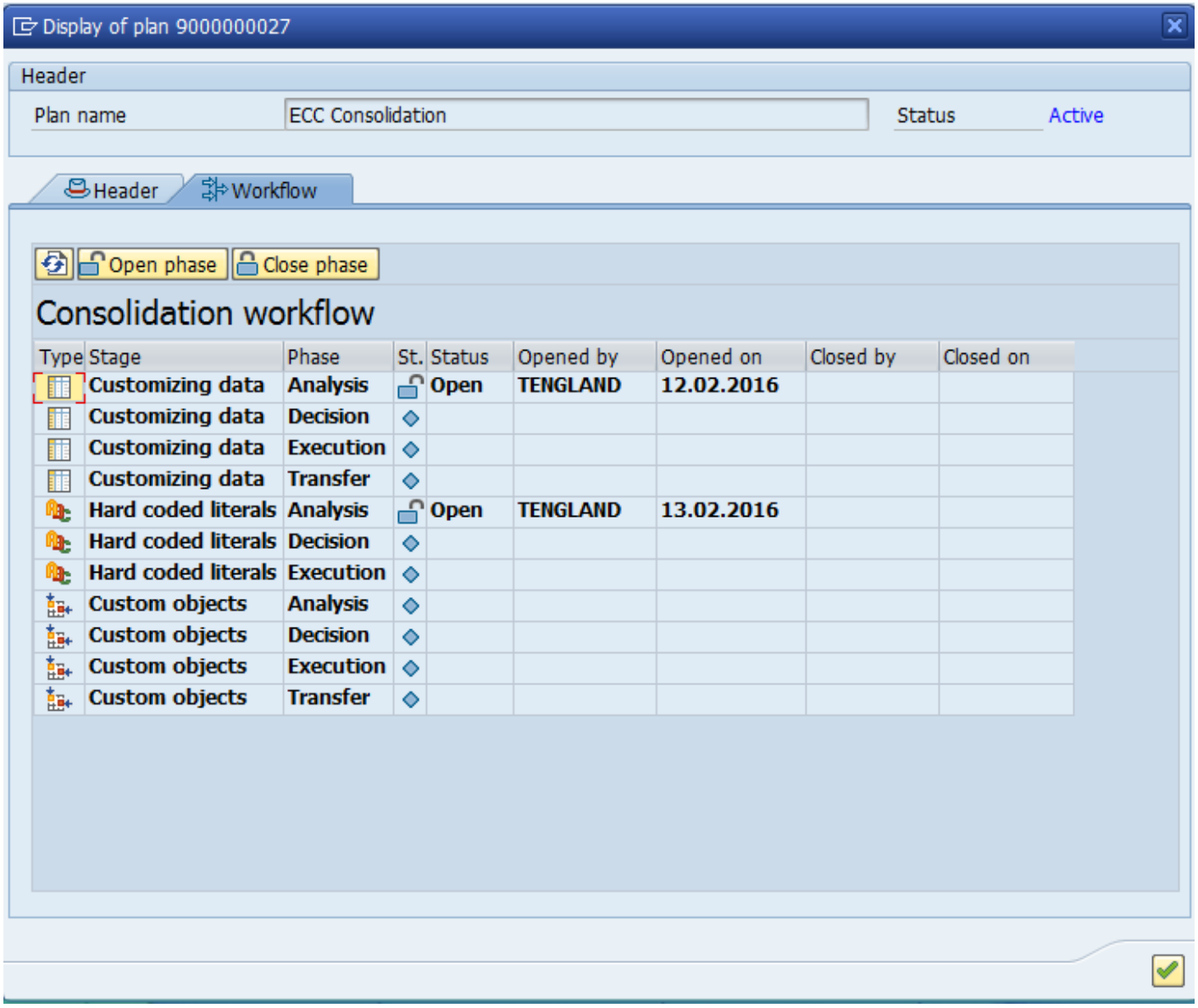
> * Note this stage should not start until the Customizing Data has completed the Decision Phase



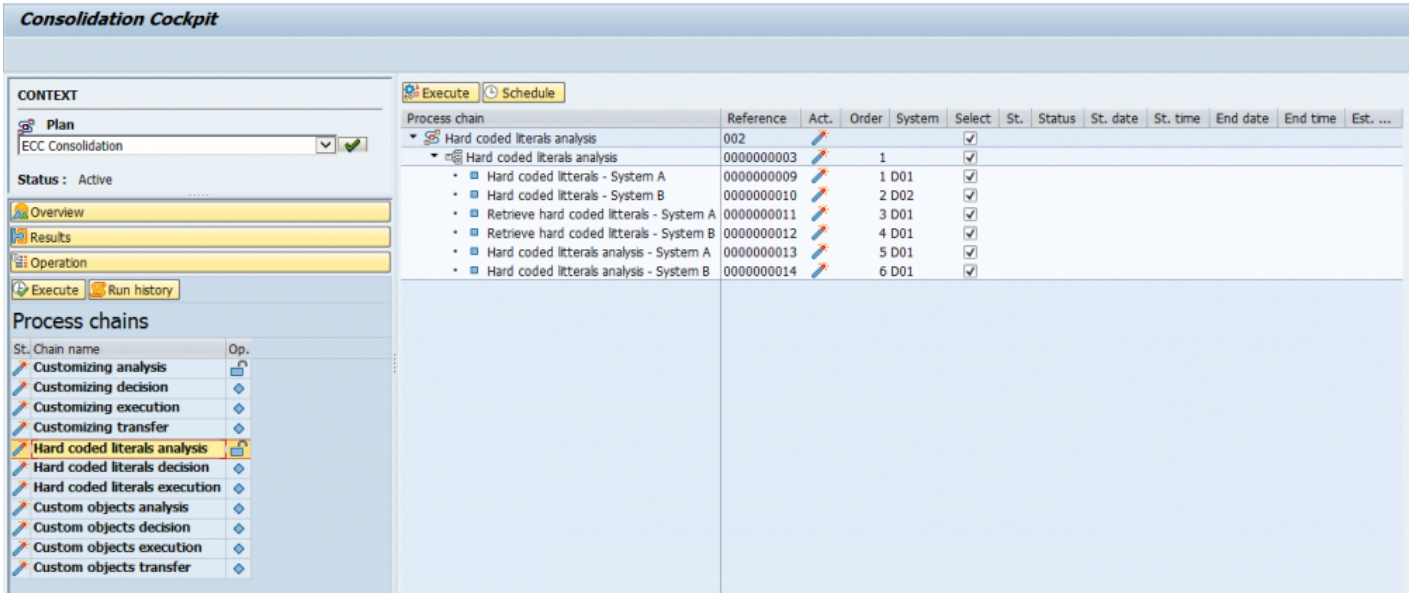
In the workflow tab select the stage ‘Hard Code Literals’ phase ‘Analysis’ and press the ‘Open Phase button.



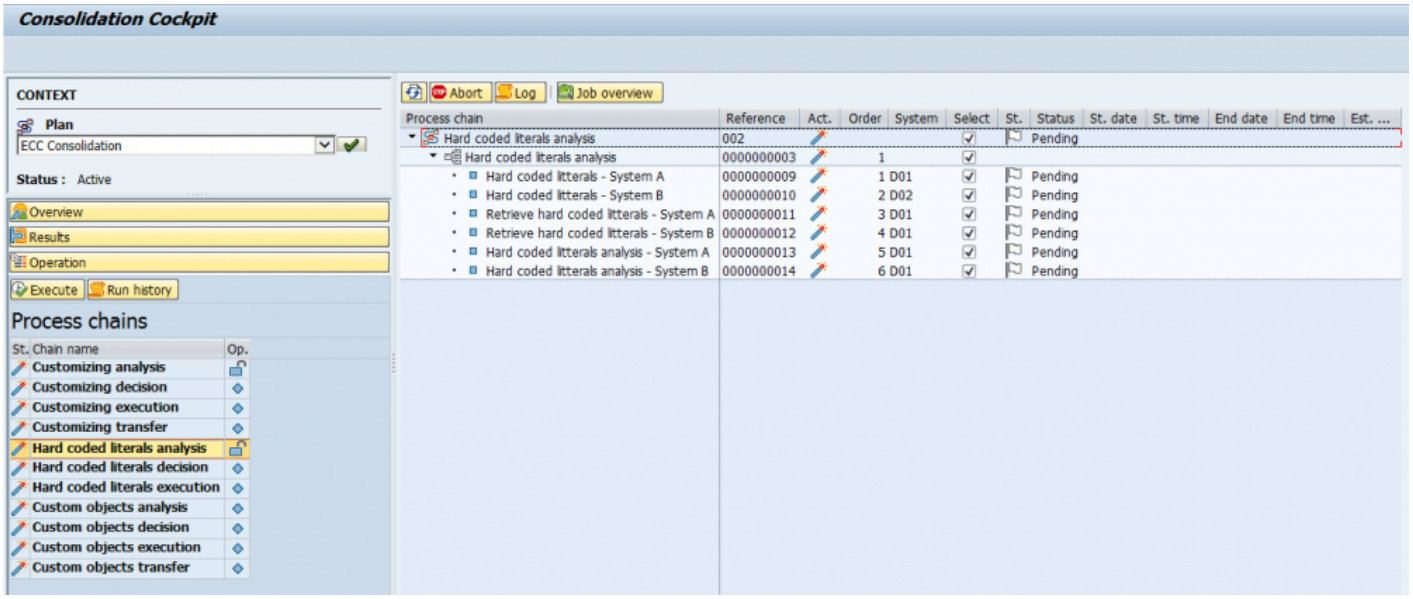
The phase is now open for operations.



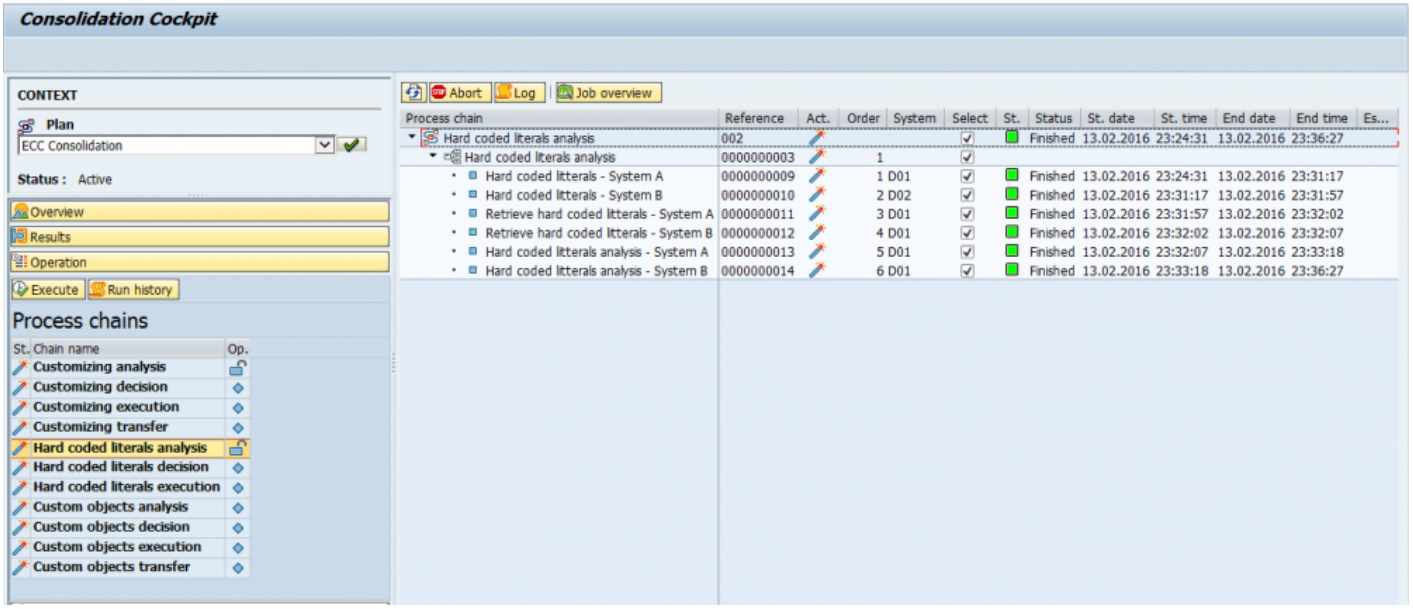
With the analysis phase now open go to the ‘Operation’ drawer and select the ‘Hard Code Literals’ phase and press the ‘Execute’ button.



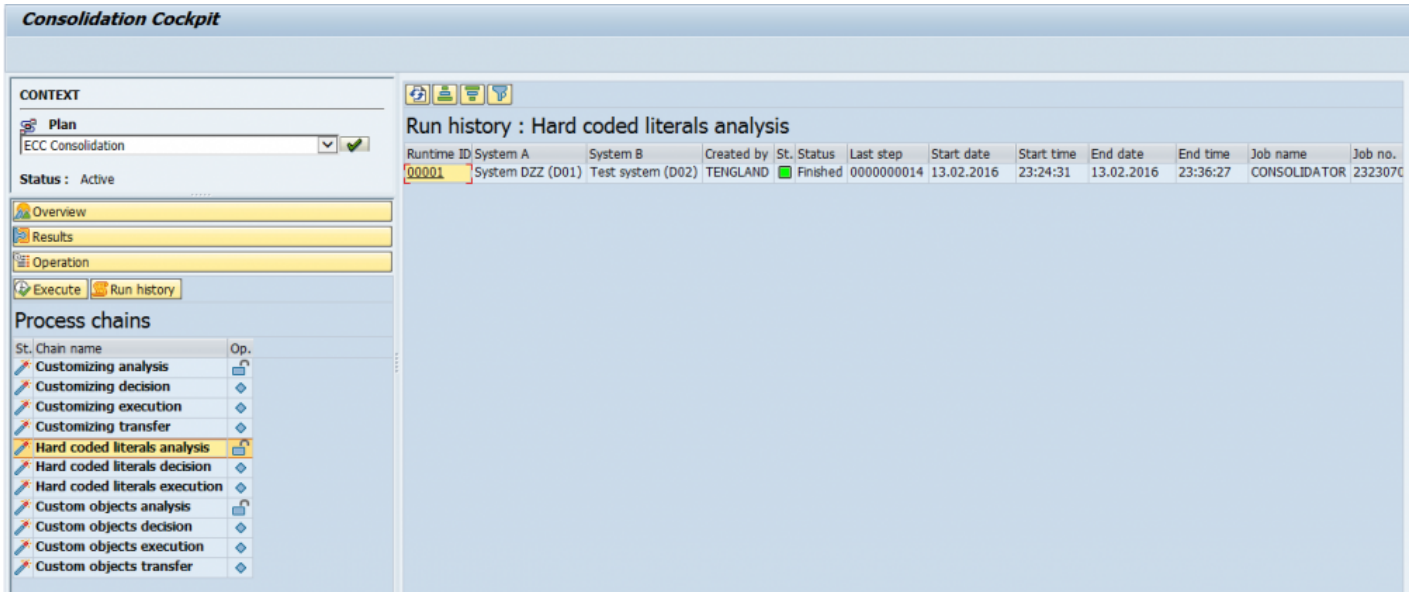
Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings.



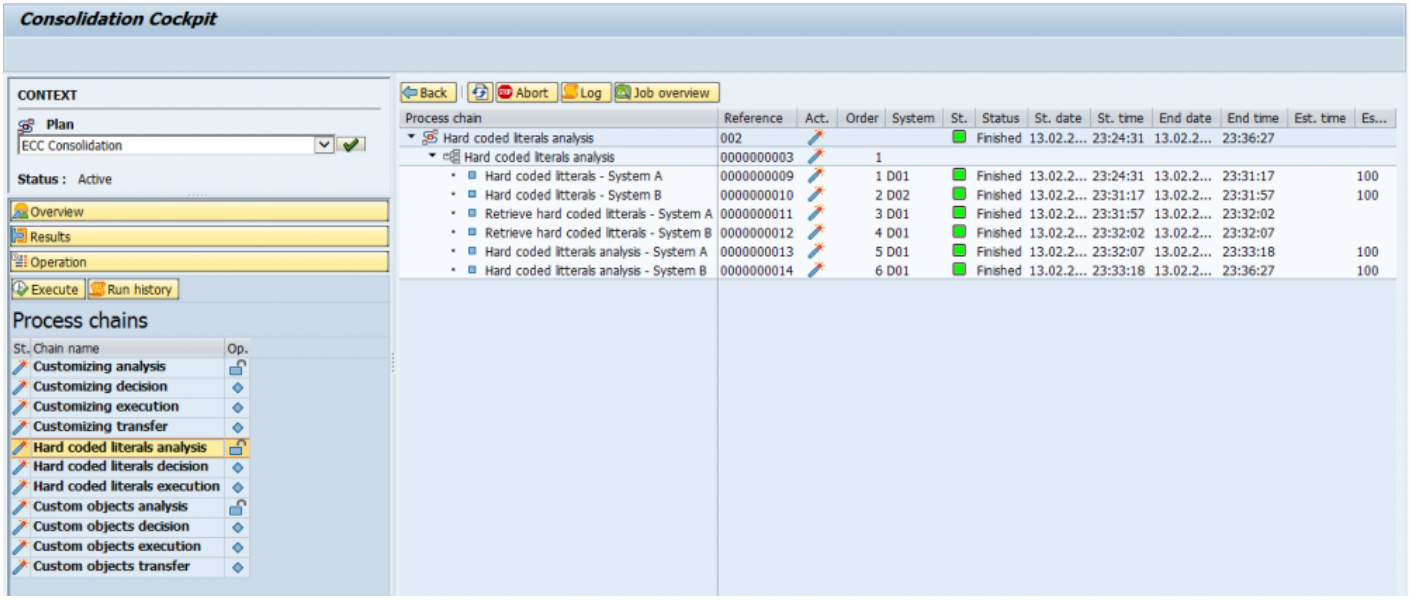
Pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Hard coded literals analysis’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



When the jobs have a status of finished when complete, it is ready to progress to the results screen.

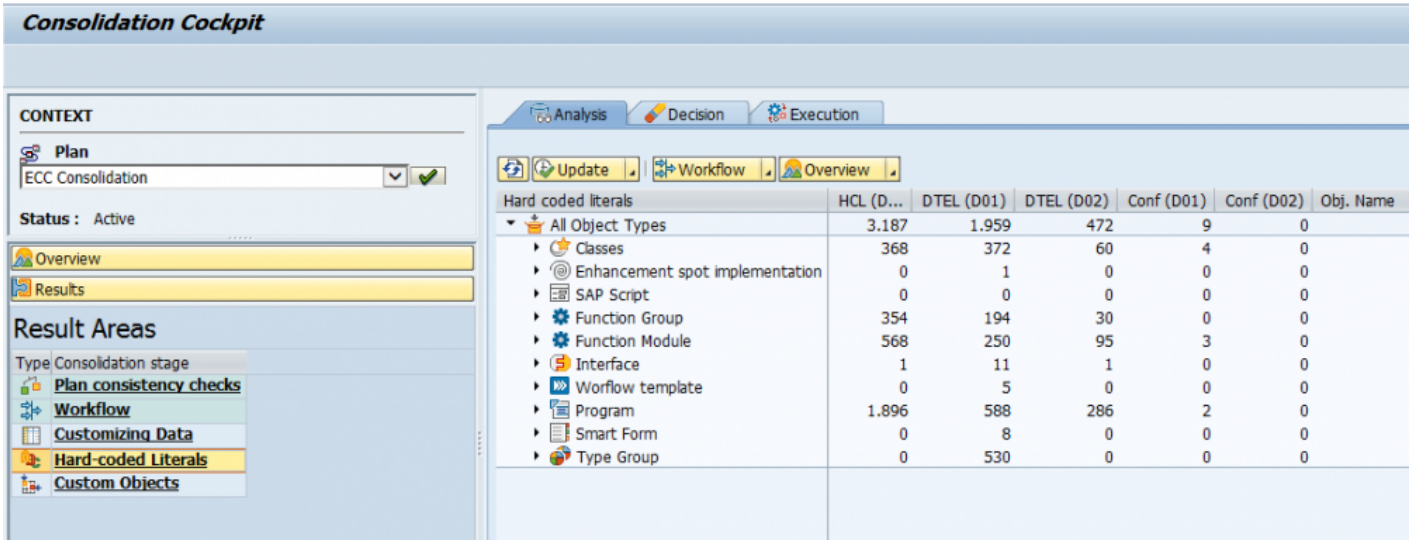

Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Back
Abort
Log
Job overview
Process chain Reference Act. Order System St. Status St. date St. time End date End time Est. time Es...
Hard coded literals analysis 002 Finished 13.02.2... 23:24:31 13.02.2... 23:36:27
Hard coded literals analysis 0000000003 1
Hard coded litterals - System A 0000000009 1 D01 Finished 13.02.2... 23:24:31 13.02.2... 23:31:17 100
Hard coded litterals - System B 0000000010 2 D02 Finished 13.02.2... 23:31:17 13.02.2... 23:31:57 100
Retrieve hard coded litterals - System A 0000000011 3 D01 Finished 13.02.2... 23:31:57 13.02.2... 23:32:02
Retrieve hard coded litterals - System B 0000000012 4 D01 Finished 13.02.2... 23:32:02 13.02.2... 23:32:07
Hard coded litterals analysis - System A 0000000013 5 D01 Finished 13.02.2... 23:32:07 13.02.2... 23:33:18 100
Hard coded litterals analysis - System B 0000000014 6 D01 Finished 13.02.2... 23:33:18 13.02.2... 23:36:27 100

Results

The Analysis phase of the Hard Code Literals stage will provide the number of custom objects with Hard Coded Literals from each system and those which conflict.

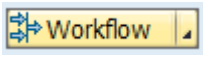
Once the Analysis programs have run from the Operation section it is time to view the results, go to the 'Results' drawer and select the 'Hard Code Literal' then selects the 'Analysis' tab.

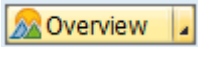
The screen below shows the number of objects in each system and the number of hard code literal conflicts found between the systems.



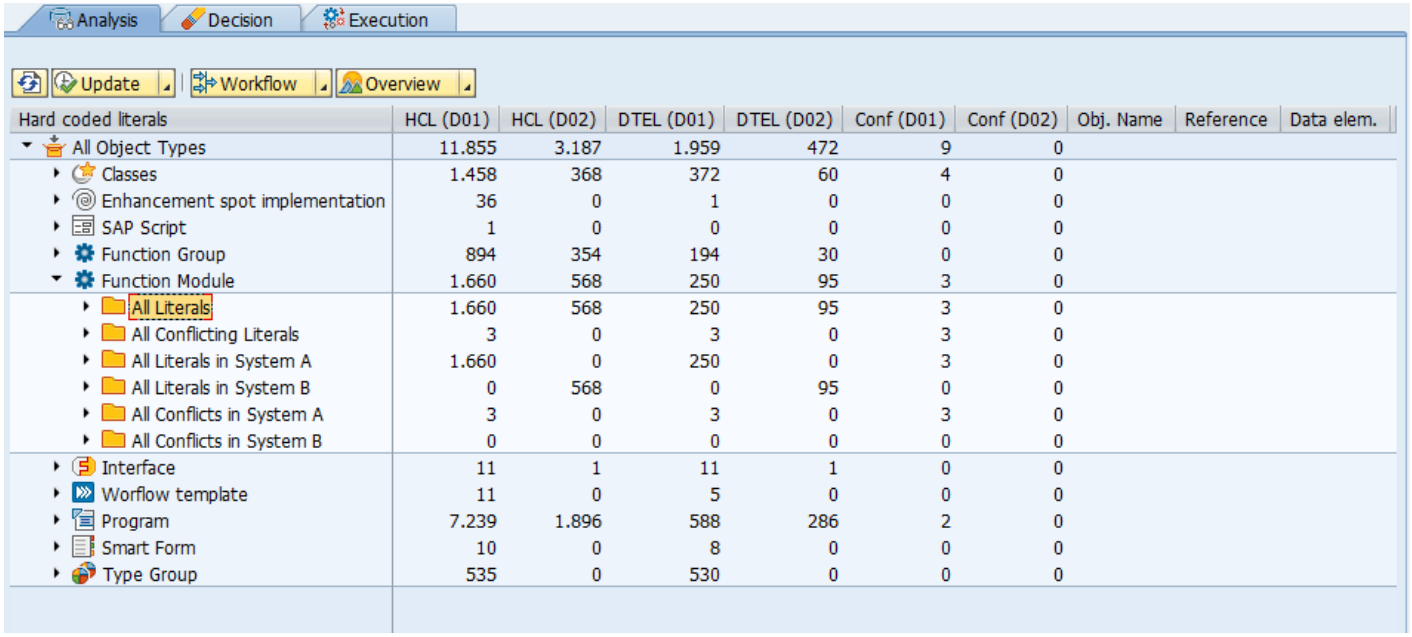
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The 'Update' button  allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The 'Workflow' button  allows the user to open and close this phase.

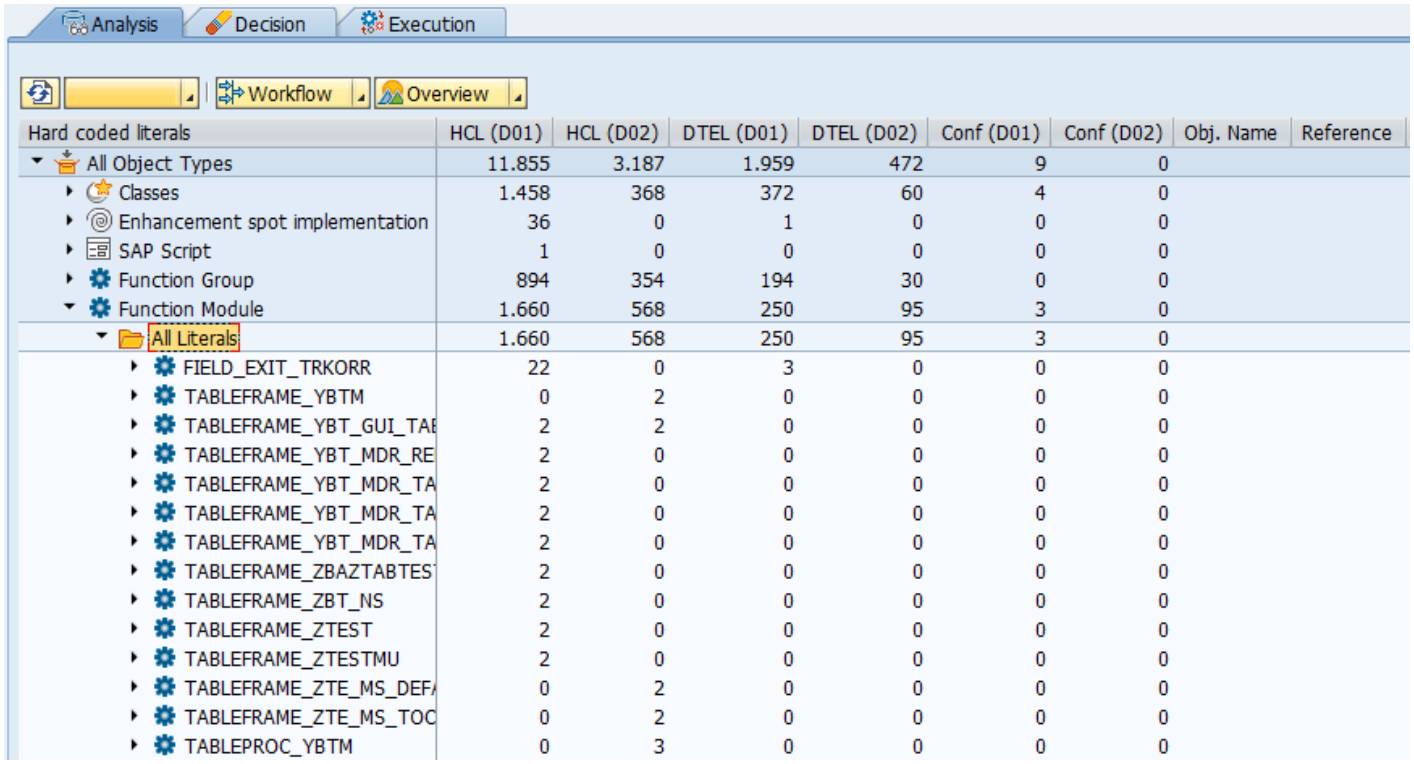
The 'Overview' button  allows the user to view the reports for this phase, see the Reporting section for more details.

On the hard code literals screen below, opening up an Object Type provides further folders where you can view more information about the objects in each object type.



Hard coded literals	HCL (D01)	HCL (D02)	DTEL (D01)	DTEL (D02)	Conf (D01)	Conf (D02)	Obj. Name	Reference	Data elem.
All Object Types	11.855	3.187	1.959	472	9	0			
Classes	1.458	368	372	60	4	0			
Enhancement spot implementation	36	0	1	0	0	0			
SAP Script	1	0	0	0	0	0			
Function Group	894	354	194	30	0	0			
Function Module	1.660	568	250	95	3	0			
All Literals	1.660	568	250	95	3	0			
All Conflicting Literals	3	0	3	0	3	0			
All Literals in System A	1.660	0	250	0	3	0			
All Literals in System B	0	568	0	95	0	0			
All Conflicts in System A	3	0	3	0	3	0			
All Conflicts in System B	0	0	0	0	0	0			
Interface	11	1	11	1	0	0			
Worflow template	11	0	5	0	0	0			
Program	7.239	1.896	588	286	2	0			
Smart Form	10	0	8	0	0	0			
Type Group	535	0	530	0	0	0			

Opening up the ‘All Literals’ folders lists all of the objects of this type in both systems.

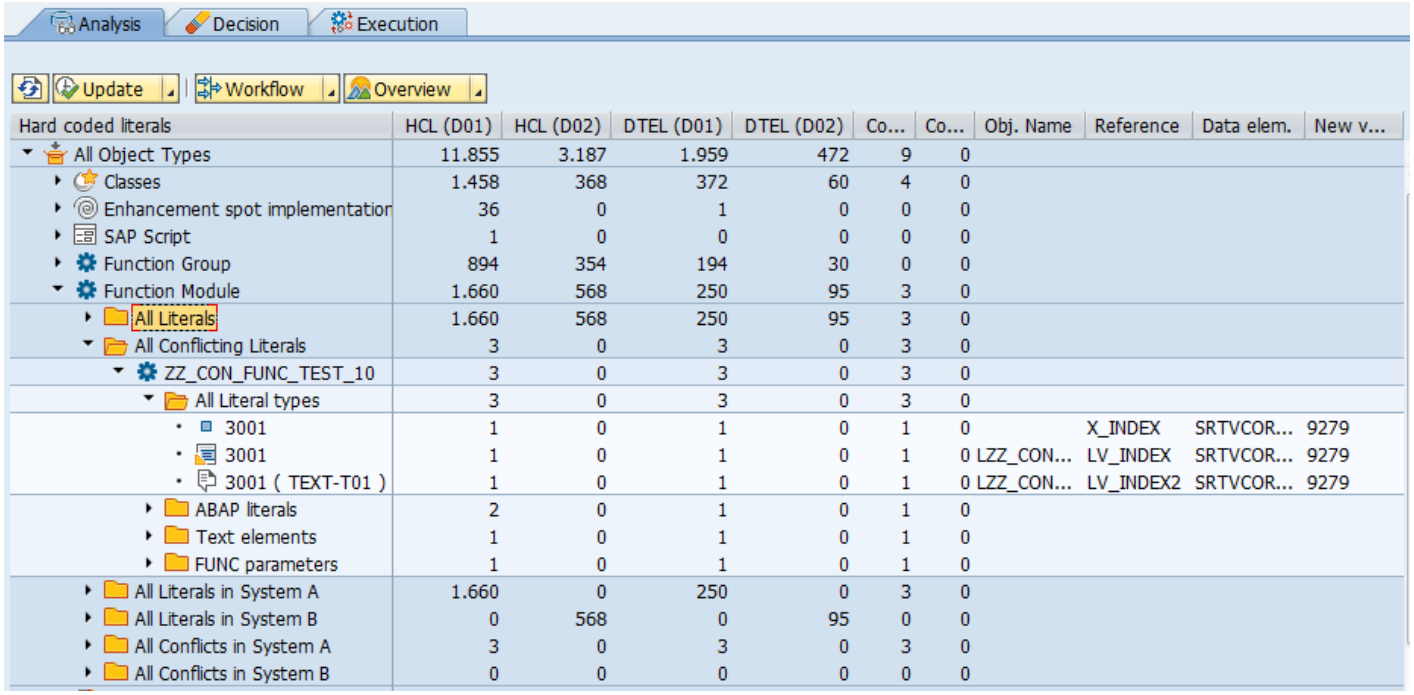


Hard coded literals	HCL (D01)	HCL (D02)	DTEL (D01)	DTEL (D02)	Conf (D01)	Conf (D02)	Obj. Name	Reference
All Object Types	11.855	3.187	1.959	472	9	0		
Classes	1.458	368	372	60	4	0		
Enhancement spot implementation	36	0	1	0	0	0		
SAP Script	1	0	0	0	0	0		
Function Group	894	354	194	30	0	0		
Function Module	1.660	568	250	95	3	0		
All Literals	1.660	568	250	95	3	0		
FIELD_EXIT_TRKORR	22	0	3	0	0	0		
TABLEFRAME_YBTM	0	2	0	0	0	0		
TABLEFRAME_YBT_GUI_TAE	2	2	0	0	0	0		
TABLEFRAME_YBT_MDR_RE	2	0	0	0	0	0		
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0		
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0		
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0		
TABLEFRAME_ZBAZTABTES	2	0	0	0	0	0		
TABLEFRAME_ZBT_NS	2	0	0	0	0	0		
TABLEFRAME_ZTEST	2	0	0	0	0	0		
TABLEFRAME_ZTESTMU	2	0	0	0	0	0		
TABLEFRAME_ZTE_MS_DEF	0	2	0	0	0	0		
TABLEFRAME_ZTE_MS_TOC	0	2	0	0	0	0		
TABLEPROC_YBTM	0	3	0	0	0	0		

Opening up the ‘All Conflicting Literals’ folders lists all of the objects in the selected object type in conflict across the two systems. Here opening up the object and viewing the literal types will give you a view of these hard coded literals.

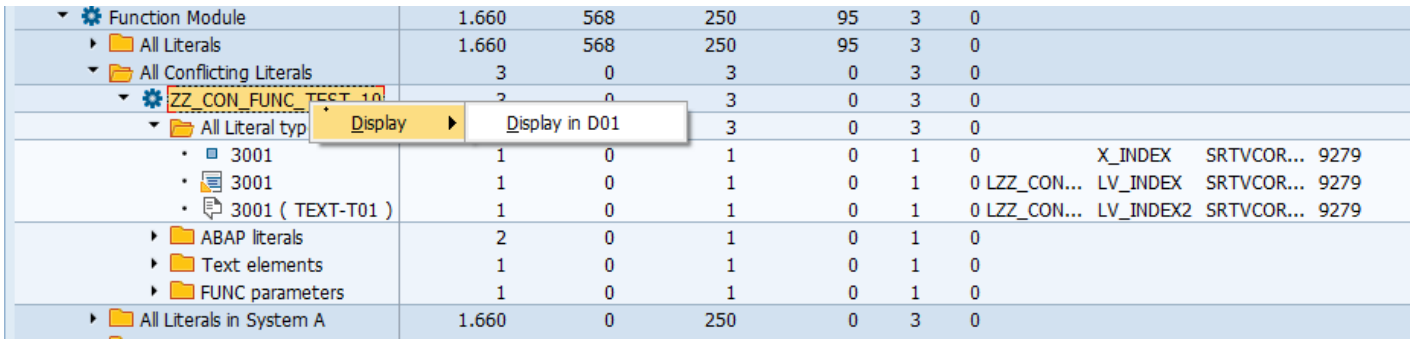
The details below reflect the literals details and the new value.

- Object Names
- Reference
- Data Element
- New value

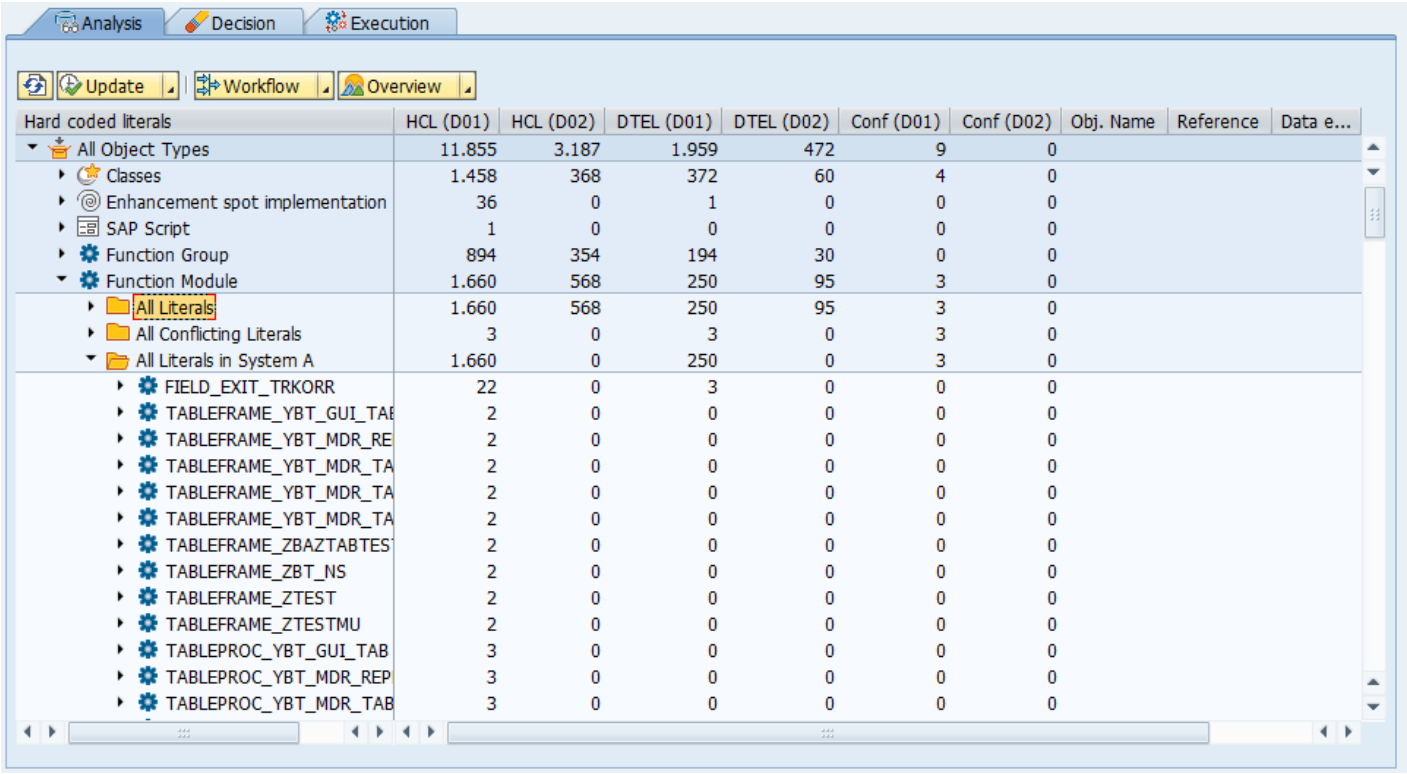


Hard coded literals	HCL (D01)	HCL (D02)	DTEL (D01)	DTEL (D02)	Co...	Co...	Obj. Name	Reference	Data elem.	New v...
All Object Types	11.855	3.187	1.959	472	9	0				
Classes	1.458	368	372	60	4	0				
Enhancement spot implementation	36	0	1	0	0	0				
SAP Script	1	0	0	0	0	0				
Function Group	894	354	194	30	0	0				
Function Module	1.660	568	250	95	3	0				
All Literals	1.660	568	250	95	3	0				
All Conflicting Literals	3	0	3	0	3	0				
ZZ_CON_FUNC_TEST_10	3	0	3	0	3	0				
All Literal types	3	0	3	0	3	0				
3001	1	0	1	0	1	0		X_INDEX	SRTVCOR...	9279
3001	1	0	1	0	1	0	LZZ_CON...	LV_INDEX	SRTVCOR...	9279
3001 (TEXT-T01)	1	0	1	0	1	0	LZZ_CON...	LV_INDEX2	SRTVCOR...	9279
ABAP literals	2	0	1	0	1	0				
Text elements	1	0	1	0	1	0				
FUNC parameters	1	0	1	0	1	0				
All Literals in System A	1.660	0	250	0	3	0				
All Literals in System B	0	568	0	95	0	0				
All Conflicts in System A	3	0	3	0	3	0				
All Conflicts in System B	0	0	0	0	0	0				

Below if you right mouse click on the object name then options to view the program in the system where the object resides.

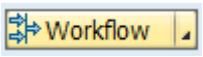


Opening up the ‘All Literals in System A’ or ‘All Literals in System B’ or ‘All conflicts in System A’ or ‘All conflicts in System B’ folders lists all of the objects of this type in the chosen system



Hard coded literals	HCL (D01)	HCL (D02)	DTEL (D01)	DTEL (D02)	Conf (D01)	Conf (D02)	Obj. Name	Reference	Data e...
All Object Types	11.855	3.187	1.959	472	9	0			
Classes	1.458	368	372	60	4	0			
Enhancement spot implementation	36	0	1	0	0	0			
SAP Script	1	0	0	0	0	0			
Function Group	894	354	194	30	0	0			
Function Module	1.660	568	250	95	3	0			
All Literals	1.660	568	250	95	3	0			
All Conflicting Literals	3	0	3	0	3	0			
All Literals in System A	1.660	0	250	0	3	0			
FIELD_EXIT_TRKORR	22	0	3	0	0	0			
TABLEFRAME_YBT_GUI_TAB	2	0	0	0	0	0			
TABLEFRAME_YBT_MDR_RE	2	0	0	0	0	0			
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0			
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0			
TABLEFRAME_YBT_MDR_TA	2	0	0	0	0	0			
TABLEFRAME_ZBAZTABTES	2	0	0	0	0	0			
TABLEFRAME_ZBT_NS	2	0	0	0	0	0			
TABLEFRAME_ZTEST	2	0	0	0	0	0			
TABLEFRAME_ZTESTMU	2	0	0	0	0	0			
TABLEPROC_YBT_GUI_TAB	3	0	0	0	0	0			
TABLEPROC_YBT_MDR_REP	3	0	0	0	0	0			
TABLEPROC_YBT_MDR_TAB	3	0	0	0	0	0			

* To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button  and select close phase. Continue to the next phase Decision Phase

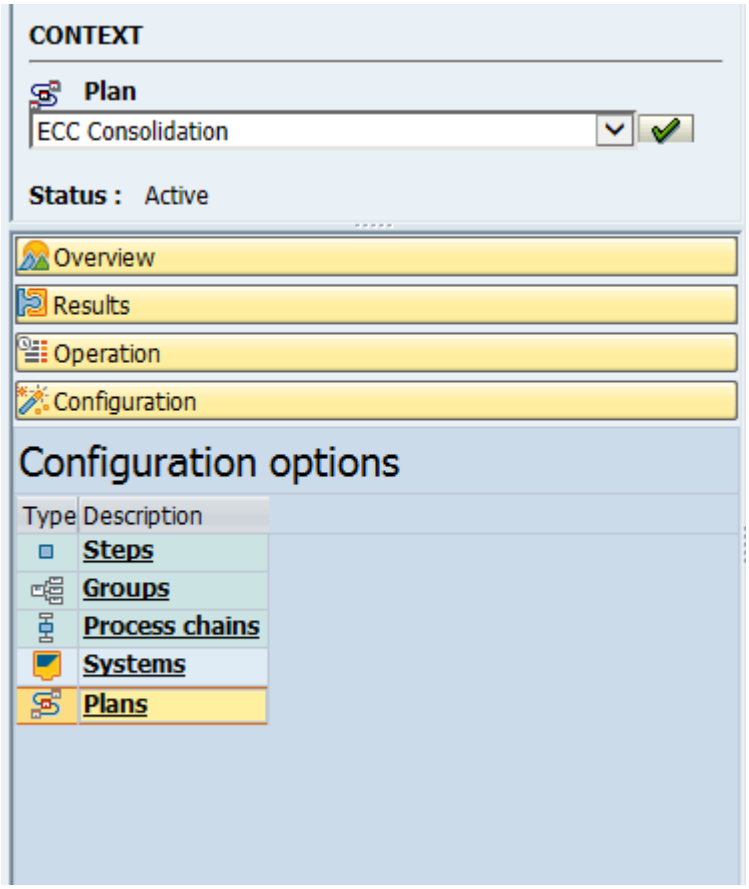
Decision Phase

The Decision phase is broken down into two section the operation of the run and then viewing the results.

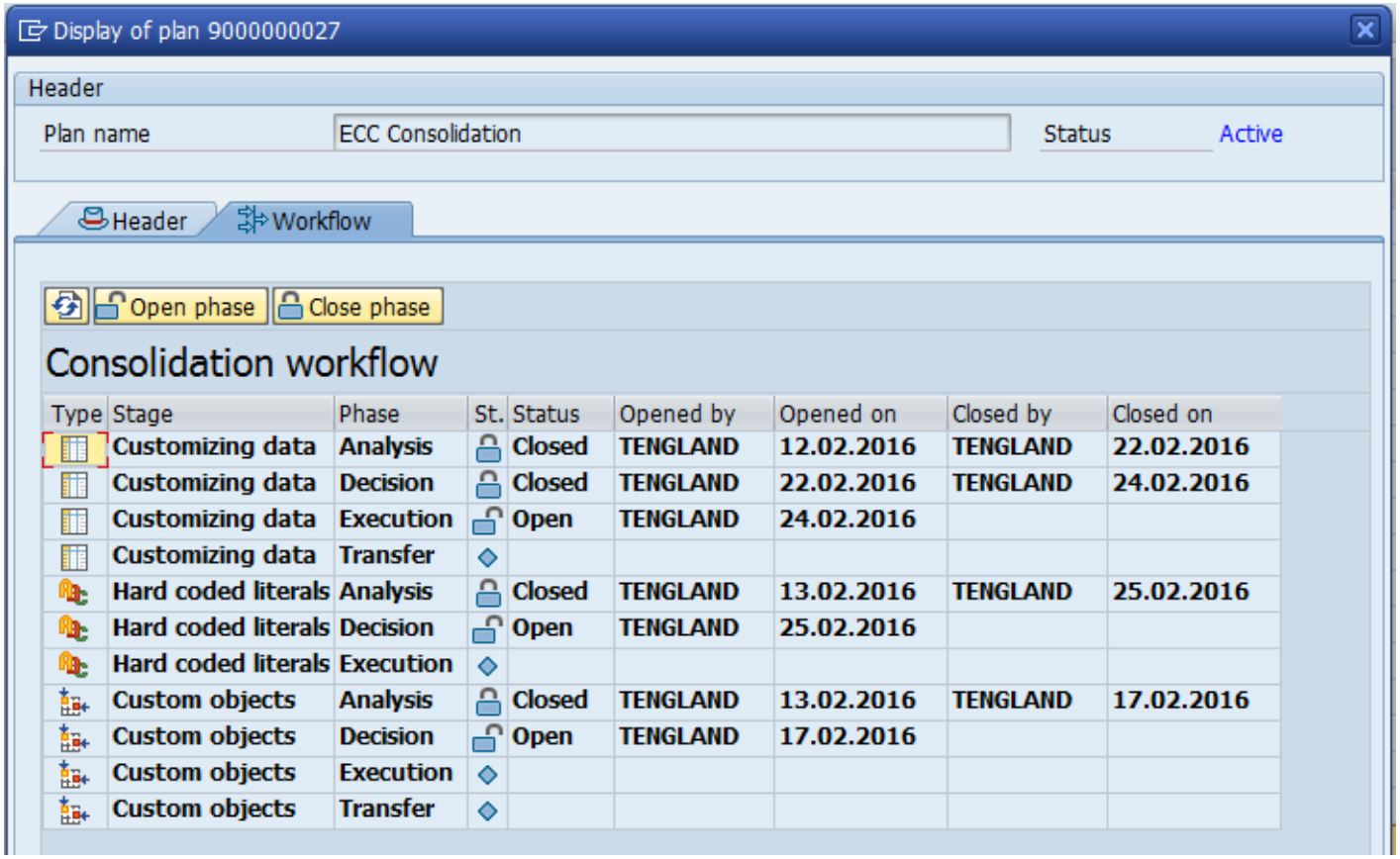
- Operation
- Results

Operation

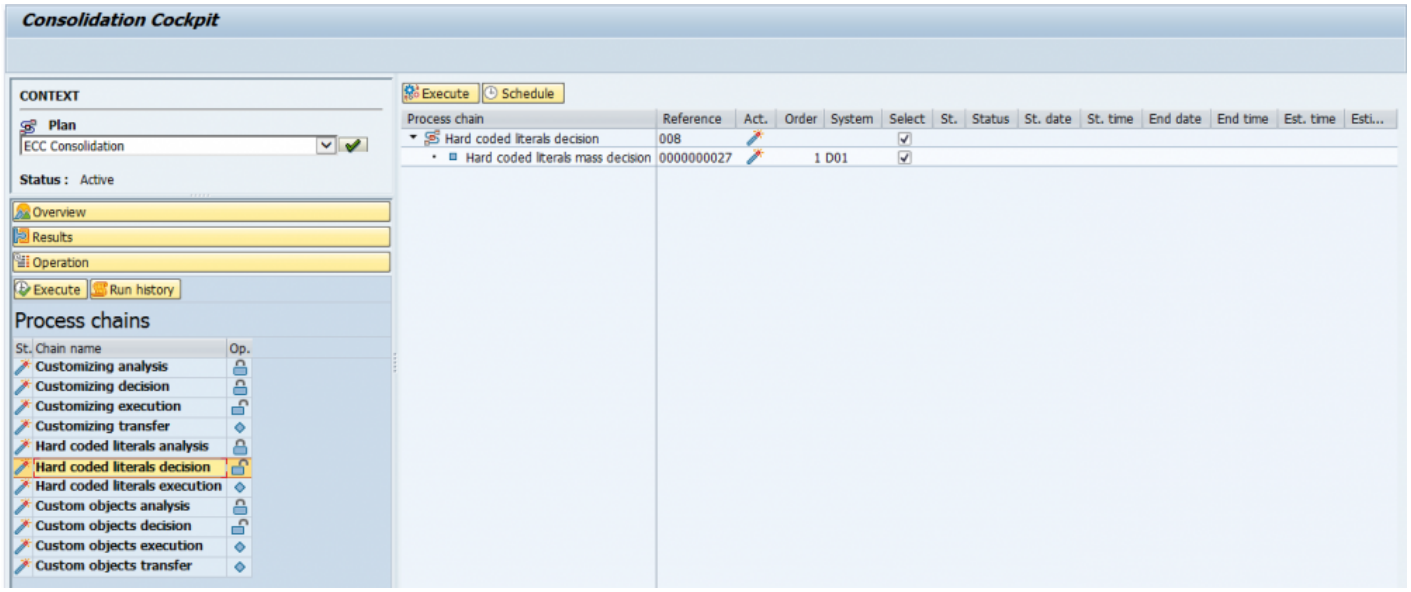
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



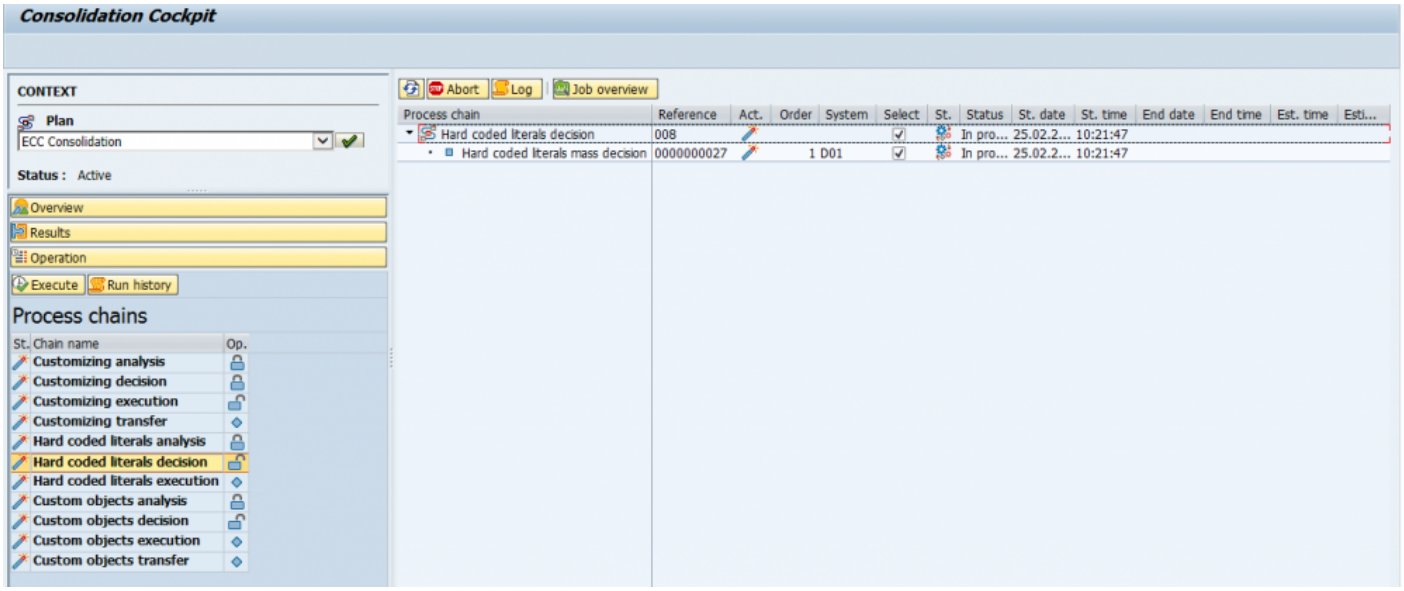
In the workflow tab select the stage ‘Hard Code Literals’ phase ‘Decision’ and press the ‘Open Phase button, the phase is now open for operations.



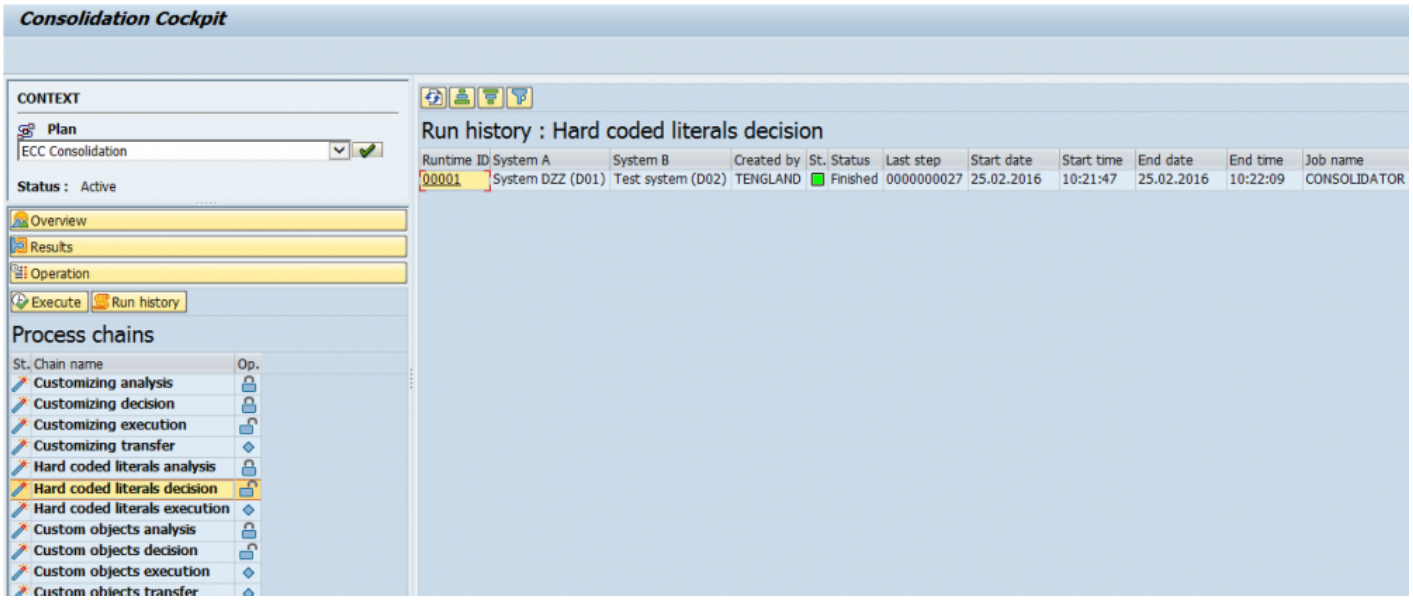
With the analysis phase now open go to the ‘Operation’ drawer and select the ‘Hard Code Literals Decision’ phase and press the ‘Execute’ button.



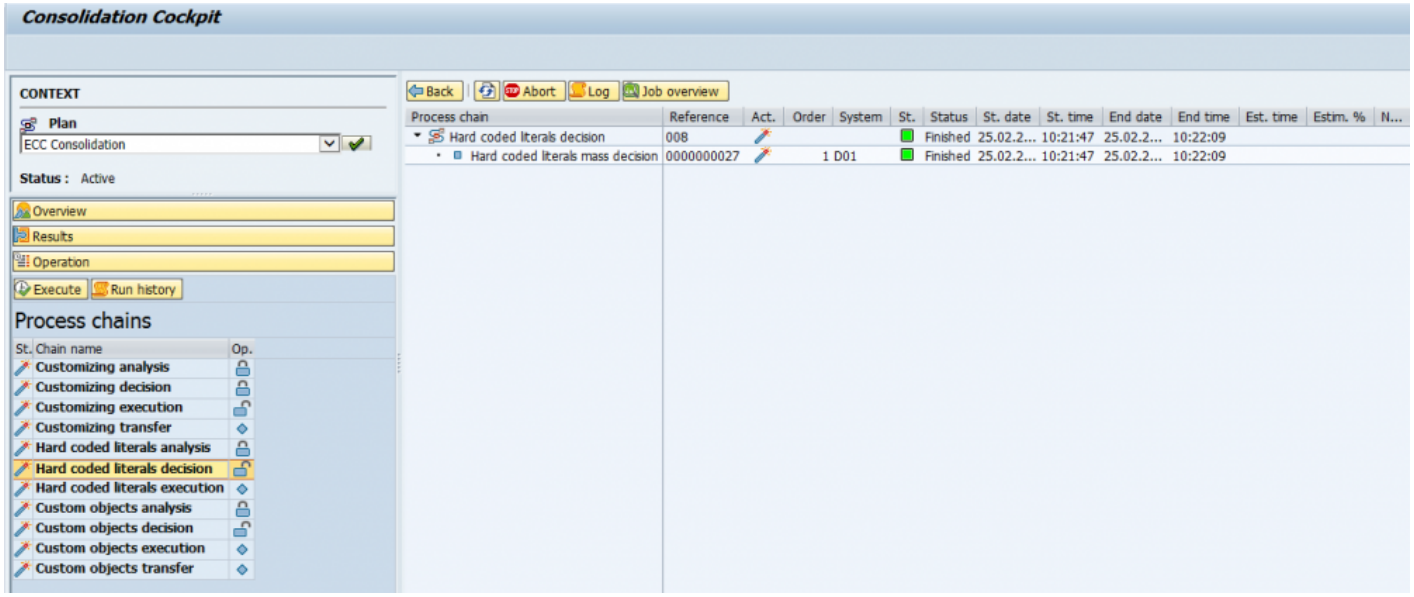
Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings, pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Hard coded literals decision’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



When the jobs have a status of finished when complete, it is ready to progress to the results screen.

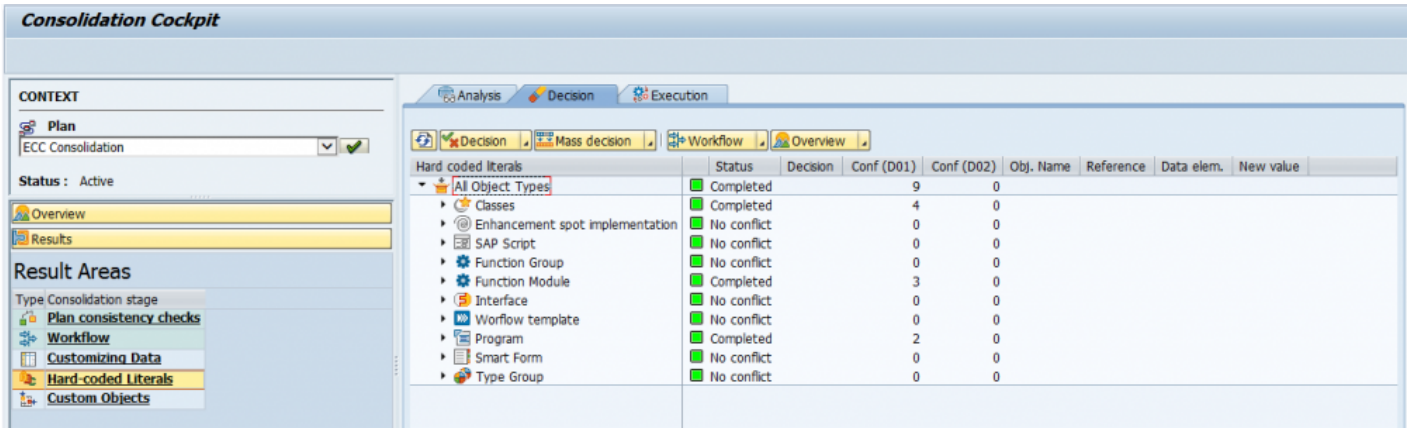

Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St.
Chain name
Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Back
Abort
Log
Job overview
Process chain
Reference
Act.
Order
System
St.
Status
St. date
St. time
End date
End time
Est. time
Estim. %
N...
Hard coded literals decision
008
Finished
25.02.2...
10:21:47
25.02.2...
10:22:09
Hard coded literals mass decision
0000000027
1 D01
Finished
25.02.2...
10:21:47
25.02.2...
10:22:09

Results

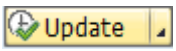
The Decision phase of the Hard Code Literals stage will provide the number of custom objects with Hard Coded Literals from each system after running the programs everything should be in a complete or no conflict status.

Once the Decision programs have run from the Operation section it is time to view the results, go to the ‘Results’ drawer and select the ‘Hard Code Literal’.

The screen below shows the number of objects in each system and the number of hard code literal conflicts and their status after the decision programs have run.



The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button 

allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

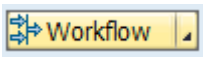
The ‘Decision’ button 

allows the user to change the decisions, options are as below:

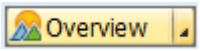
*Translate the literal
*Ignore Conflict
*Remediate Manually
*Cancel decision

The ‘Mass Decision’ button 

allows the user to run the programs for this phase, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Workflow’ button 

allows the user to open and close this phase.

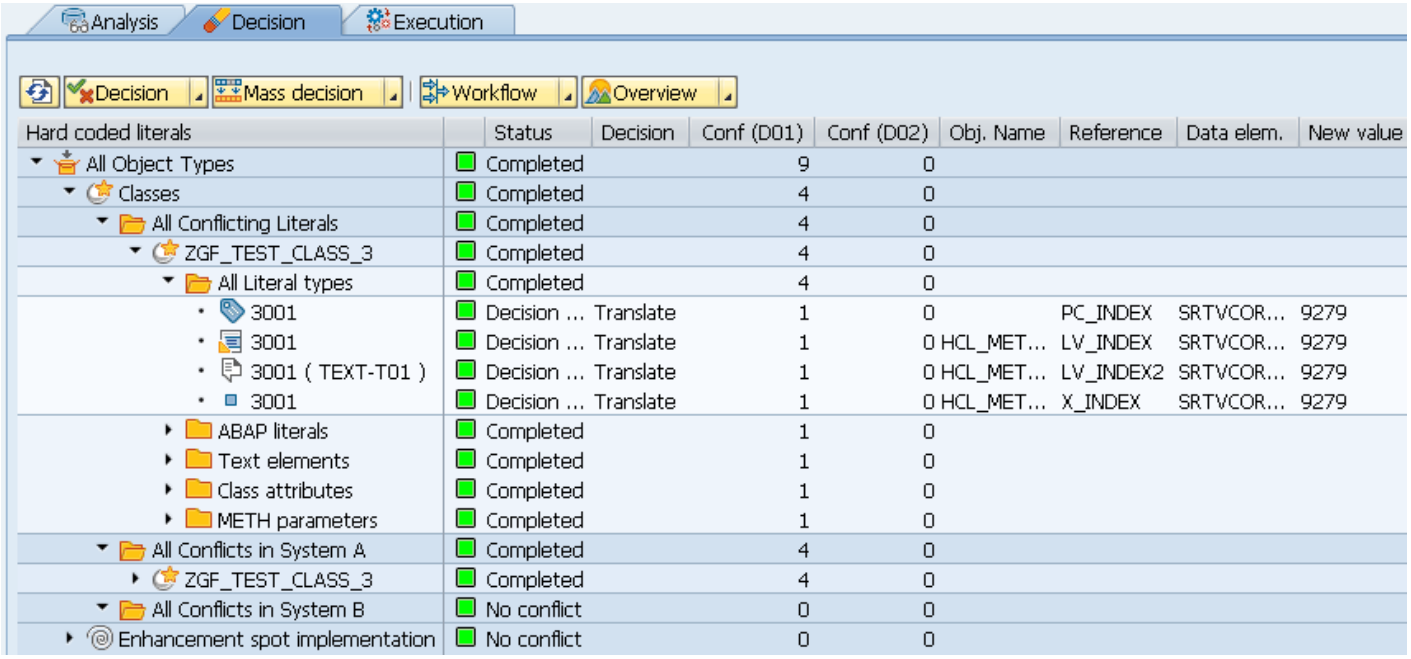
The ‘Overview’ button 

allows the user to view the reports for this phase, see the Reporting section for more details.

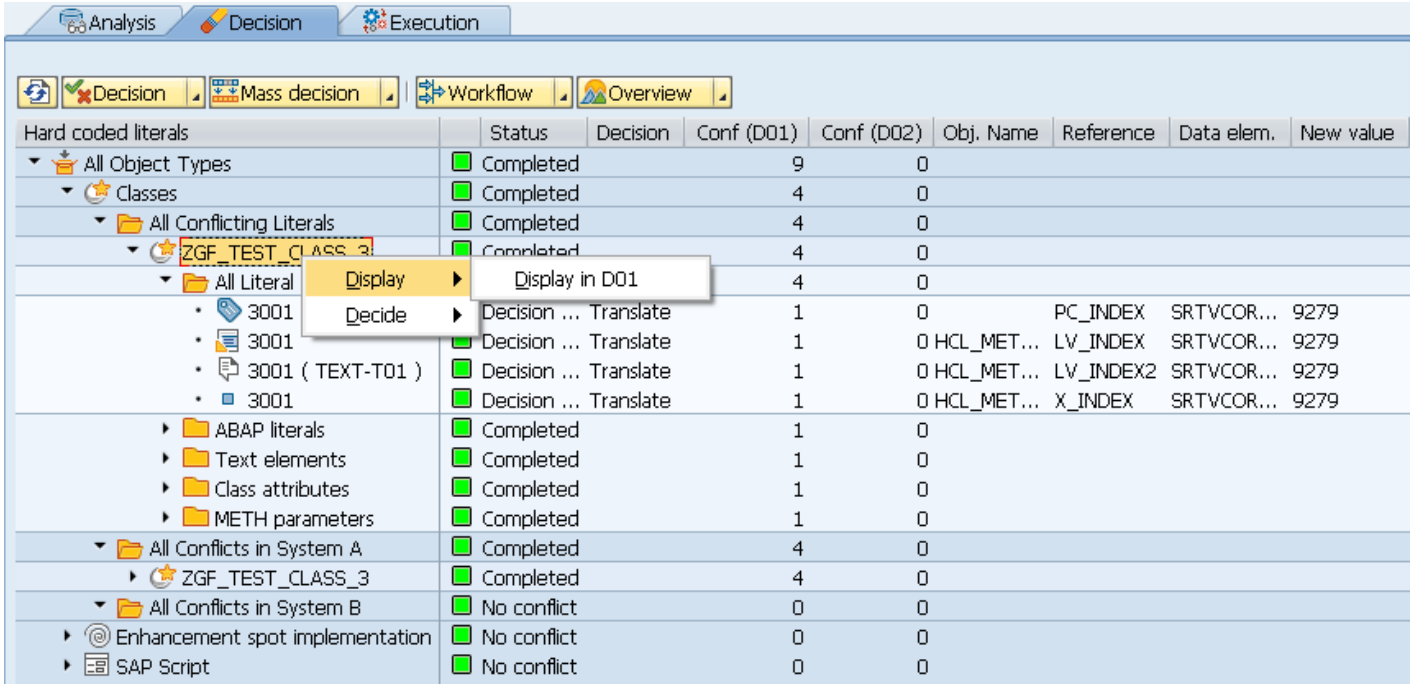
On the hard code literals screen below, opening up an Object Type provides further folders where you can view more information about the objects in each object type. Opening up the ‘All Literals’ folders lists all of the objects of this type in both systems, opening up the ‘All Conflicting Literals’ folders lists all of the objects in the selected object type in conflict across the two systems. Here opening up the object and viewing the literal types will give you a view of these hard coded literals.

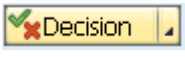
The details below reflect the literals details and the new value.

- Object Names
- Reference
- Data Element
- New value



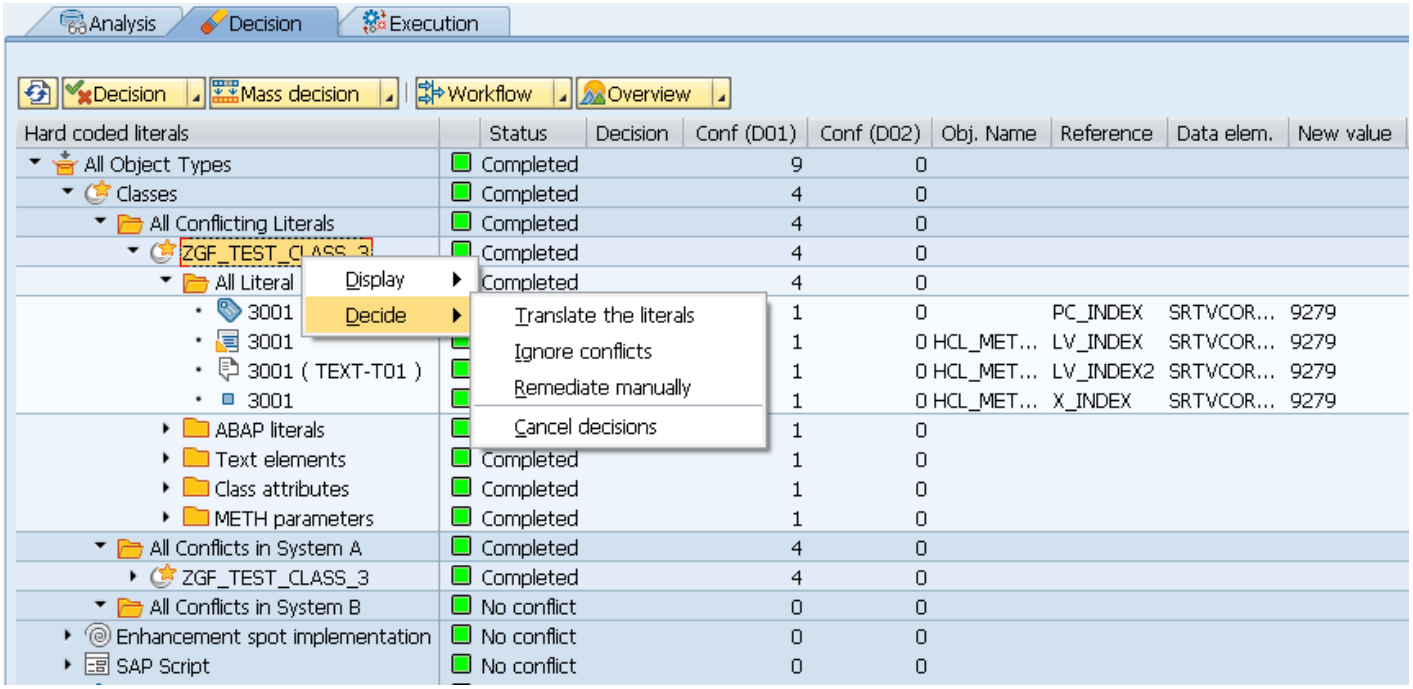
If you right mouse click on the object name then the ‘Display’ option allows viewing the object in the system where the object resides.



Below if you right mouse click on the object name then the ‘Decide’ option allows the user to change the decisions, options are as below, this is the same as the ‘Decision’ button 

.

*Translate the literal
*Ignore Conflict
*Remediate Manually
*Cancel decision



* To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the option on the ‘Workflow’ button Workflow and select close phase. Continue to the next phase Execution Phase.

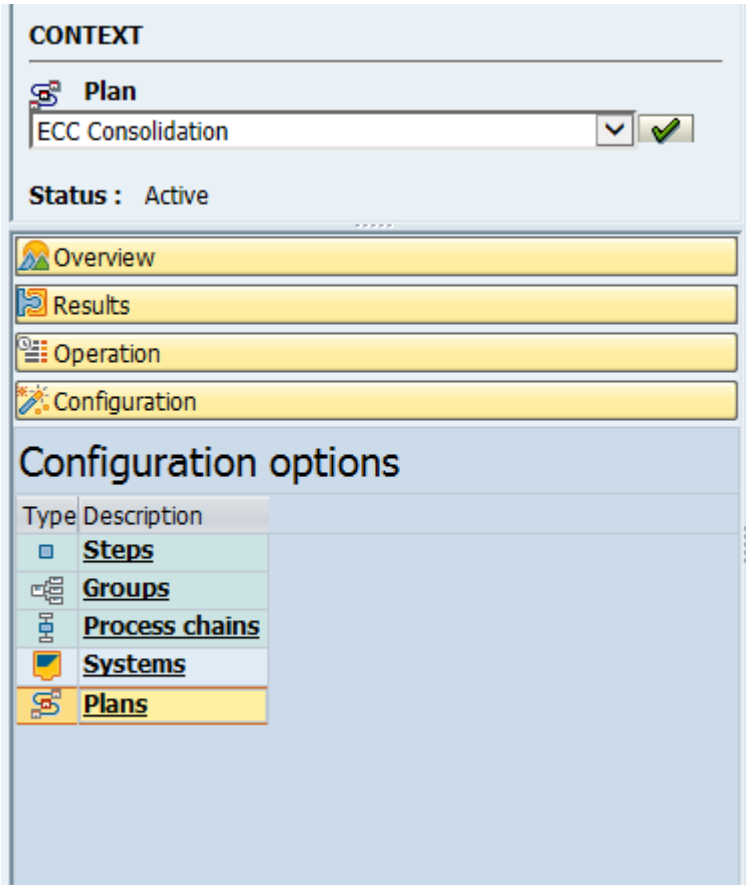
Execution Phase

The Execution phase is broken down into two section the operation of the run and then viewing the results.

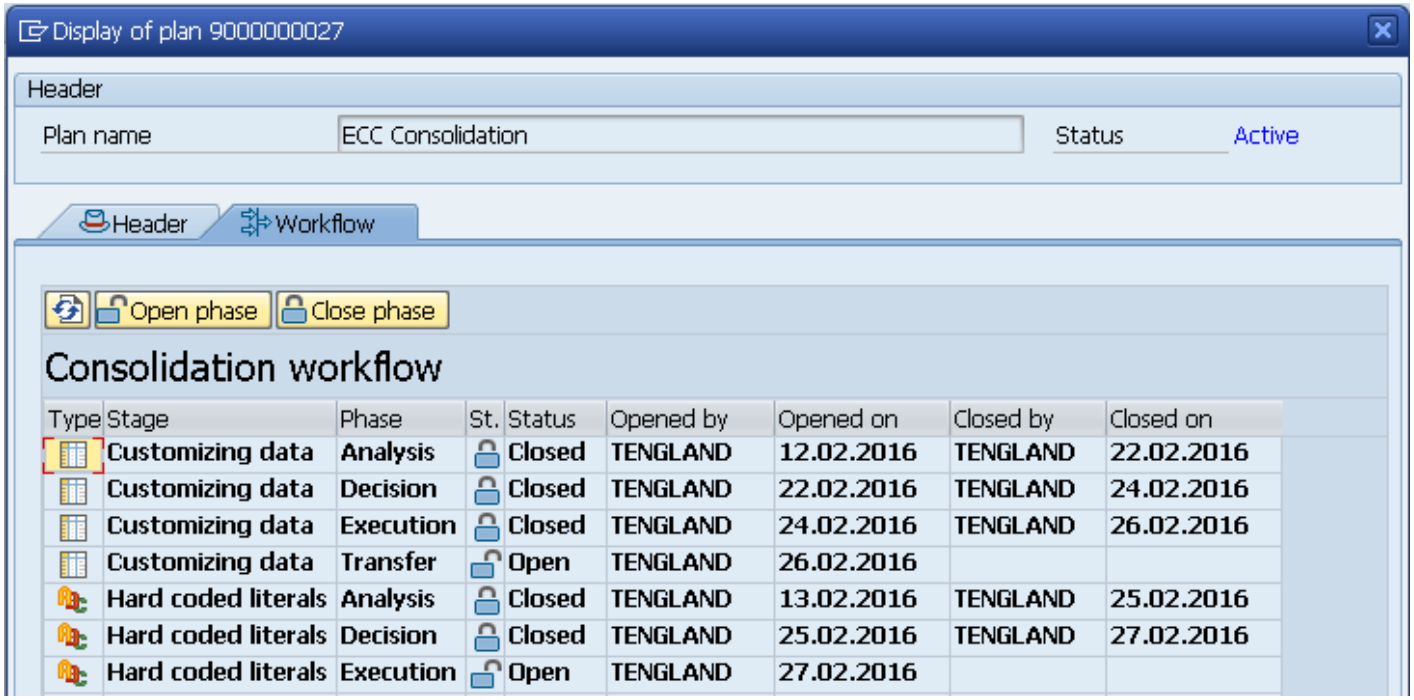
- Operation
- Results

Operation

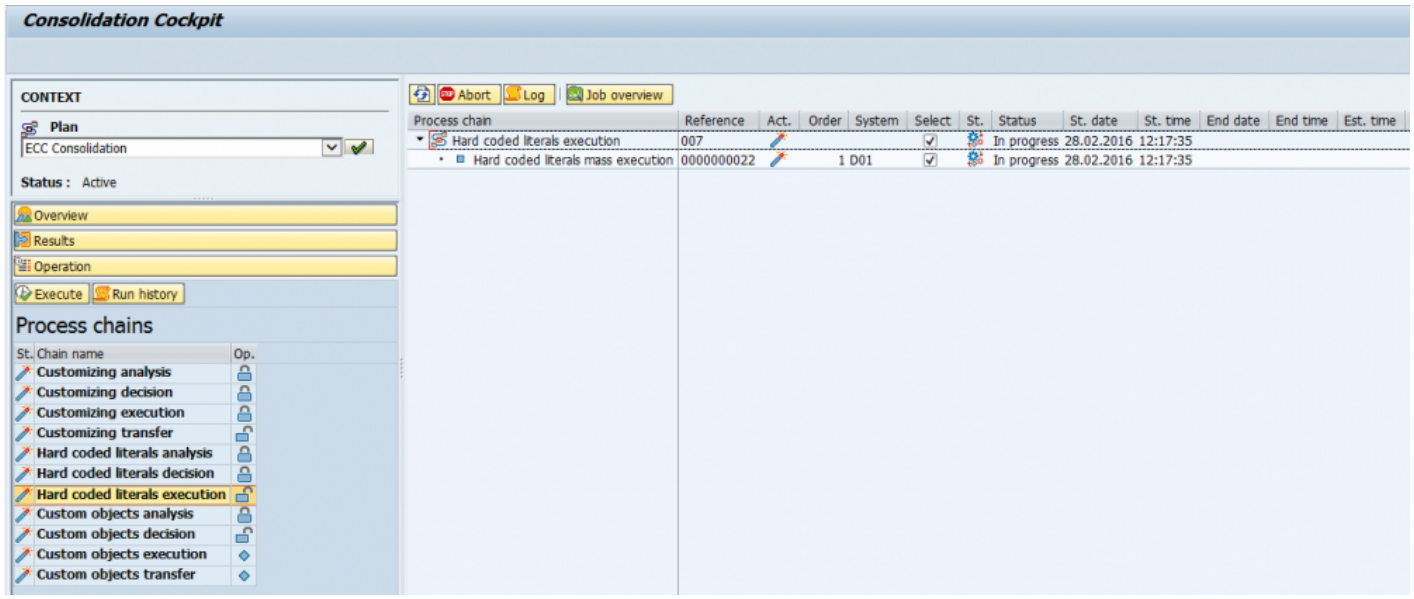
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



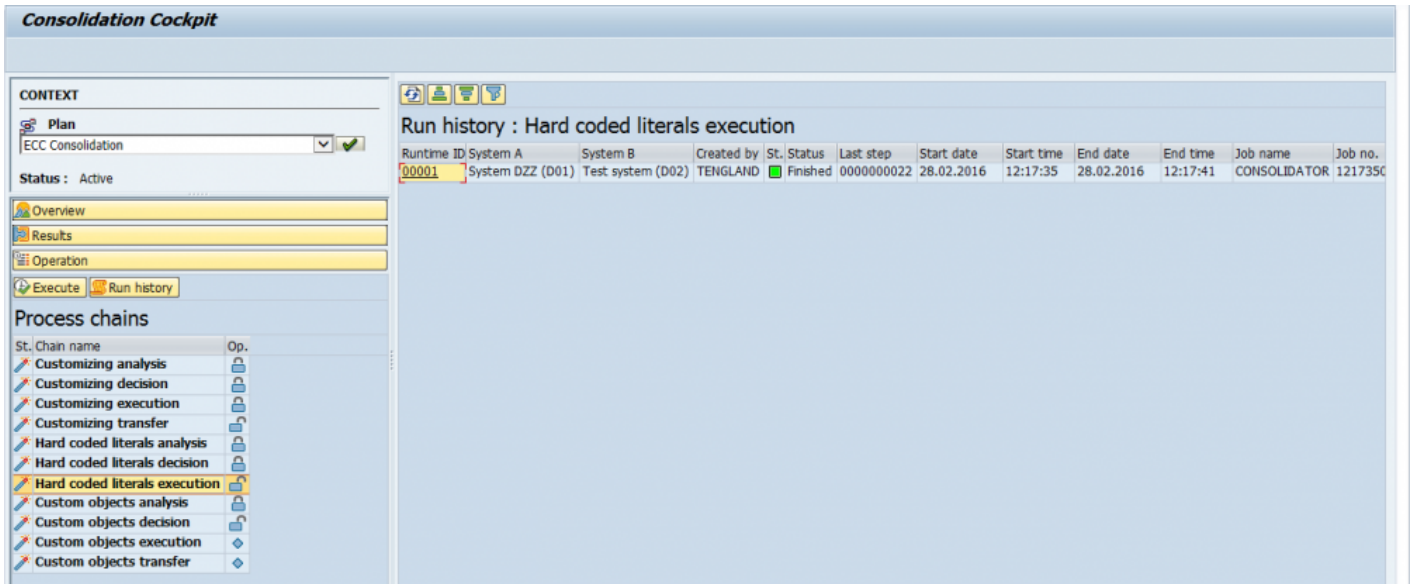
In the workflow tab select the stage ‘Hard Code Literals’ phase ‘Execution’ and press the ‘Open Phase button, the phase is now open for operations.



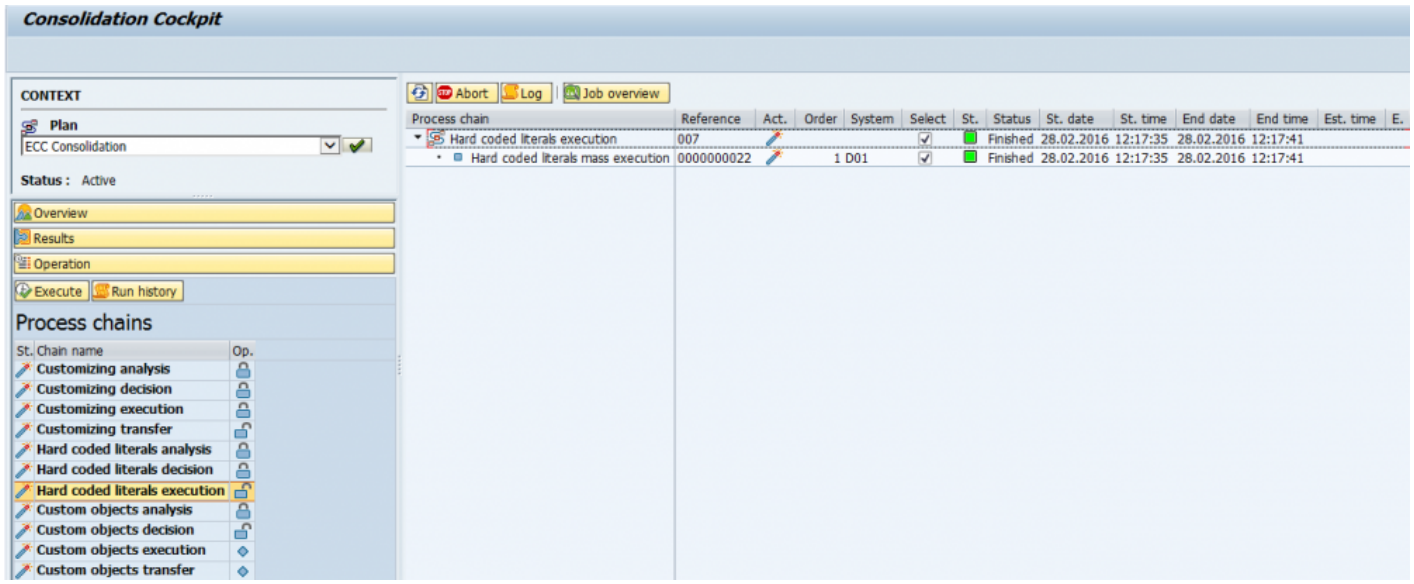
With the analysis phase now open go to the ‘Operation’ drawer and select the ‘Hard Code Literals \execution’ phase and press the ‘Execute’ button. Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings, pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Hard coded literals Execution’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



When the jobs have a status of finished when complete, it is ready to progress to the Results screen.

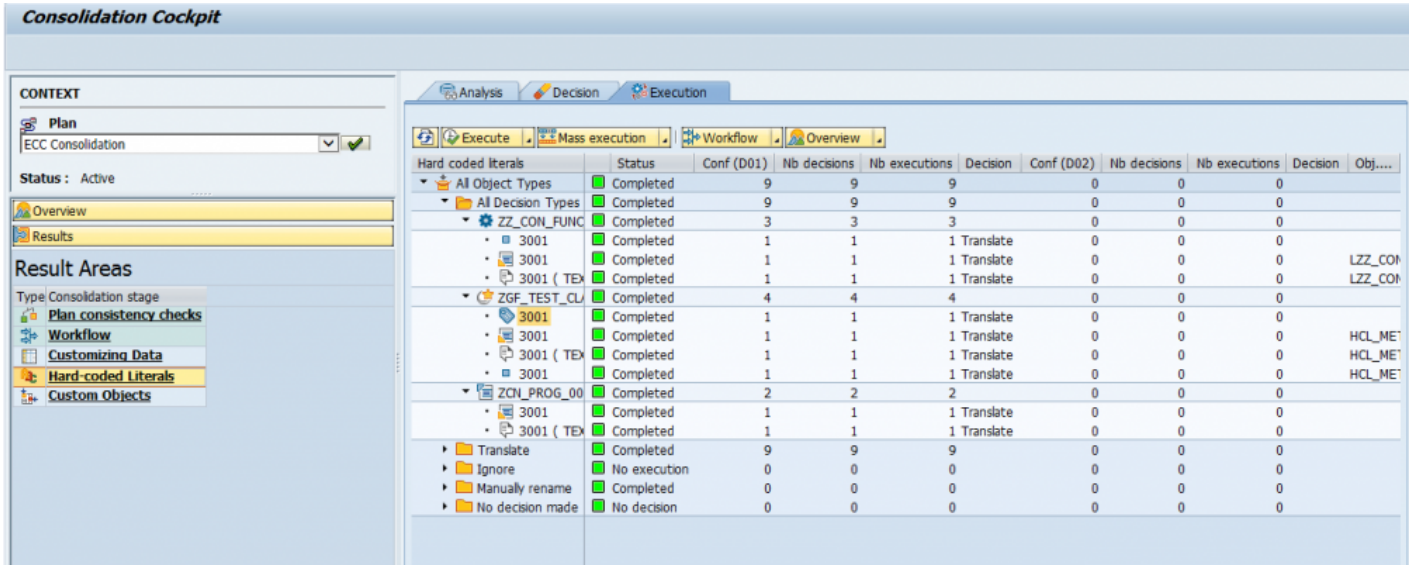


Results

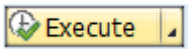
The Execution phase of the Hard Code Literals stage is where the actual changes are made to the code.

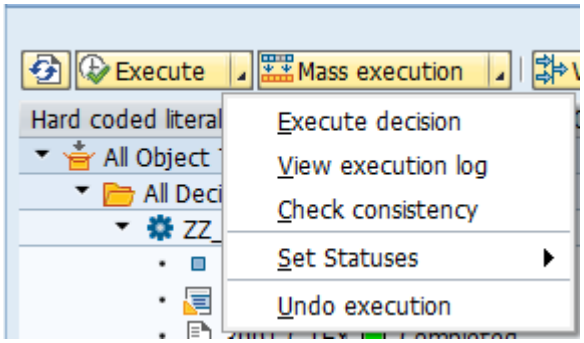
Once the Decision programs have run from the Operation section it is time to view the results, go to the 'Results' drawer and select the 'Hard Code Literal' then select the 'Execution' tab.

The screen below shows the number of objects in each system and the number of hard code literal conflicts and their status after the execution programs have run. Failures will need to be investigated and resolved.



The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

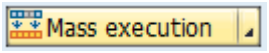
The 'Execution' button  allows the user a number of options as below:



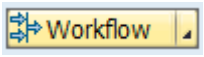
- Execute Decision – Enables an individual execution to be run, useful if an execution has been undone and you want to revert a section
- View Execution Log – Enables the logs to be viewed, useful when trying to solve errors
- Check Consistency – Enables consistency checks to be run
- Set Status – The status of an individually select item or group can be set
- Undo Execution – Undo the execution so changes are reverted

Status options under ‘Set Status’ are:

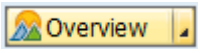
- In Progress
- Executed
- Failed
- Undone
- Reset to initial

The ‘Mass Execution’ button 

allows the user to run the programs for this phase, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Workflow’ button 

allows the user to open and close this phase.

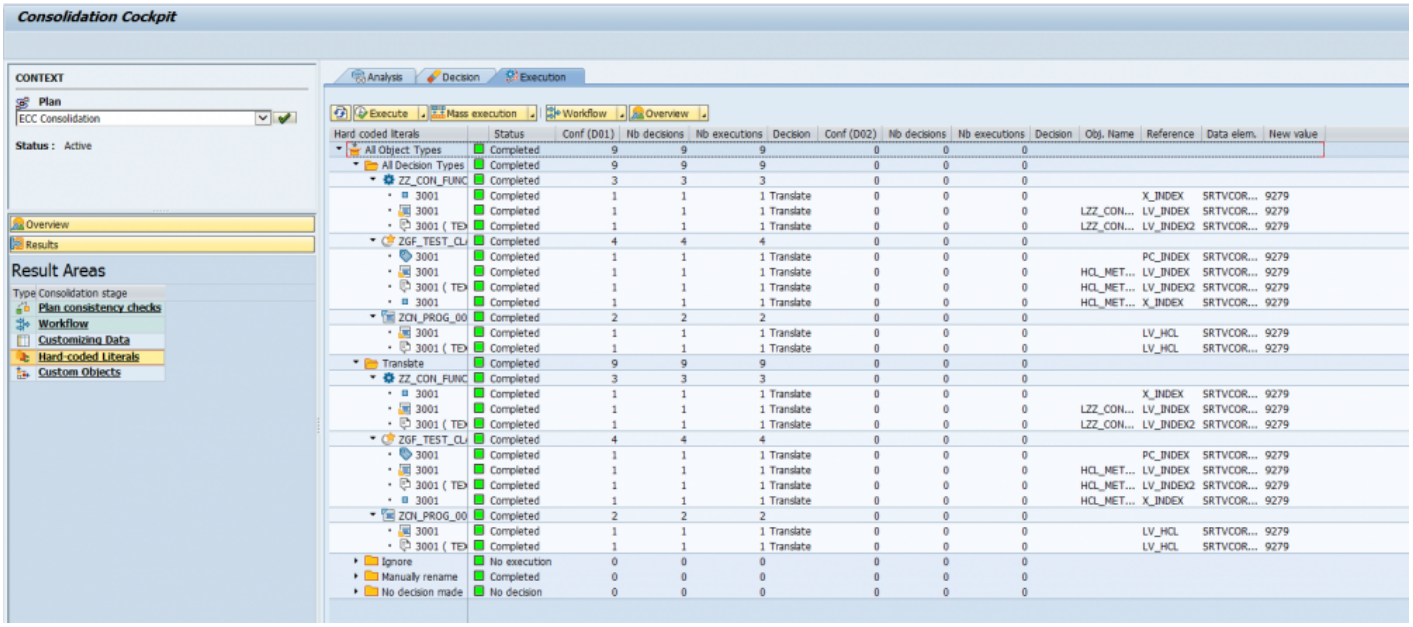
The ‘Overview’ button 

allows the user to view the reports for this phase, see the Reporting section for more details.

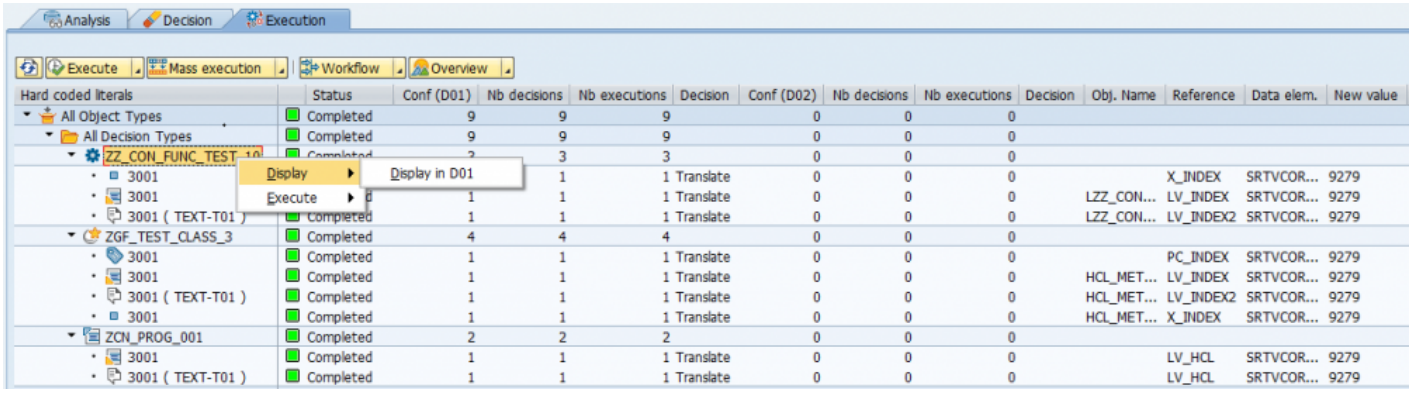
On the hard code literals screen below, opening up an Object Type provides further folders where you can view more information about the objects in each object type. Opening up the ‘All Literals’ folders lists all of the objects of this type in both systems, opening up the ‘All Conflicting Literals’ folders lists all of the objects in the selected object type in conflict across the two systems. Here opening up the object and viewing the literal types will give you a view of these hard coded literals.

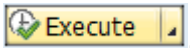
The details below reflect the literals details and the new value.

- Object Names
- Reference
- Data Element
- New value



If you right mouse click on the object name then the ‘Display’ option allows viewing the object in the system where the object resides.



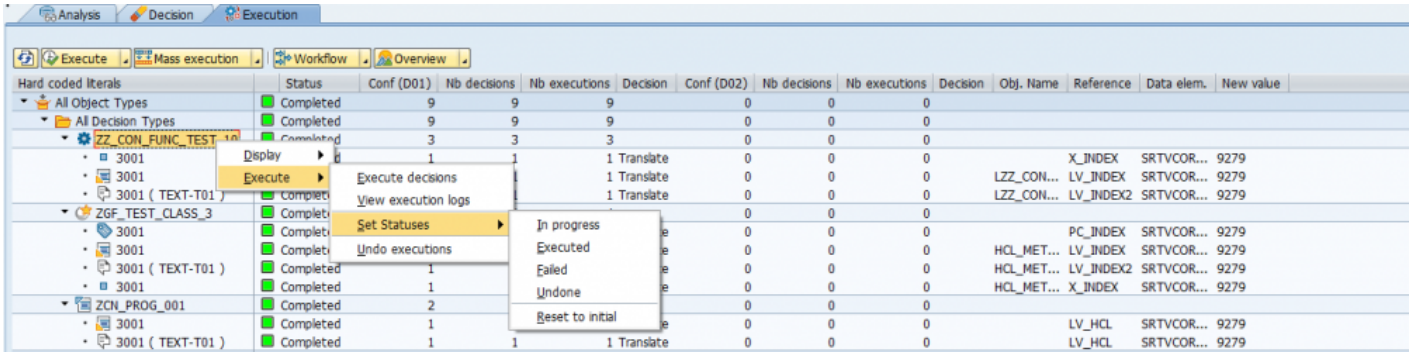
Below if you right mouse click on the object name then the ‘Execute’ option allows the user to change the decisions, options are as below, this is the same as the ‘Execution’ button 

.

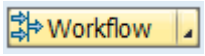
- Execute Decision – Enables an individual execution to be run, useful if an execution has been undone and you want to revert a section
- View Execution Log – Enables the logs to be viewed, useful when trying to solve errors
- Check Consistency – Enables consistency checks to be run
- Set Status – The status of an individually select item or group can be set
- Undo Execution – Undo the execution so changes are reverted

Status options under ‘Set Status’ are:

- In Progress
- Executed
- Failed
- Undone
- Reset to initial



> * To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button  and select close phase. The Hard Code Literal stage is now complete.

Custom Objects

The custom objects stage is dealt with through four phases which are completed in the order below:

- Analysis Phase
- Decision Phase
- Execution Phase
- Transfer Phase

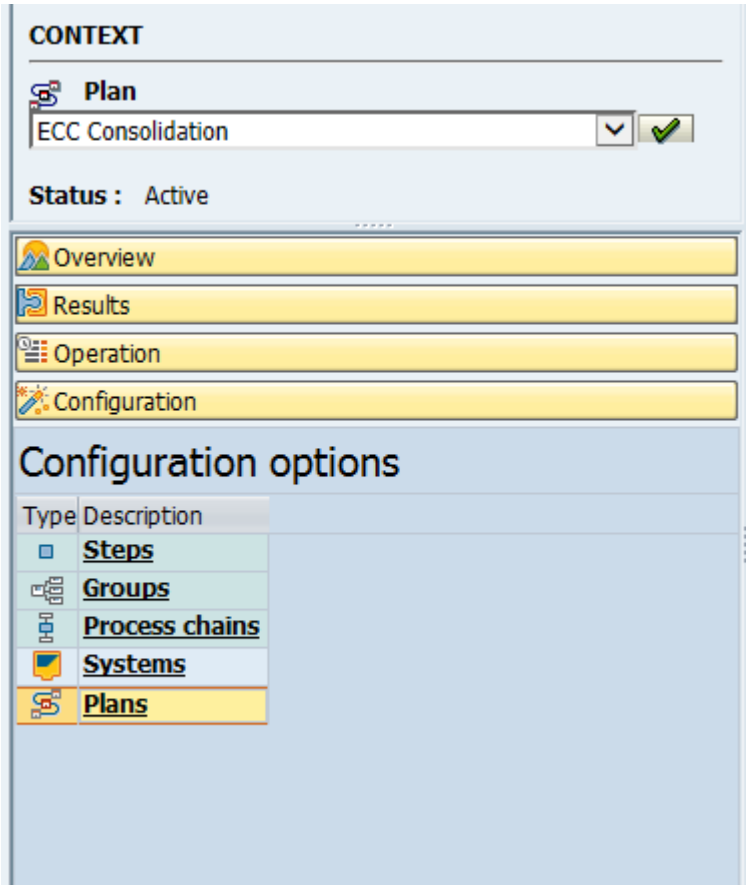
Analysis Phase

The Analysis phase is broken down into two section the operation of the run and then viewing the results.

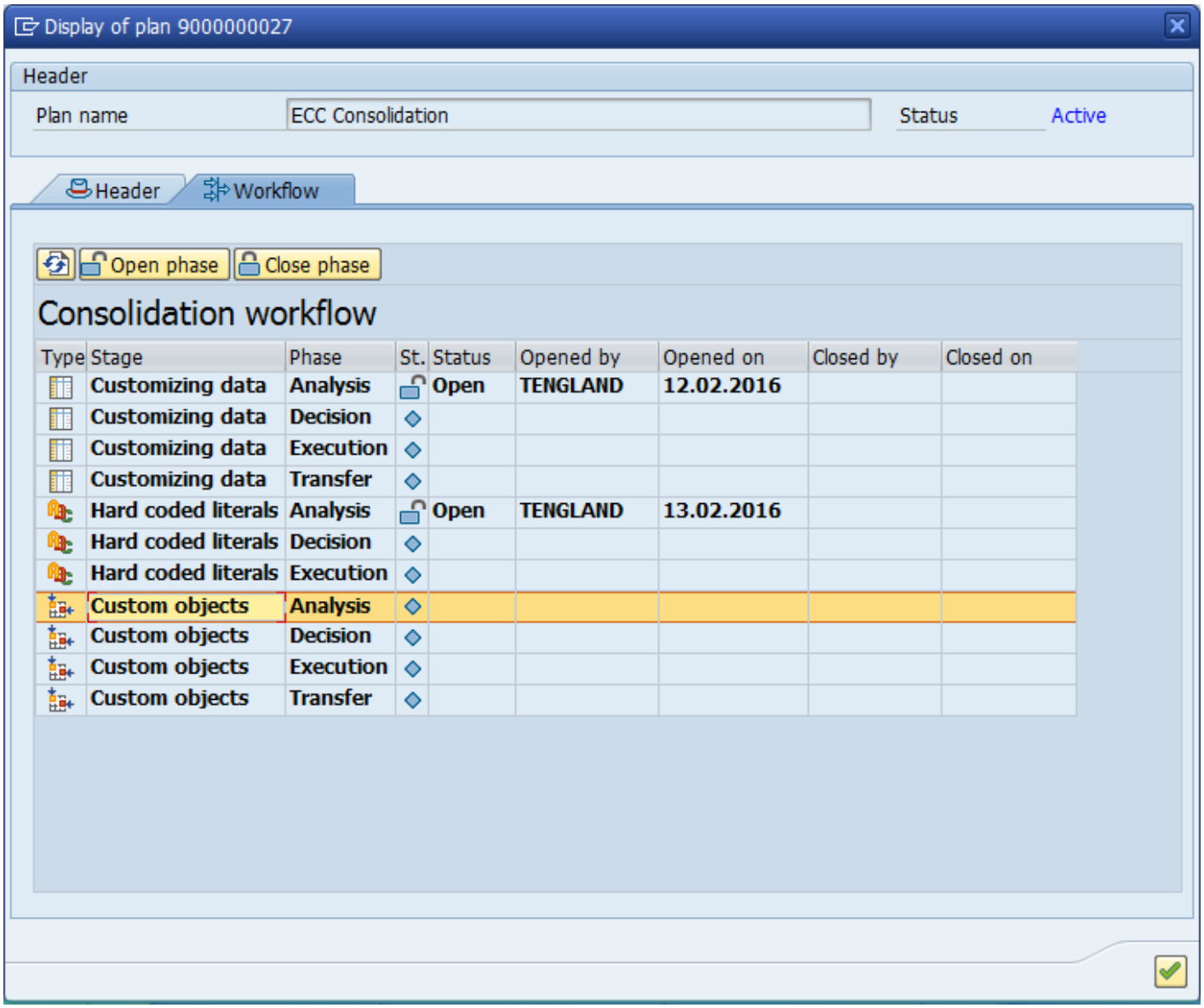
- Operation
- Results

Operation

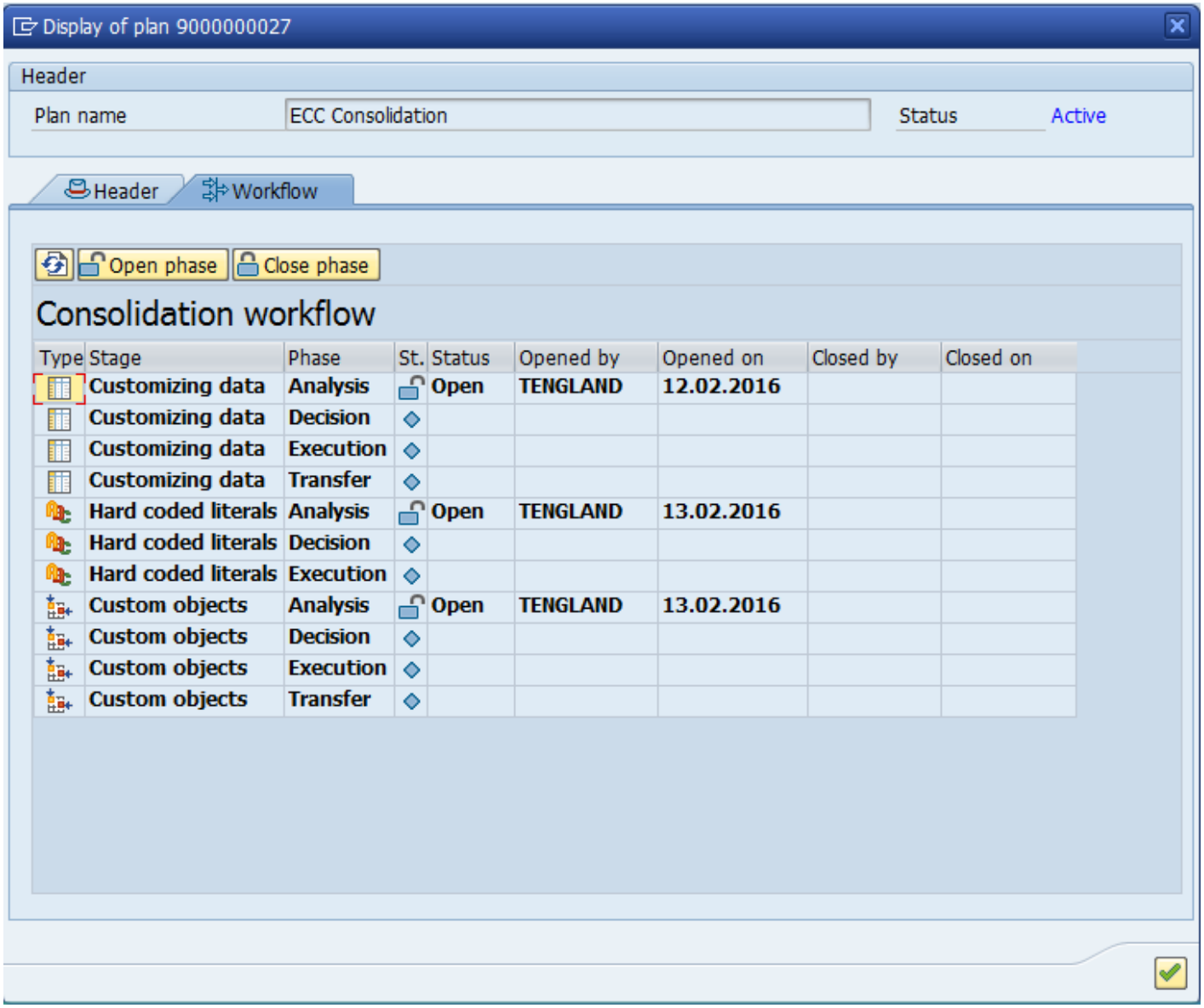
The first task is to open the analysis phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



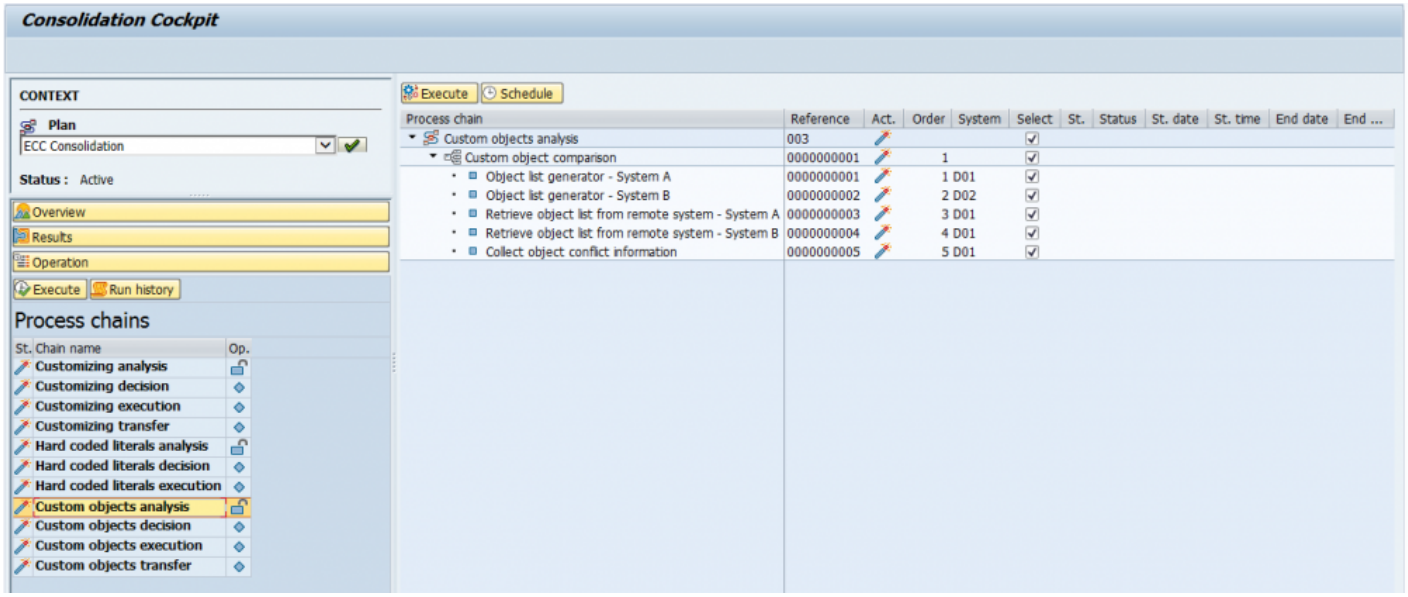
In the workflow tab select the stage ‘Custom Objects’ phase ‘Analysis’ and press the ‘Open Phase button.



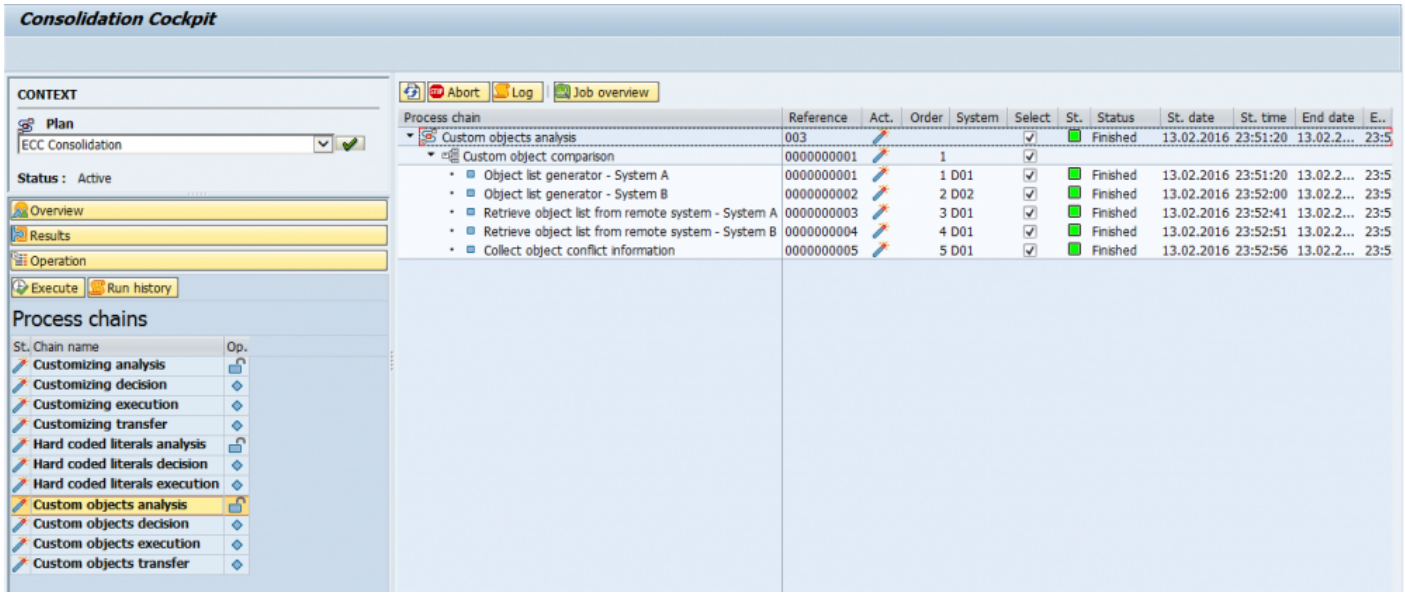
The phase is now open for operations.



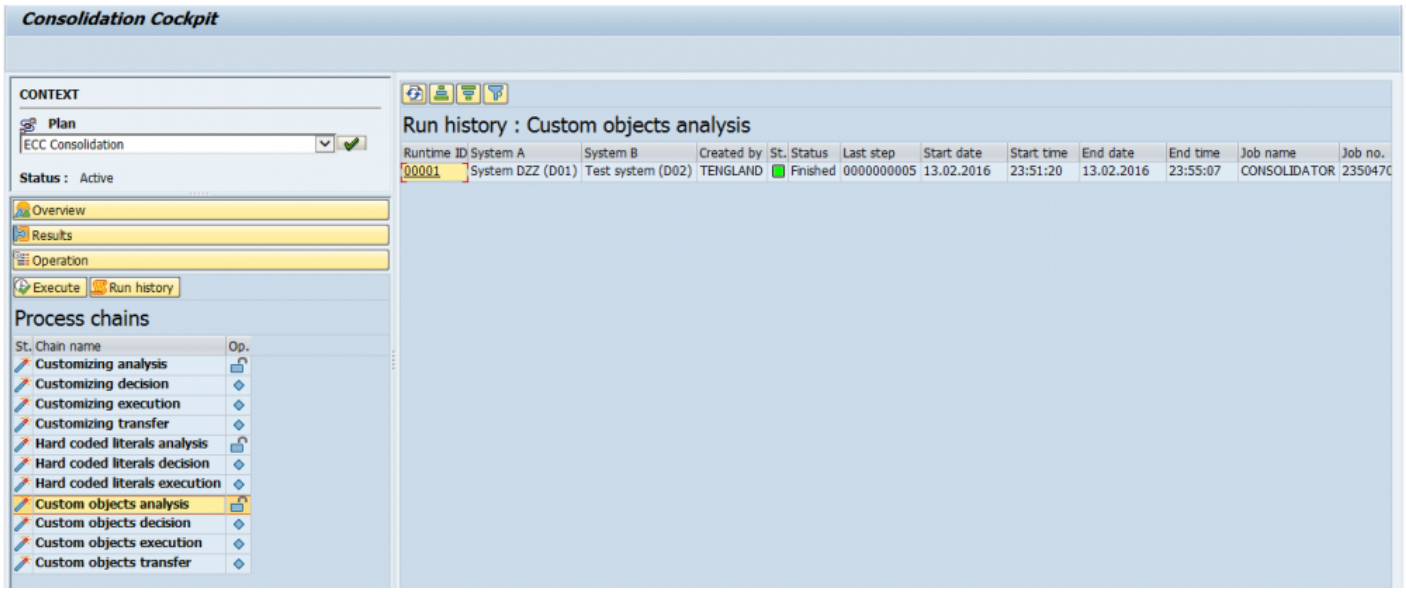
With the analysis phase now open go to the ‘Operation’ drawer and select the ‘Custom Objects’ phase and press the ‘Execute’ button.



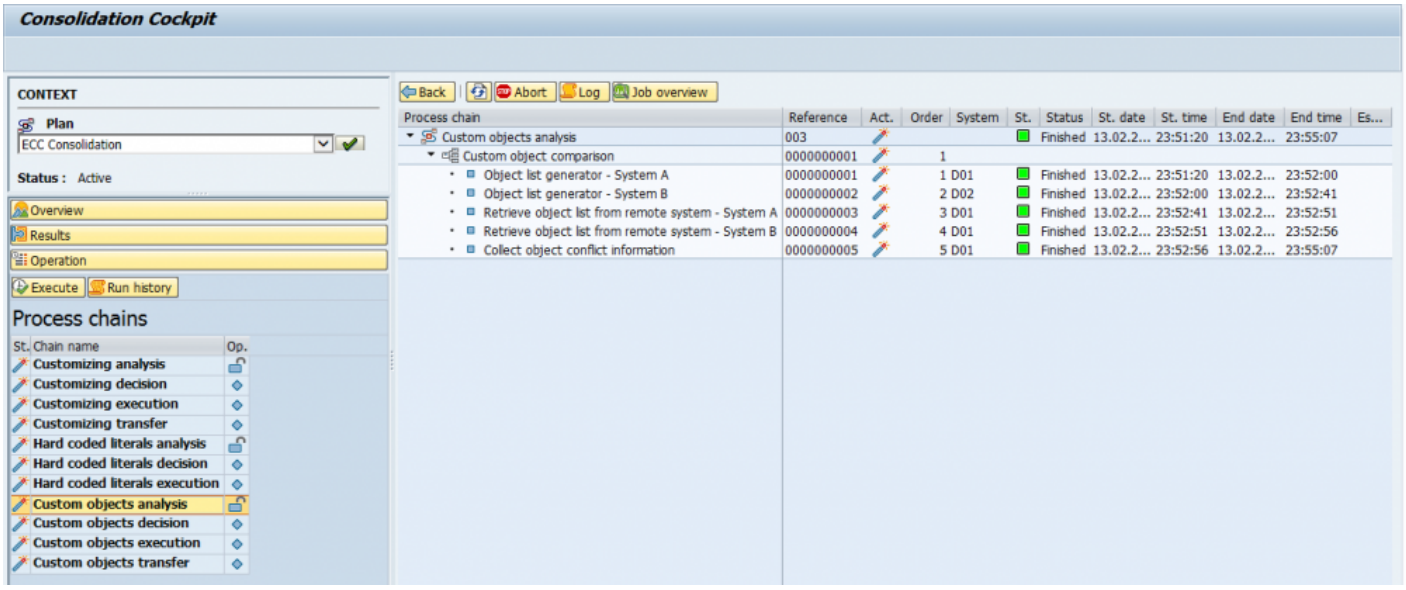
Selecting the execute button again will trigger the programs that are required to run for analysis with their default settings, pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Custom Objects’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



The full run details are displayed as below:

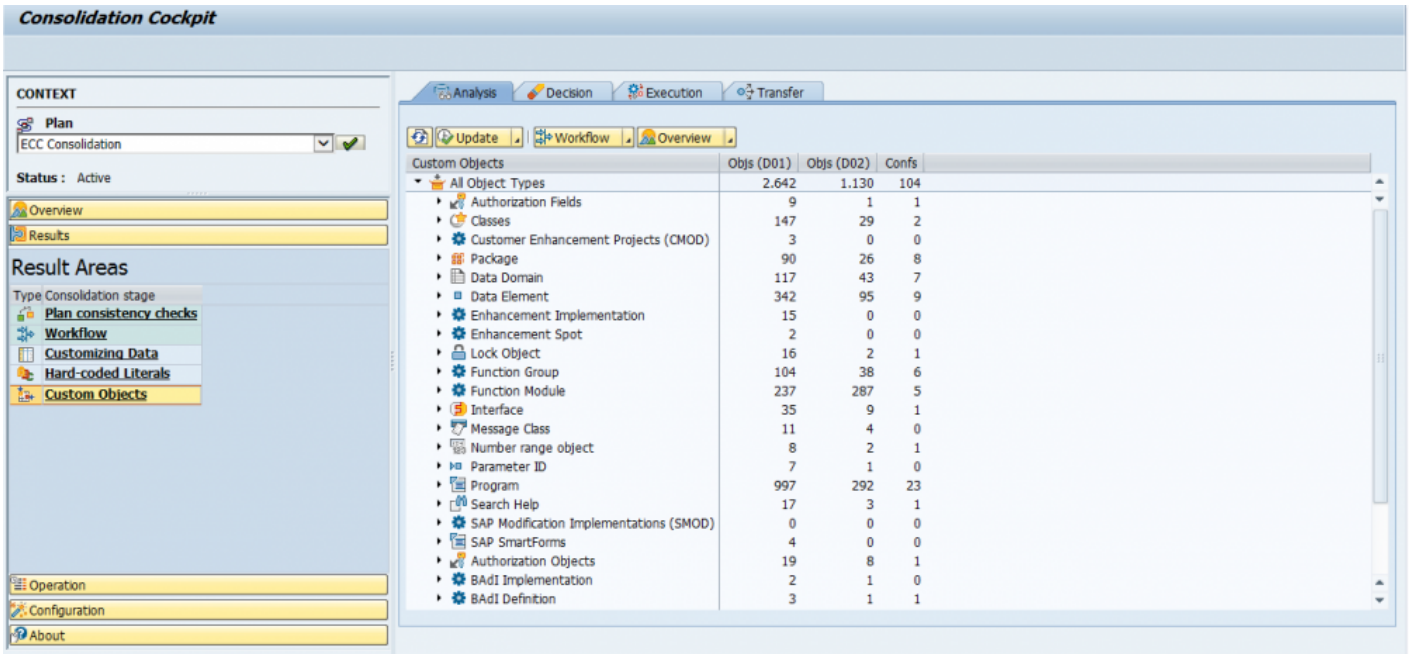


Results

The Analysis phase of the Custom Objects stage this will provide the number of objects from each system and the number of conflicts that have been found.

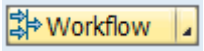
Once the Analysis programs have run it is time to view the results, go to the ‘Results’ drawer and select the ‘Custom Objects’.

The screen below shows the number of objects in each system and the number of conflicts found between the systems.



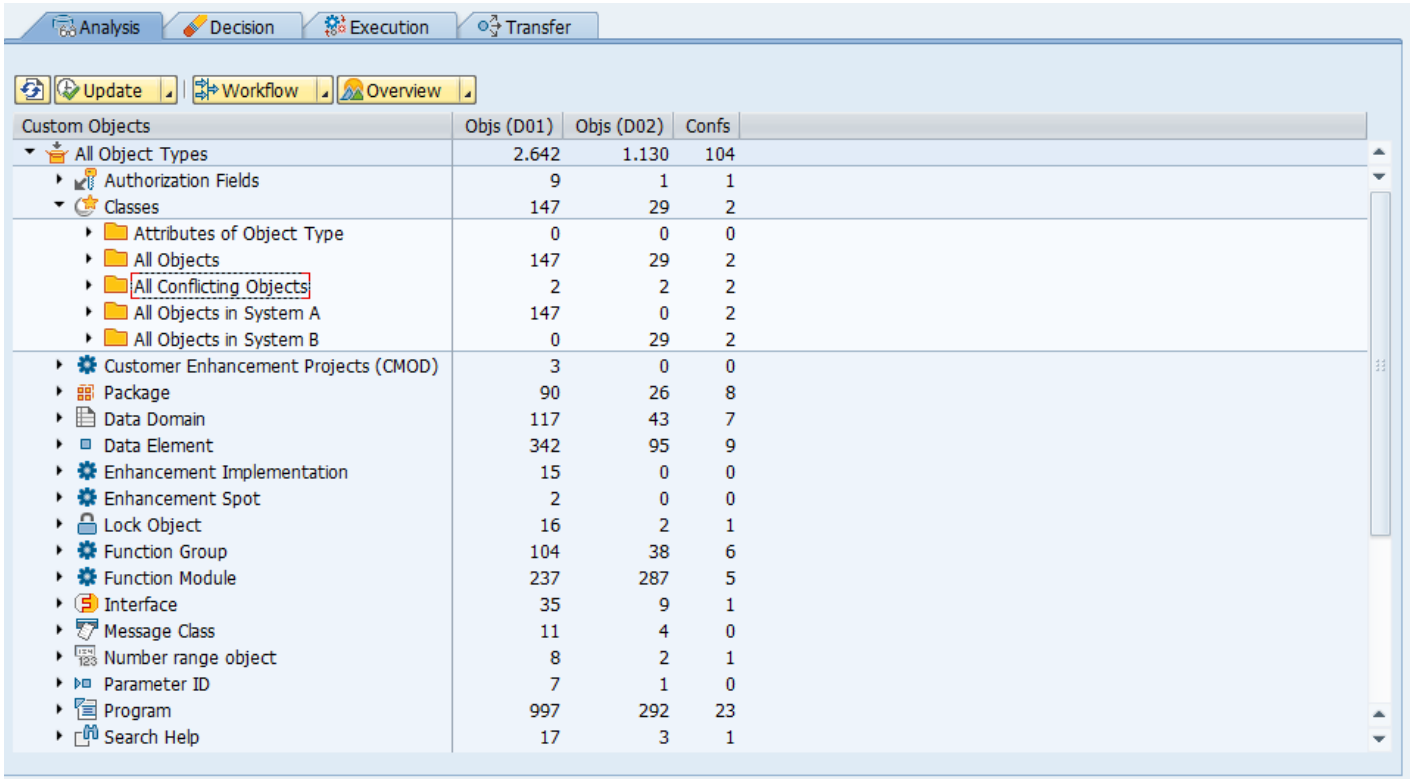
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button  allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Workflow’ button  allows the user to open and close this phase.

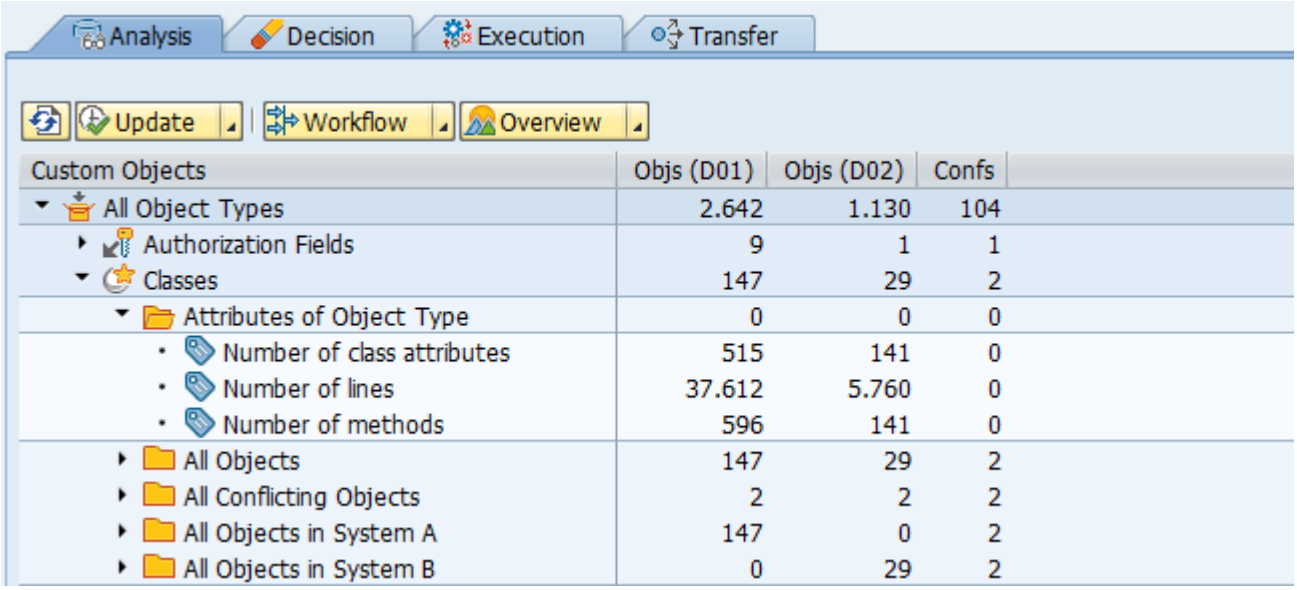
The ‘Overview’ button  allows the user to view the reports for this phase, see the Reporting section for more details.

On the custom objects screen below, opening up an Object Type provides further folders where you can view more information about the objects in each object type.



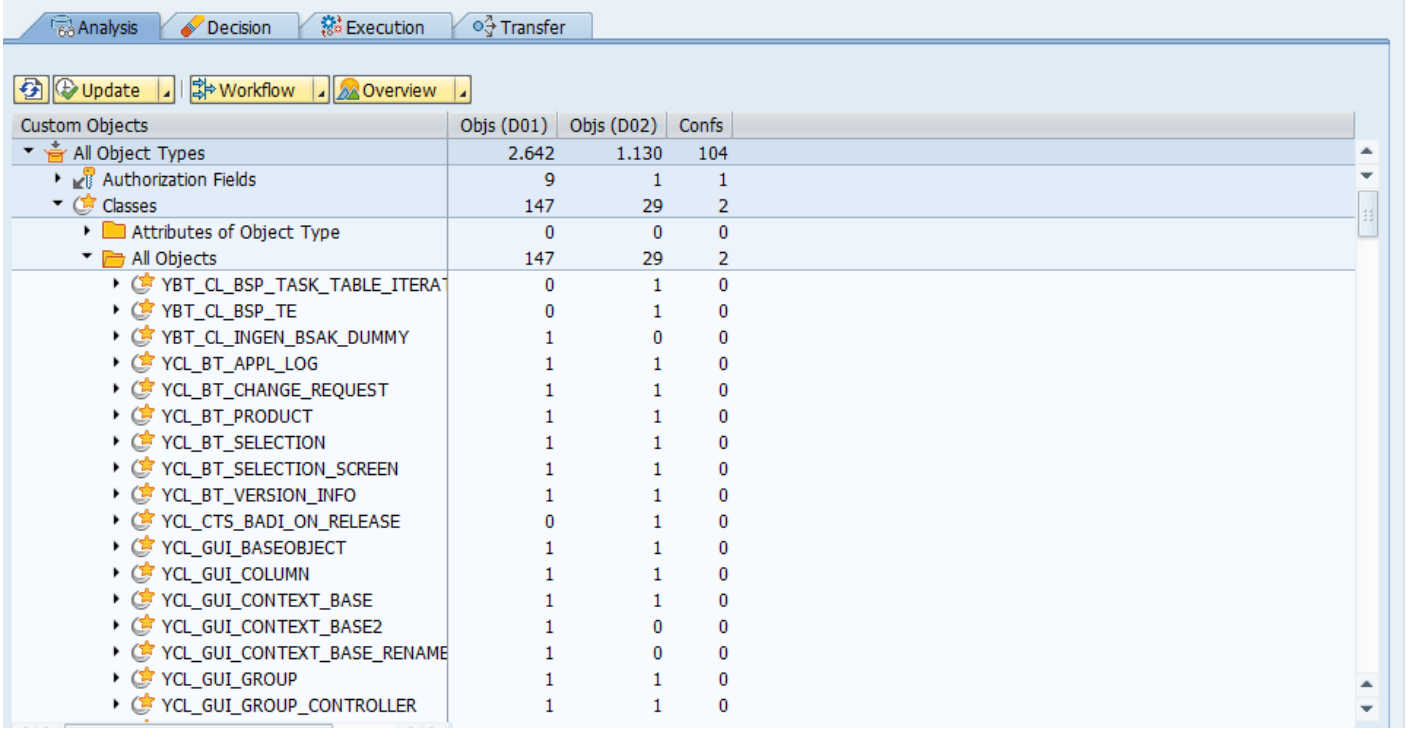
Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
All Objects	147	29	2
All Conflicting Objects	2	2	2
All Objects in System A	147	0	2
All Objects in System B	0	29	2
Customer Enhancement Projects (CMOD)	3	0	0
Package	90	26	8
Data Domain	117	43	7
Data Element	342	95	9
Enhancement Implementation	15	0	0
Enhancement Spot	2	0	0
Lock Object	16	2	1
Function Group	104	38	6
Function Module	237	287	5
Interface	35	9	1
Message Class	11	4	0
Number range object	8	2	1
Parameter ID	7	1	0
Program	997	292	23
Search Help	17	3	1

Opening up the ‘Attributes of Object Type’ folder provides you with further details, the top level showed a much higher number of classes in the D01 system, the number of attributes, lines of code and methods provides further details on this.



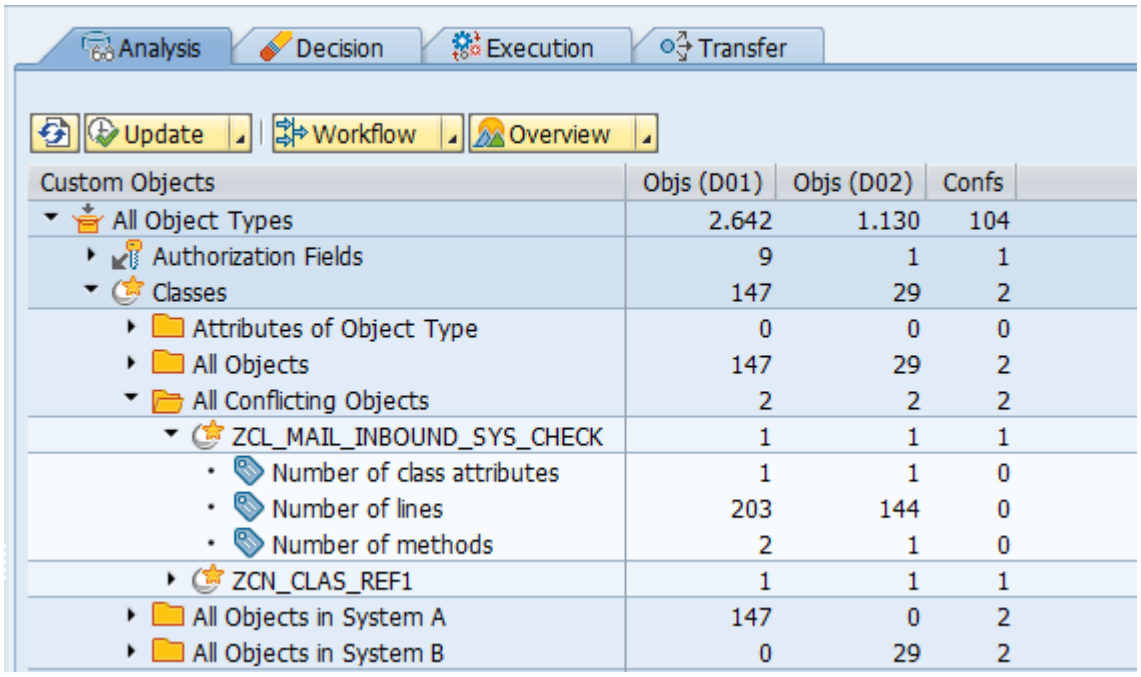
Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
Number of class attributes	515	141	0
Number of lines	37.612	5.760	0
Number of methods	596	141	0
All Objects	147	29	2
All Conflicting Objects	2	2	2
All Objects in System A	147	0	2
All Objects in System B	0	29	2

Opening up the ‘All Objects’ folders lists all of the objects of this type in both systems.

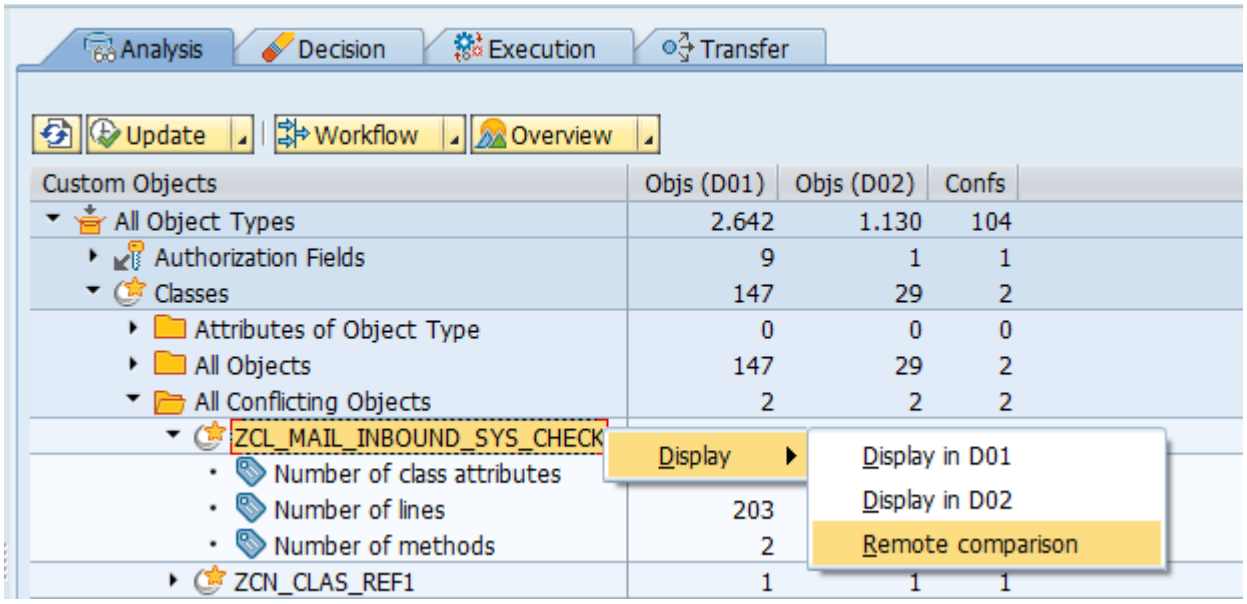


Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
All Objects	147	29	2
YBT_CL_BSP_TASK_TABLE_ITERAT	0	1	0
YBT_CL_BSP_TE	0	1	0
YBT_CL_INGEN_BSAK_DUMMY	1	0	0
YCL_BT_APPL_LOG	1	1	0
YCL_BT_CHANGE_REQUEST	1	1	0
YCL_BT_PRODUCT	1	1	0
YCL_BT_SELECTION	1	1	0
YCL_BT_SELECTION_SCREEN	1	1	0
YCL_BT_VERSION_INFO	1	1	0
YCL_CTS_BADI_ON_RELEASE	0	1	0
YCL_GUI_BASEOBJECT	1	1	0
YCL_GUI_COLUMN	1	1	0
YCL_GUI_CONTEXT_BASE	1	1	0
YCL_GUI_CONTEXT_BASE2	1	0	0
YCL_GUI_CONTEXT_BASE_RENAME	1	0	0
YCL_GUI_GROUP	1	1	0
YCL_GUI_GROUP_CONTROLLER	1	1	0

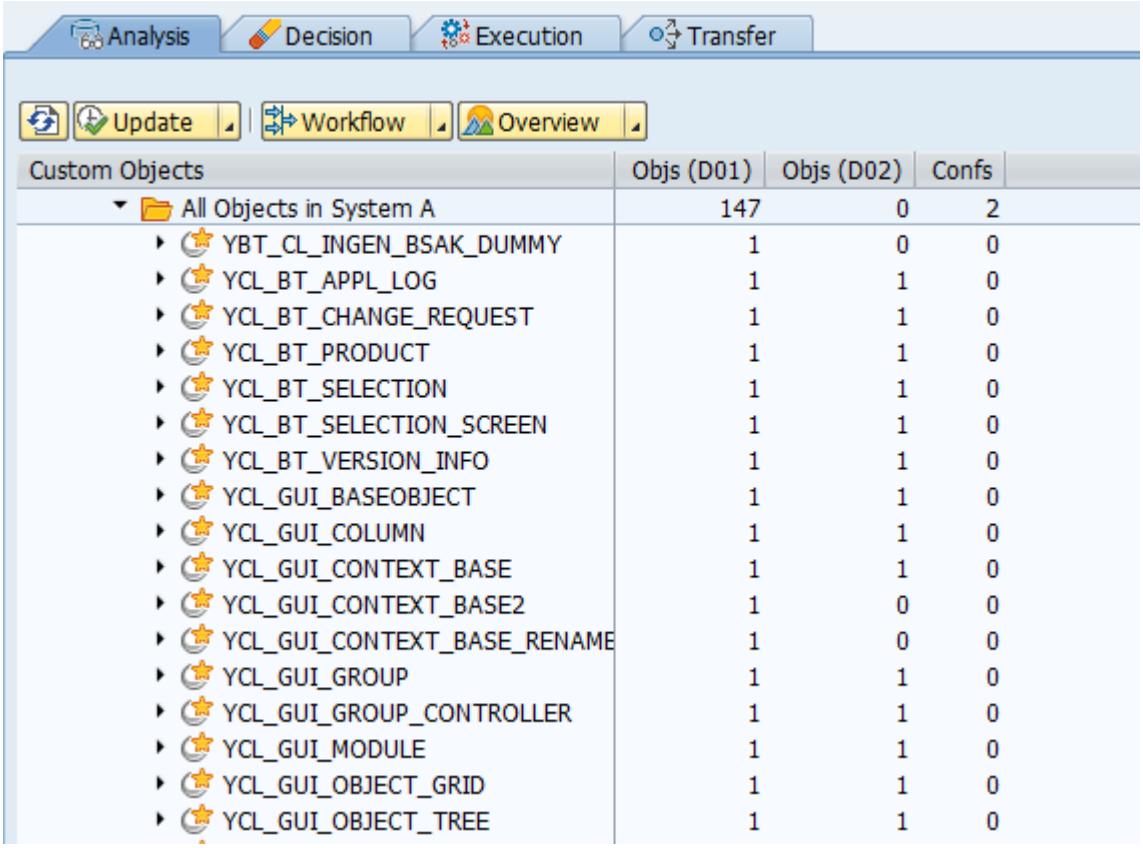
Opening up the ‘All Conflicting Objects’ folders lists all of the objects in conflict across the two systems. Here you can see opening up the object and viewing the attributes can help show further details on the differences between the objects, in the example below there are only 59 lines of code which are different between the two classes and one additional method, which suggests this object should be looked at in more detail because it is perhaps a candidate for a merge not a rename.



Below if you right mouse click on the object name then options to view the program in each of the systems or launch a remote comparison are available. This will greatly assist in making the correct decisions for each object.

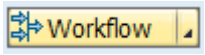


Opening up the ‘All Objects in System A’ or ‘All Objects in System B’ folders lists all of the objects of this type in the chosen system



Custom Objects	Objs (D01)	Objs (D02)	Confs
All Objects in System A	147	0	2
YBT_CL_INGEN_BSAK_DUMMY	1	0	0
YCL_BT_APPL_LOG	1	1	0
YCL_BT_CHANGE_REQUEST	1	1	0
YCL_BT_PRODUCT	1	1	0
YCL_BT_SELECTION	1	1	0
YCL_BT_SELECTION_SCREEN	1	1	0
YCL_BT_VERSION_INFO	1	1	0
YCL_GUI_BASEOBJECT	1	1	0
YCL_GUI_COLUMN	1	1	0
YCL_GUI_CONTEXT_BASE	1	1	0
YCL_GUI_CONTEXT_BASE2	1	0	0
YCL_GUI_CONTEXT_BASE_RENAME	1	0	0
YCL_GUI_GROUP	1	1	0
YCL_GUI_GROUP_CONTROLLER	1	1	0
YCL_GUI_MODULE	1	1	0
YCL_GUI_OBJECT_GRID	1	1	0
YCL_GUI_OBJECT_TREE	1	1	0

* To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the option on the ‘Workflow’ button 

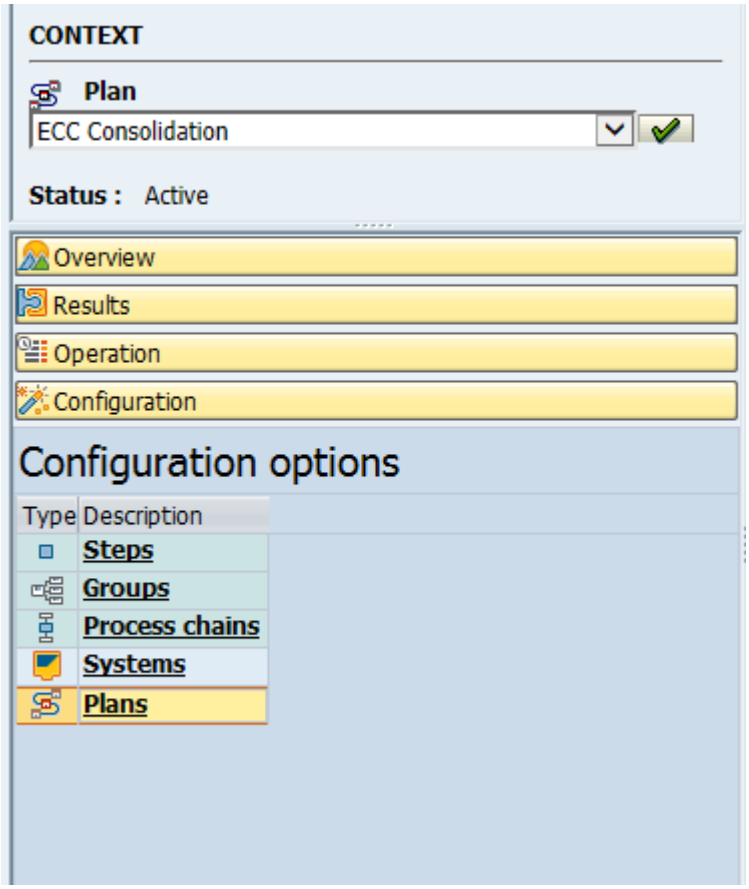
and select close phase. Continue to the next phase Decision Phase.

Decision Phase

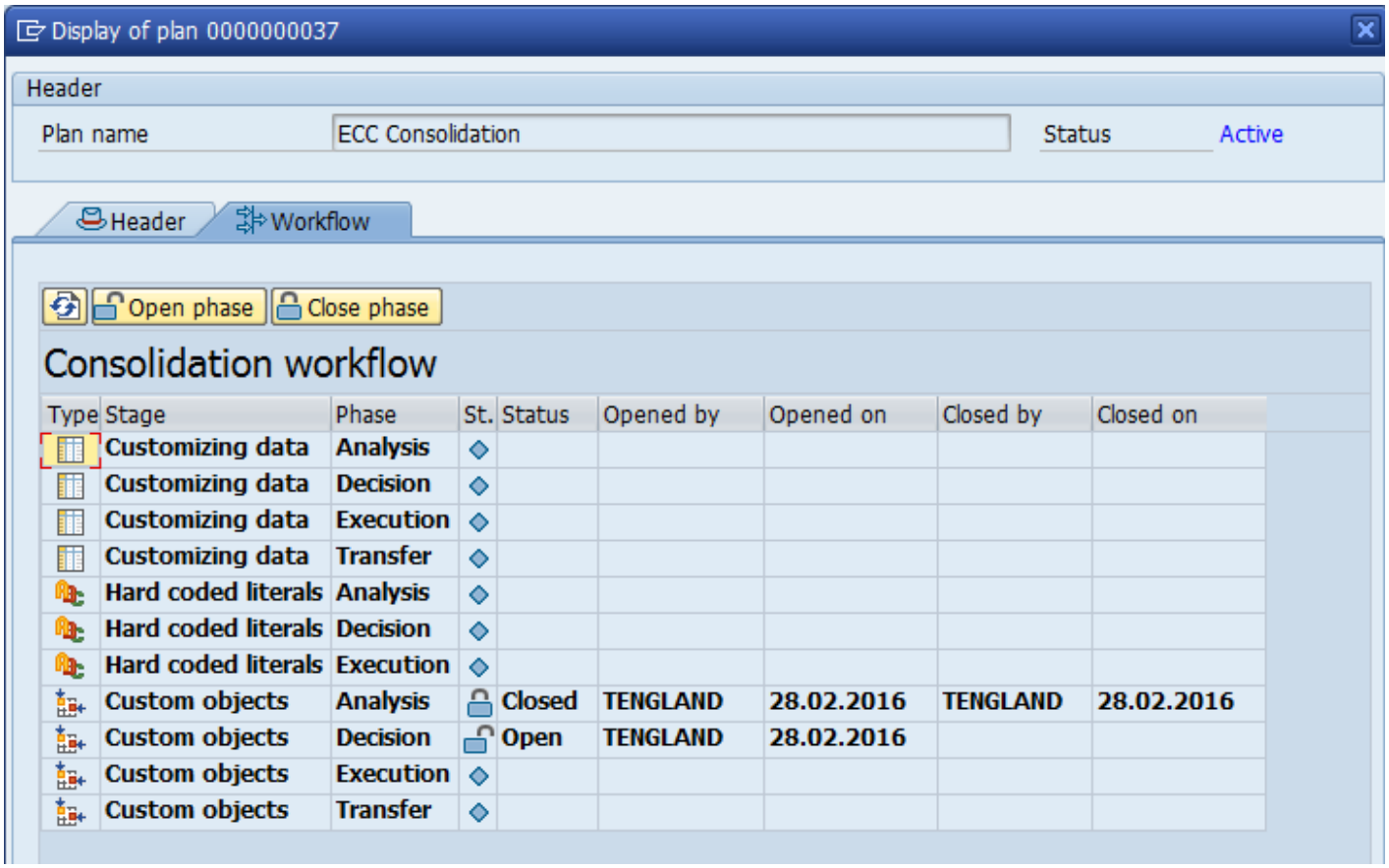
The decision phase is key to the consolidation as this is where the user makes the choices that impact the changes that will occur to these objects, the phase is broken down into two section the operation of the run and then viewing the results.

Operation

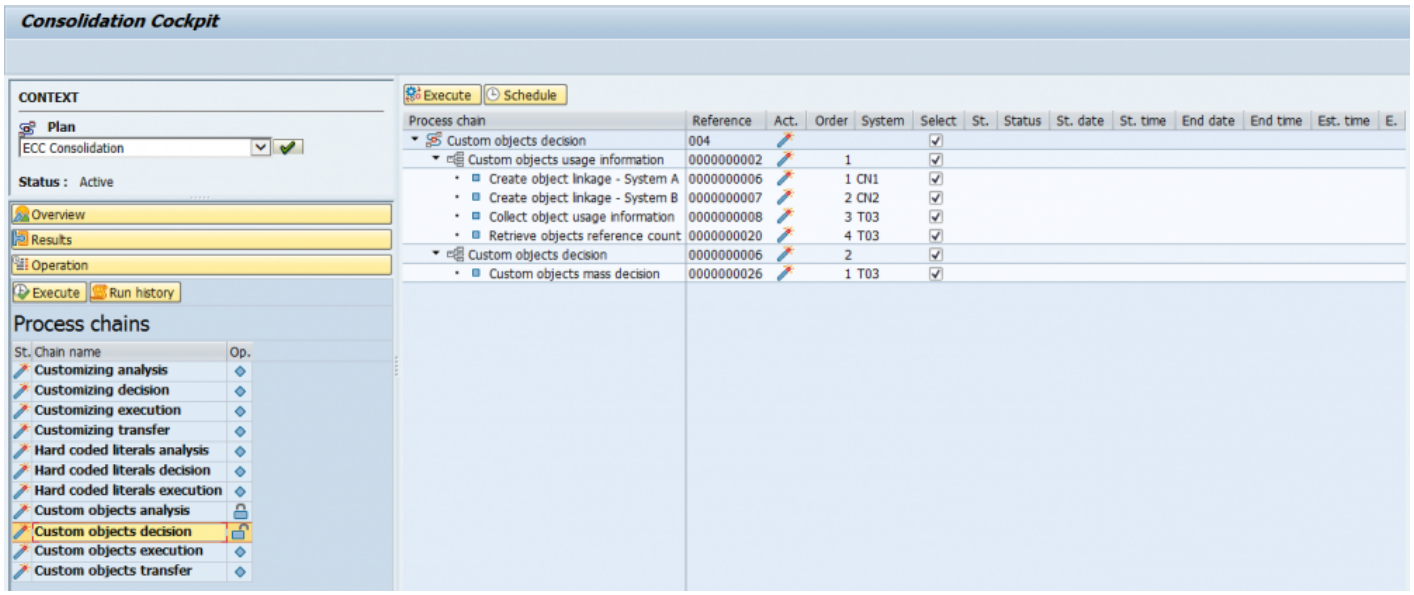
The first task is to open the decision phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



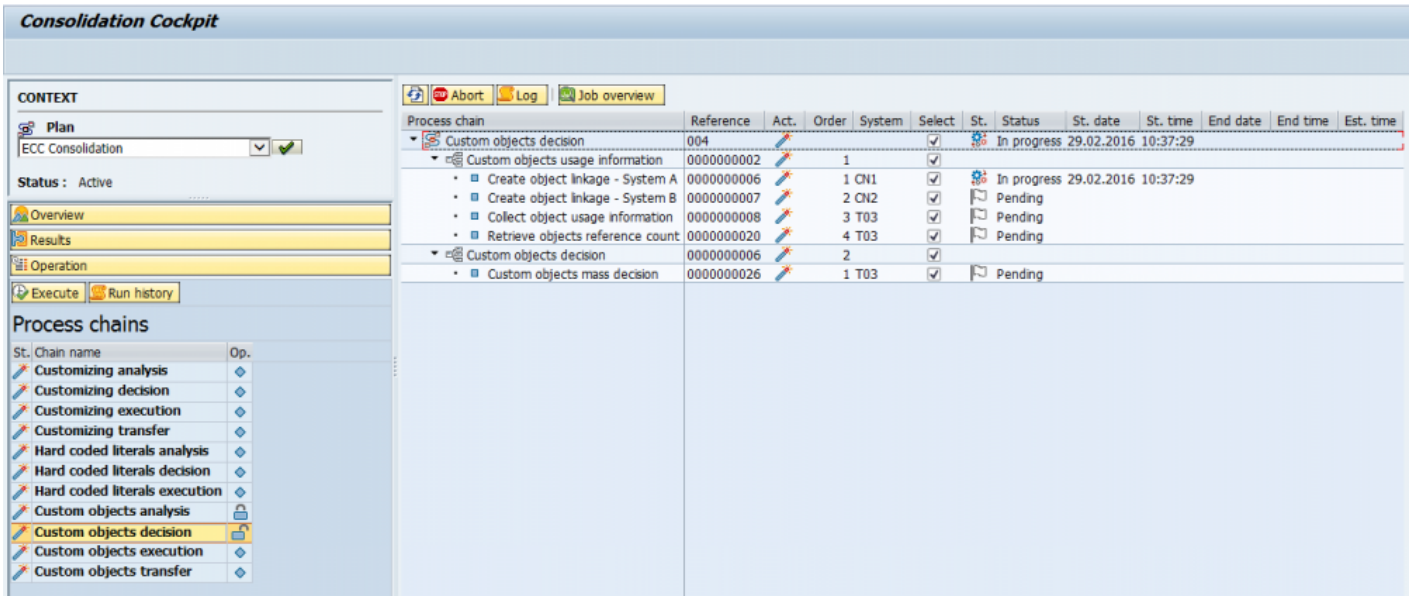
In the workflow tab select the stage ‘Custom Objects’ phase ‘Decision’ and press the ‘Open Phase button. The phase is now open for operations.



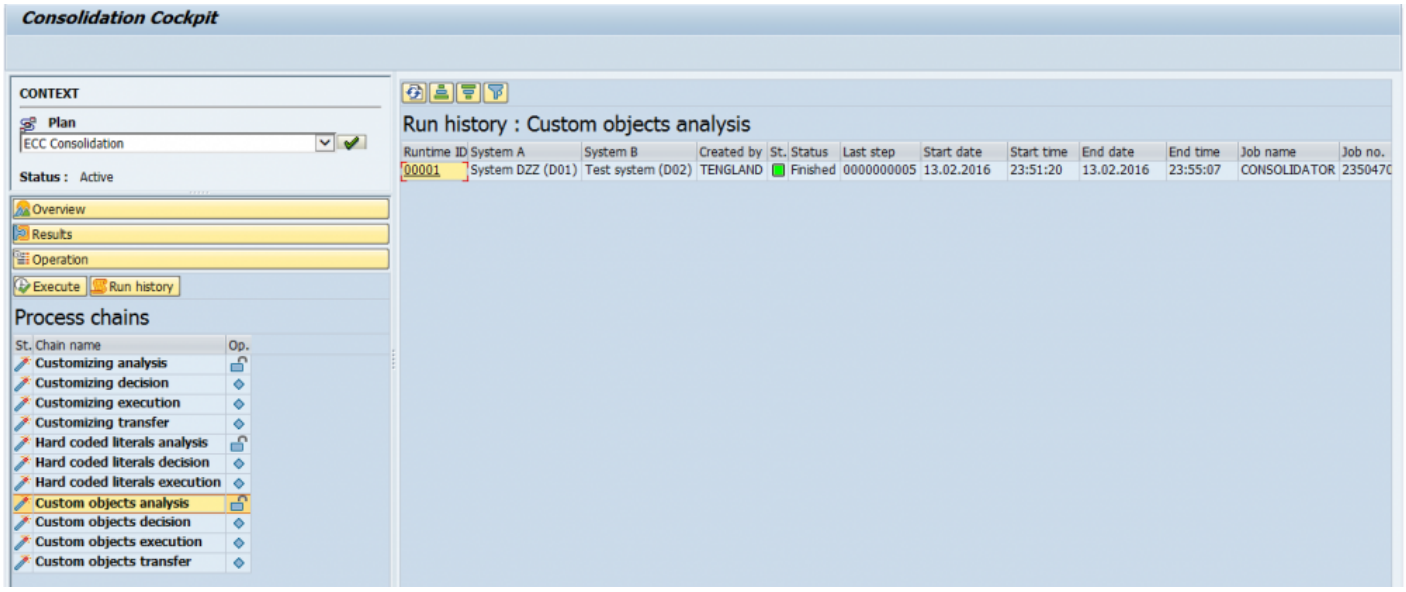
With the decision phase now open go to the ‘Operation’ drawer and select the ‘Custom Objects’ phase and press the ‘Execute’ button.



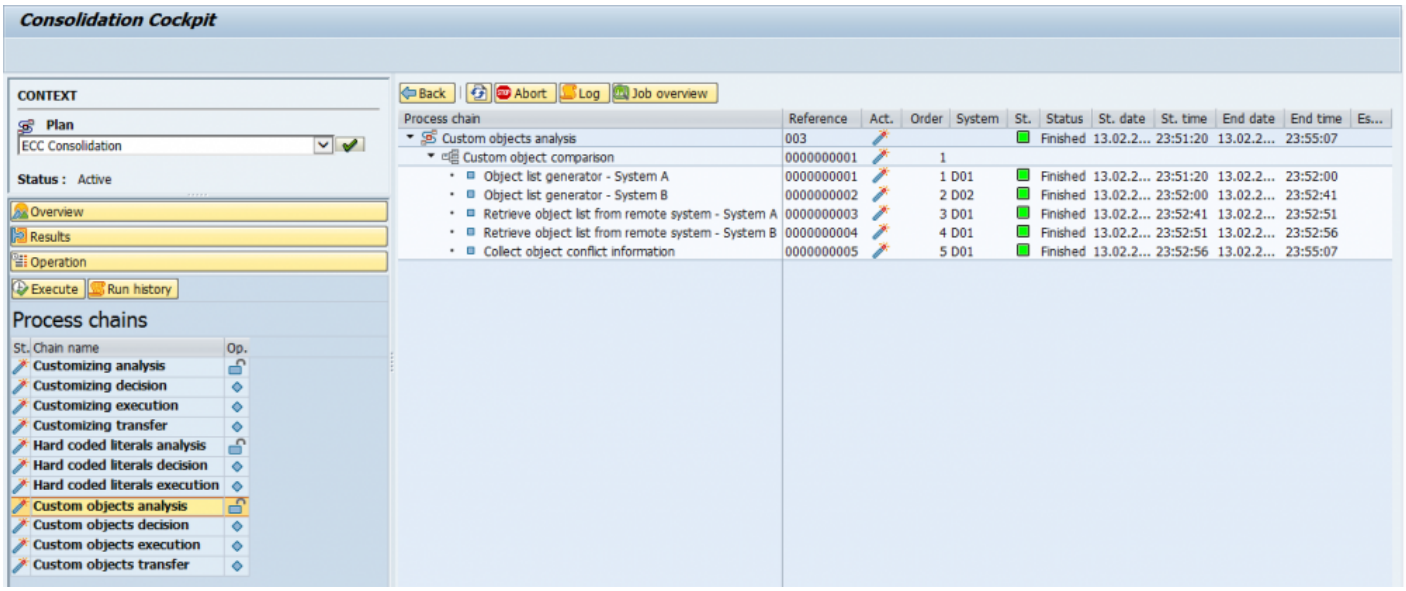
Selecting the execute button again will trigger the programs that are required to run for decision with their default settings, pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Custom Objects’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



The full run details are displayed as below:

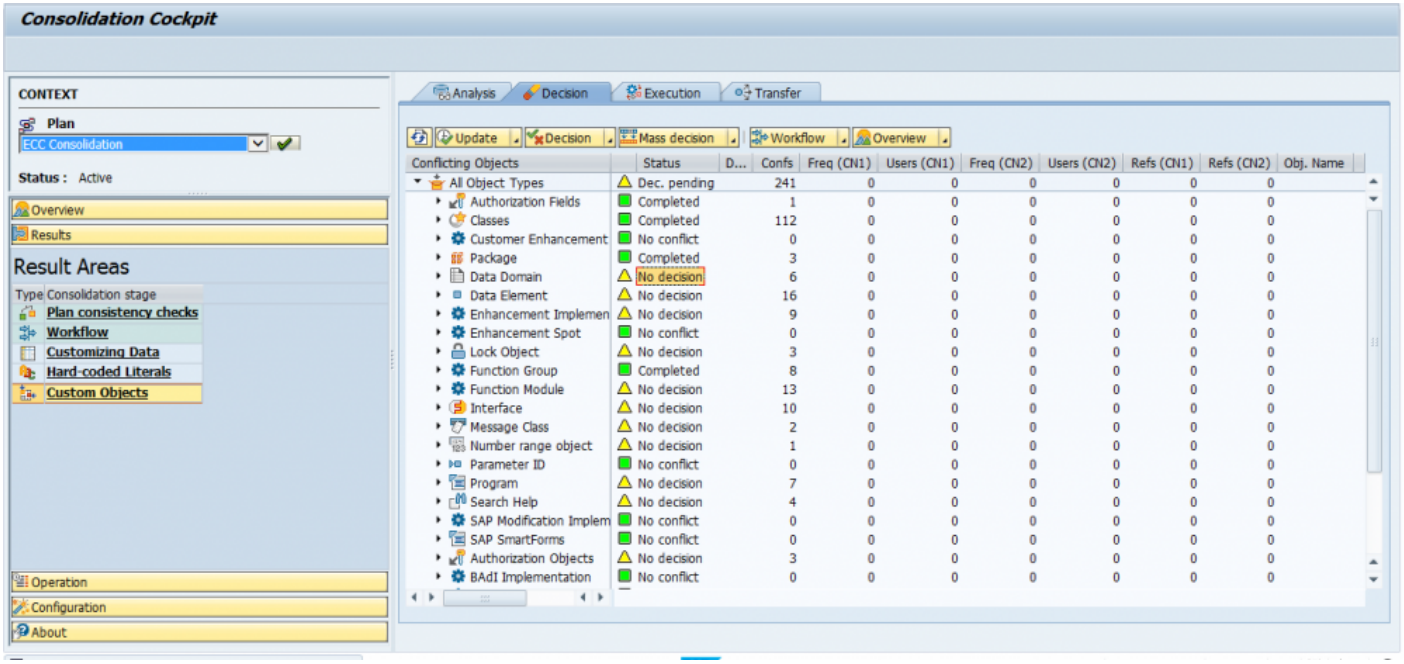

Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Status : Active
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Back
Abort
Log
Job overview
Process chain Reference Act. Order System St. Status St. date St. time End date End time Es...
Custom objects analysis 003 Finished 13.02.2... 23:51:20 13.02.2... 23:55:07
Custom object comparison 0000000001 1
Object list generator - System A 0000000001 1 D01 Finished 13.02.2... 23:51:20 13.02.2... 23:52:00
Object list generator - System B 0000000002 2 D02 Finished 13.02.2... 23:52:00 13.02.2... 23:52:41
Retrieve object list from remote system - System A 0000000003 3 D01 Finished 13.02.2... 23:52:41 13.02.2... 23:52:51
Retrieve object list from remote system - System B 0000000004 4 D01 Finished 13.02.2... 23:52:51 13.02.2... 23:52:56
Collect object conflict information 0000000005 5 D01 Finished 13.02.2... 23:52:56 13.02.2... 23:55:07

Results

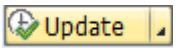
The Decision phase of the Custom Objects stage is where the key choices are made on how to resolve each conflict, usage data can be used to assist in this decision.

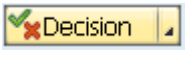
Once the Decision programs have run it is time to view the results, go to the ‘Results’ drawer and select the ‘Custom Objects’ and then navigate to the ‘Decision’ tab.

The screen below shows the number of conflicts grouped by object type.



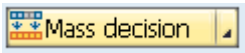
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Update’ button  allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

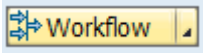
The ‘Decision’ button  allows the user to make the decisions, options are as below:

- Rename in (source system)
- Rename in (target system)

- Ignore conflict
- Remediate manually
- Decision proposal
- Cancel decision

The ‘Mass Decision’ button 

allows the user to run the programs for this phase, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

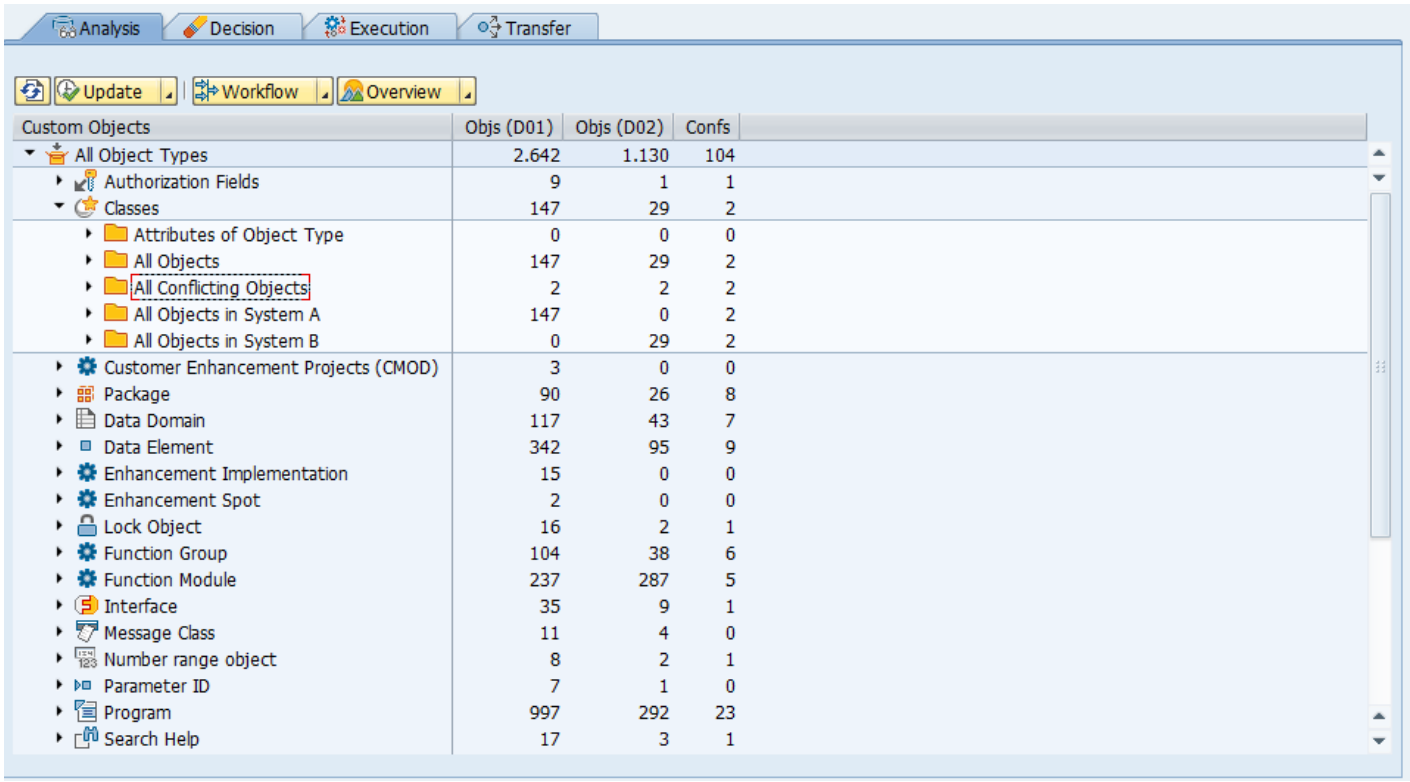
The ‘Workflow’ button 

allows the user to open and close this phase.

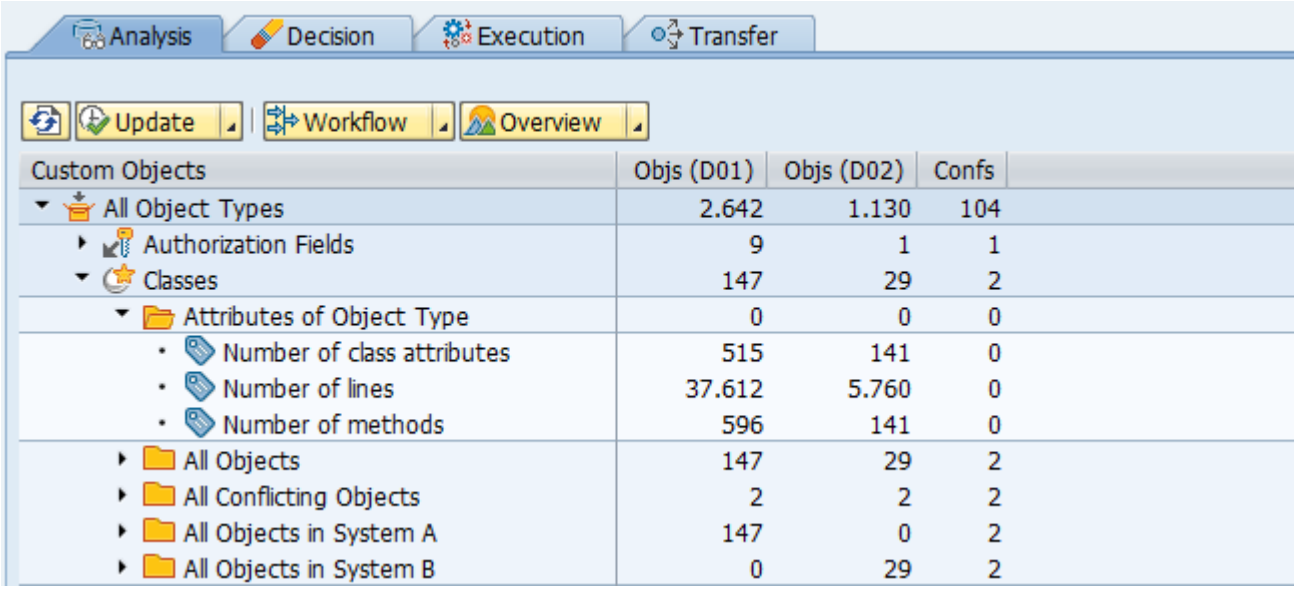
The ‘Overview’ button 

allows the user to view the reports for this phase, see the Reporting section for more details.

On the custom objects screen below, opening up an Object Type provides further folders where you can view more information about the objects in each object type.

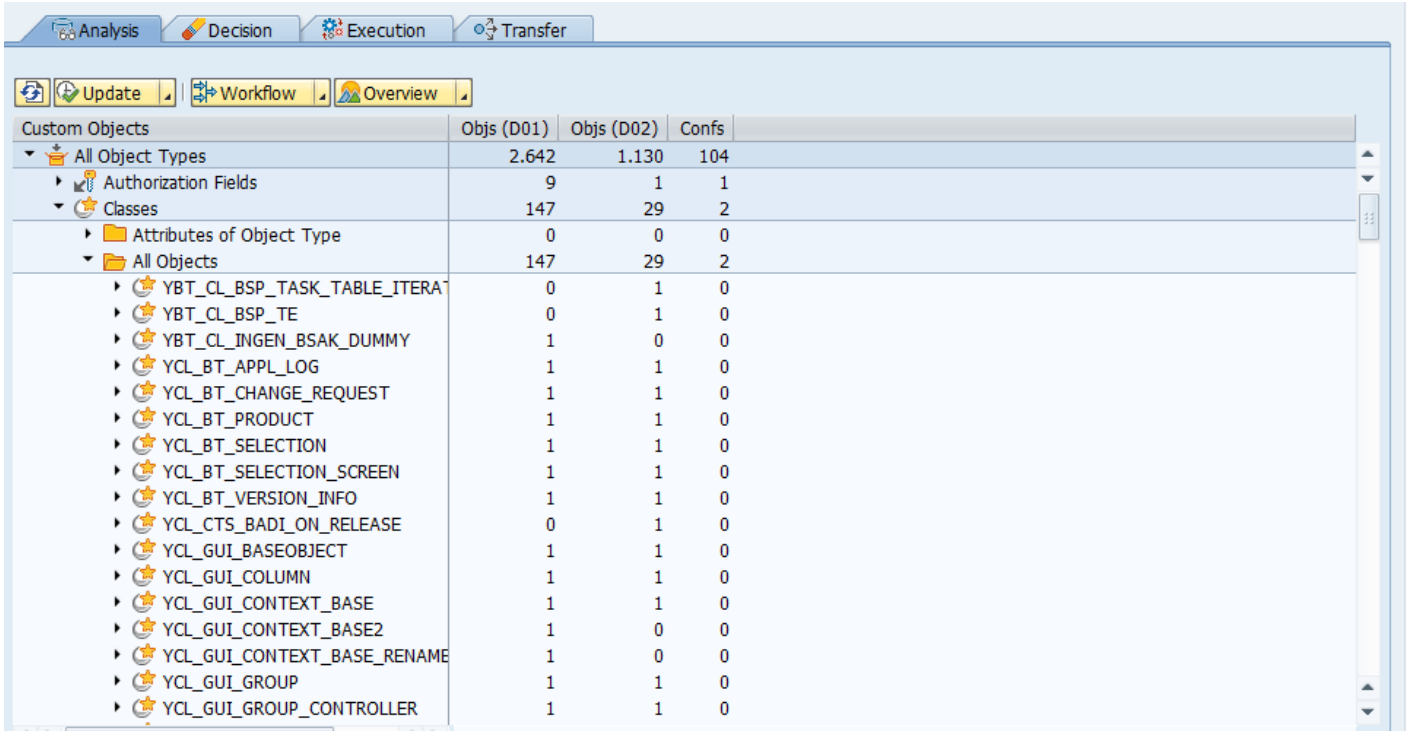


Opening up the ‘Attributes of Object Type’ folder provides you with further details, the top level showed a much higher number of classes in the D01 system, the number of attributes, lines of code and methods provides further details on this.



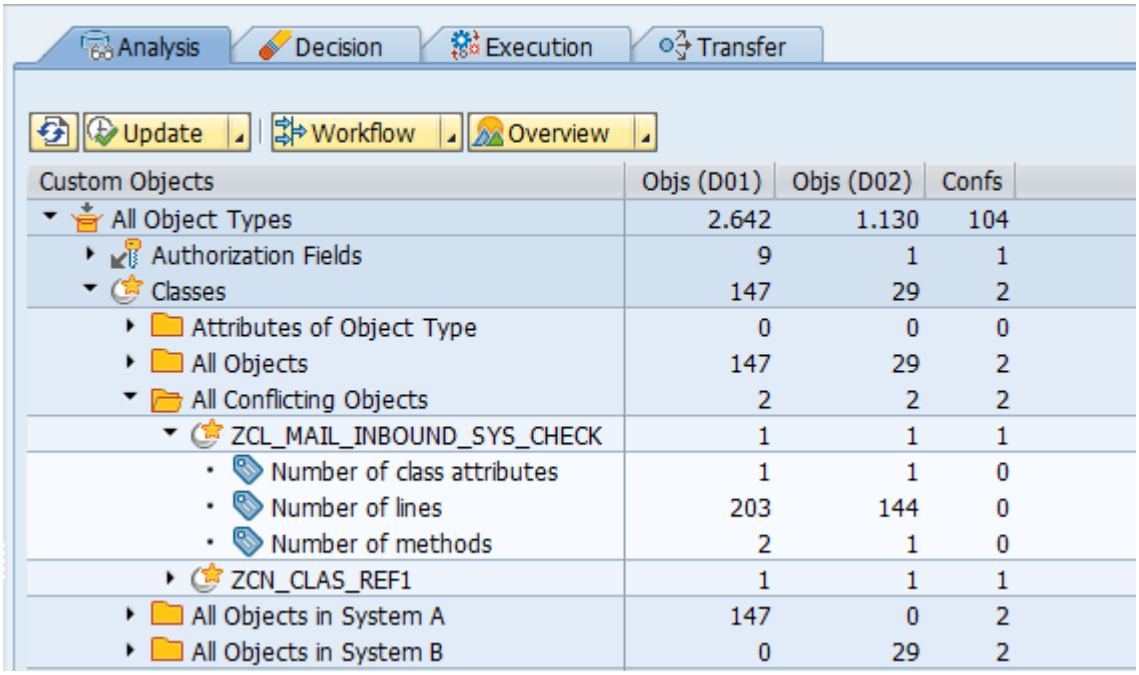
Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
Number of class attributes	515	141	0
Number of lines	37.612	5.760	0
Number of methods	596	141	0
All Objects	147	29	2
All Conflicting Objects	2	2	2
All Objects in System A	147	0	2
All Objects in System B	0	29	2

Opening up the ‘All Objects’ folders lists all of the objects of this type in both systems.



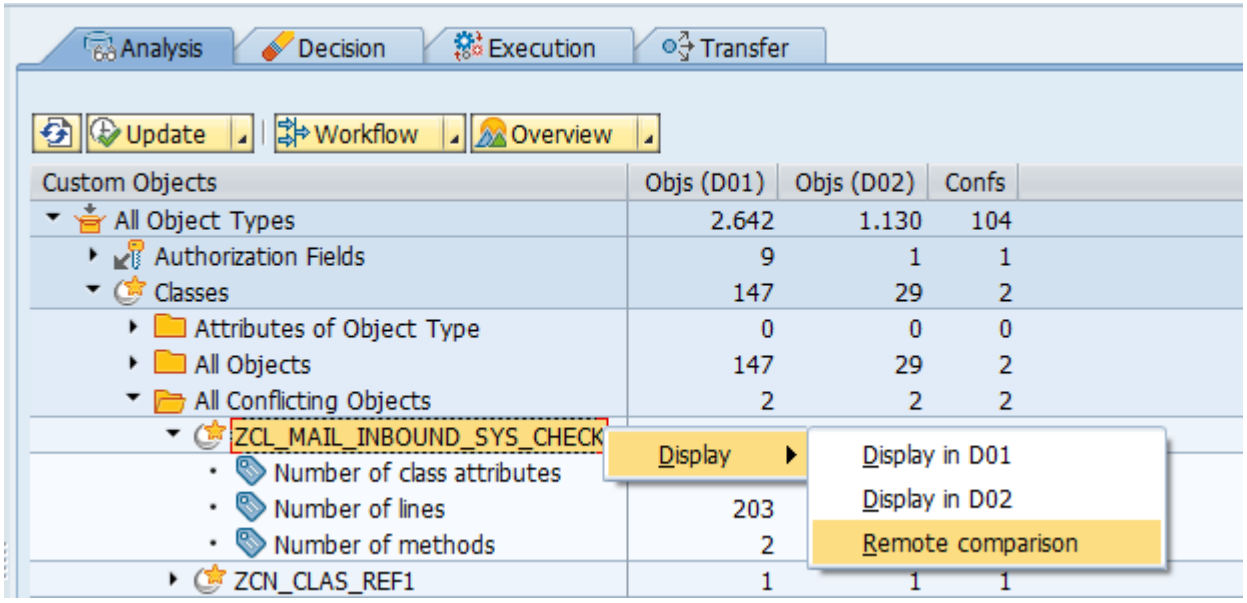
Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
All Objects	147	29	2
YBT_CL_BSP_TASK_TABLE_ITERAT	0	1	0
YBT_CL_BSP_TE	0	1	0
YBT_CL_INGEN_BSAK_DUMMY	1	0	0
YCL_BT_APPL_LOG	1	1	0
YCL_BT_CHANGE_REQUEST	1	1	0
YCL_BT_PRODUCT	1	1	0
YCL_BT_SELECTION	1	1	0
YCL_BT_SELECTION_SCREEN	1	1	0
YCL_BT_VERSION_INFO	1	1	0
YCL_CTS_BADI_ON_RELEASE	0	1	0
YCL_GUI_BASEOBJECT	1	1	0
YCL_GUI_COLUMN	1	1	0
YCL_GUI_CONTEXT_BASE	1	1	0
YCL_GUI_CONTEXT_BASE2	1	0	0
YCL_GUI_CONTEXT_BASE_RENAME	1	0	0
YCL_GUI_GROUP	1	1	0
YCL_GUI_GROUP_CONTROLLER	1	1	0

Opening up the ‘All Conflicting Objects’ folders lists all of the objects in conflict across the two systems. Here you can see opening up the object and viewing the attributes can help show further details on the differences between the objects, in the example below there are only 59 lines of code which are different between the two classes and one additional method, which suggests this object should be looked at in more detail because it is perhaps a candidate for a merge not a rename.

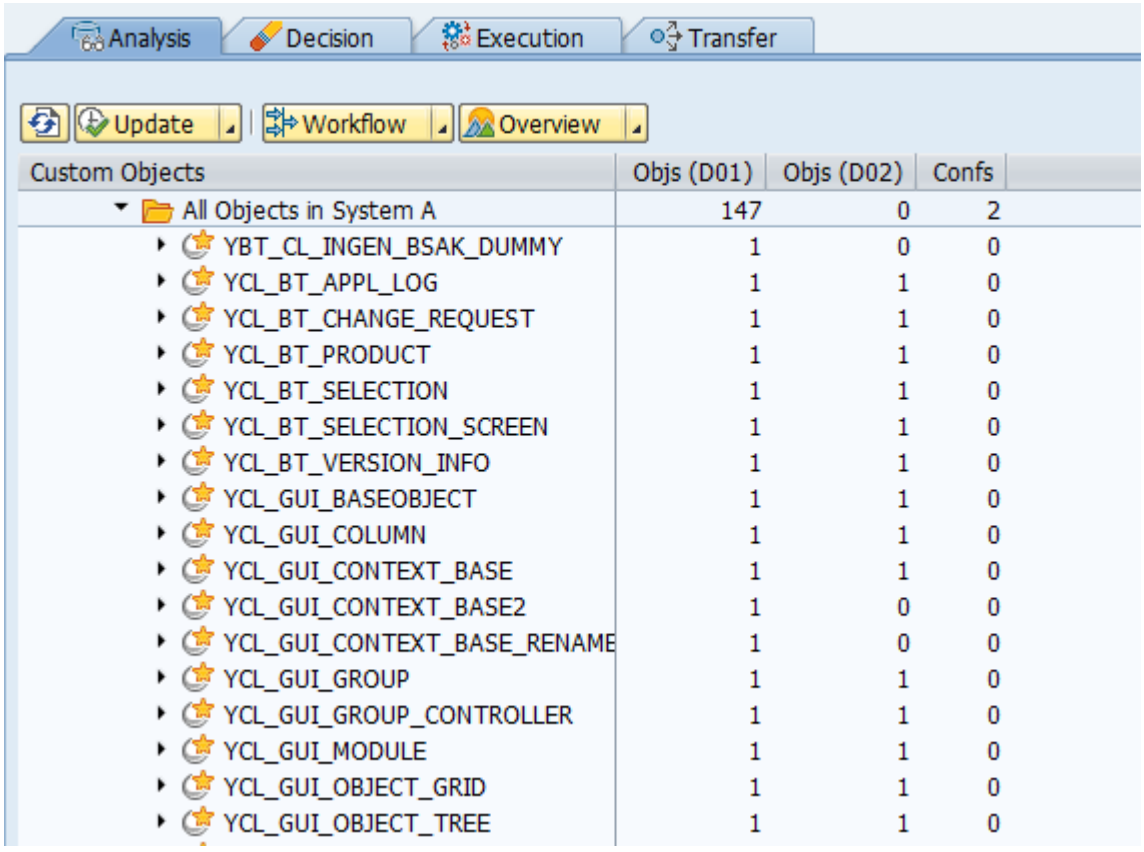


Custom Objects	Objs (D01)	Objs (D02)	Confs
All Object Types	2.642	1.130	104
Authorization Fields	9	1	1
Classes	147	29	2
Attributes of Object Type	0	0	0
All Objects	147	29	2
All Conflicting Objects	2	2	2
ZCL_MAIL_INBOUND_SYS_CHECK	1	1	1
Number of class attributes	1	1	0
Number of lines	203	144	0
Number of methods	2	1	0
ZCN_CLAS_REF1	1	1	1
All Objects in System A	147	0	2
All Objects in System B	0	29	2

Below if you right mouse click on the object name then options to view the program in each of the systems or launch a remote comparison are available. This will greatly assist in making the correct decisions for each object.

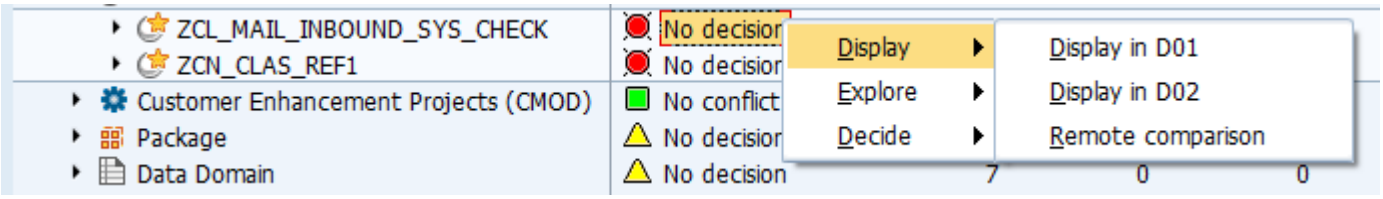


Opening up the ‘All Objects in System A’ or ‘All Objects in System B’ folders lists all of the objects of this type in the chosen system

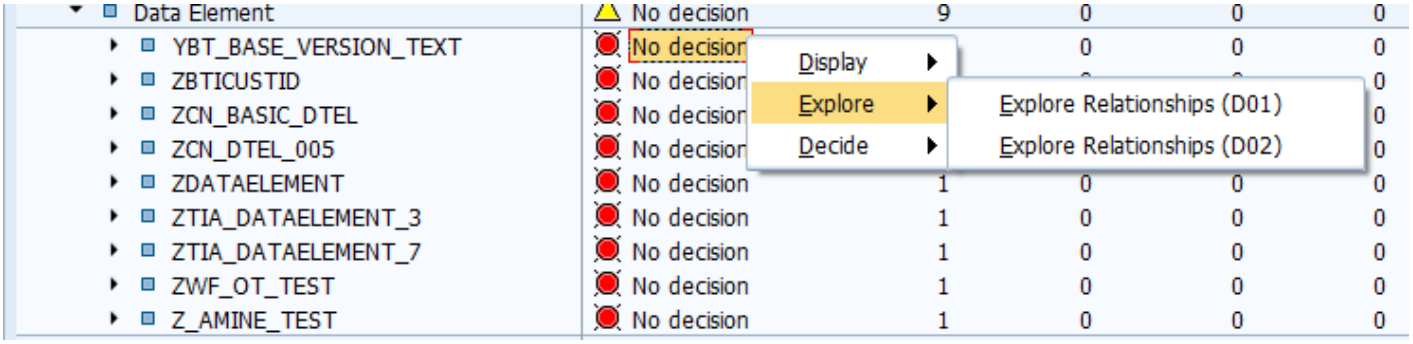


There are a number of options when using the right mouse click on objects.

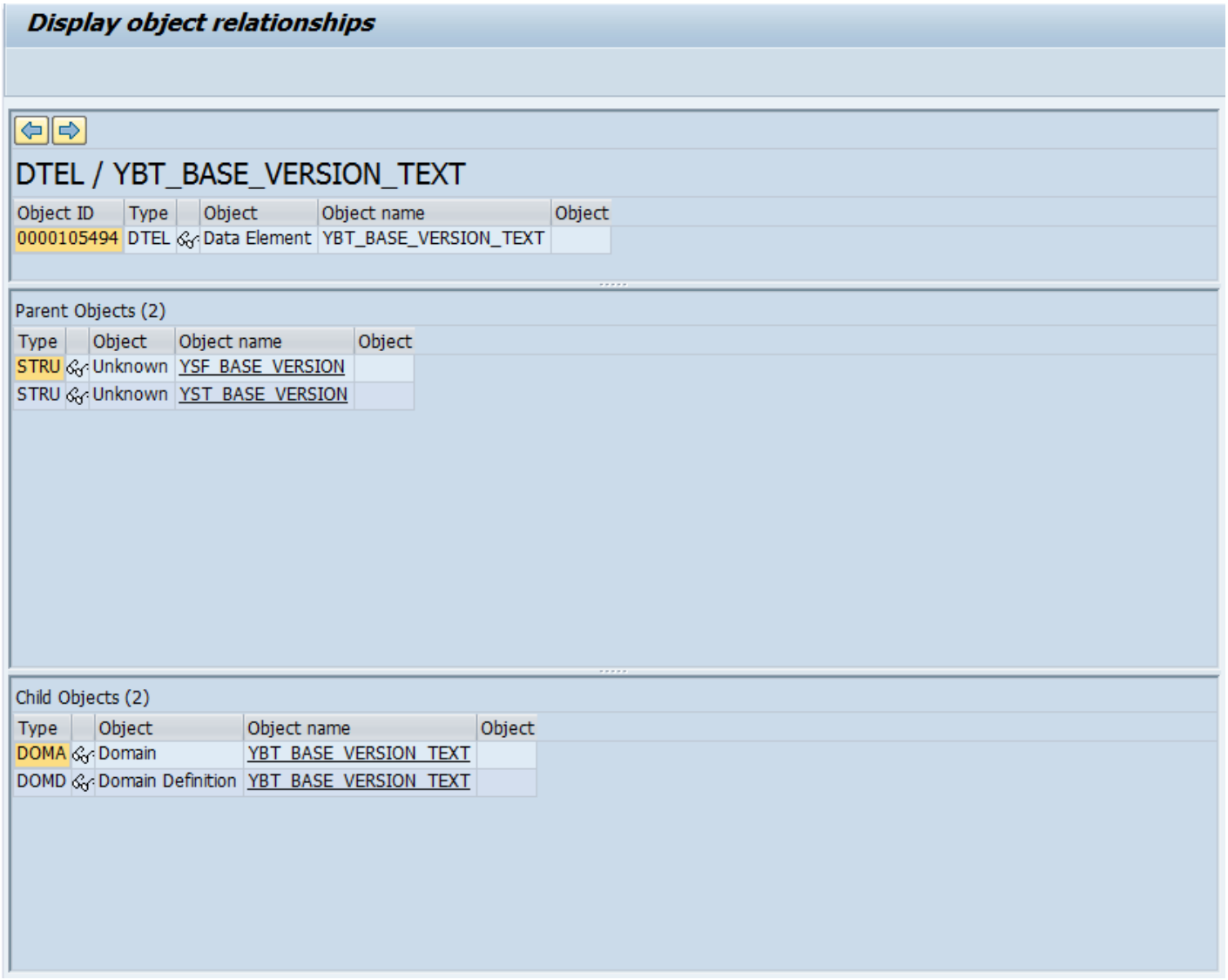
Firstly ‘Display’ lets you simply display the objects in the respective systems and more usefully perform a remote comparison of the objects.



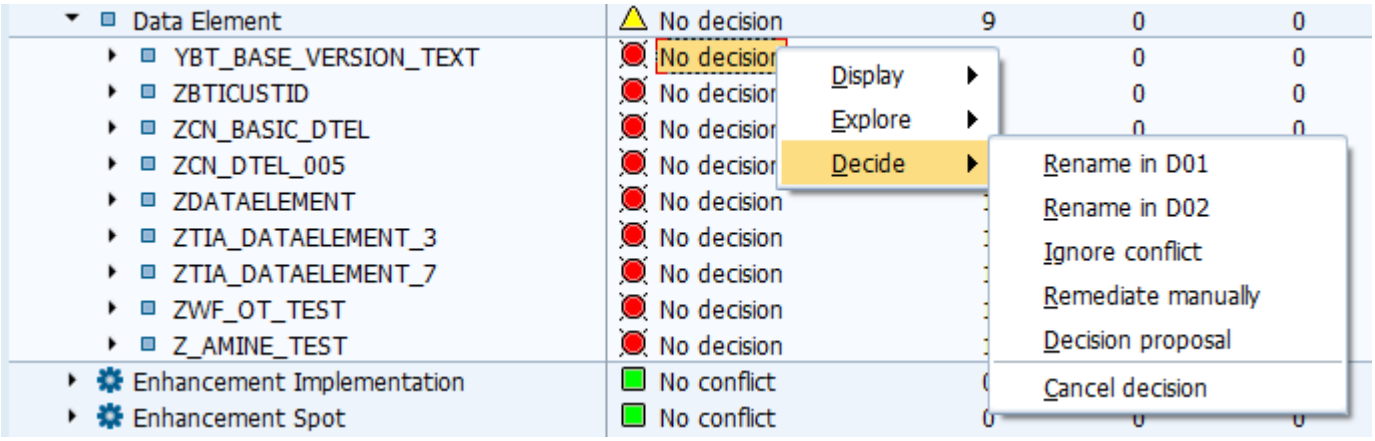
Secondly ‘Explore’ this allows you to explore the relationship between objects in their respective systems.



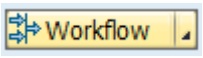
Below the screen shows the parent and child relationships that this data element has.



Thirdly ‘Decision’



* To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button 

and select close phase. Continue to the next phase “Execution Phase”

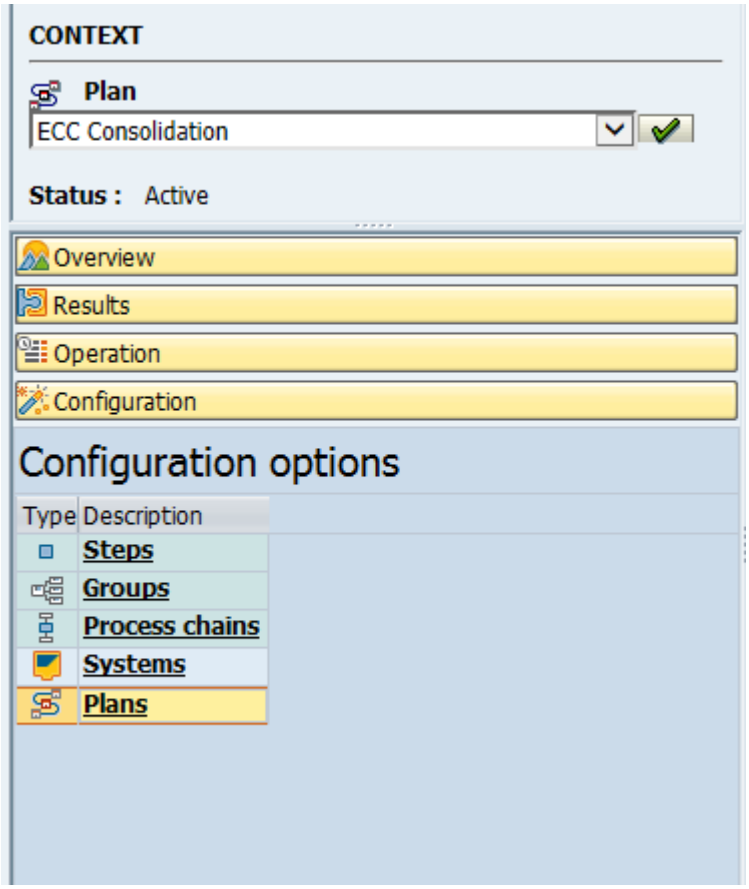
Execution Phase

The execution phase is where all the renaming of objects that can be completed automatically is done and the user can review these results and check any failures found.

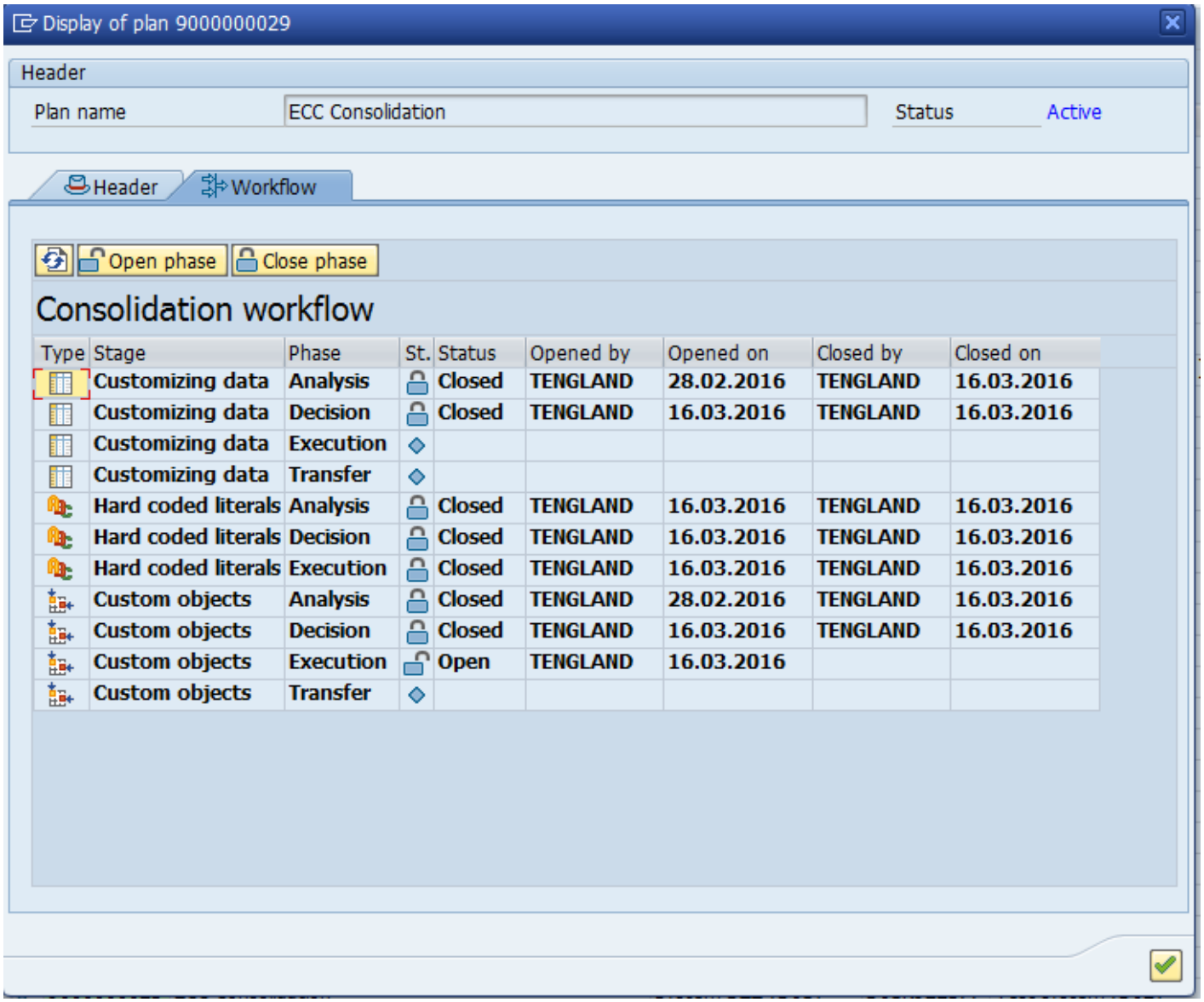
- Operation
- Result

Operation

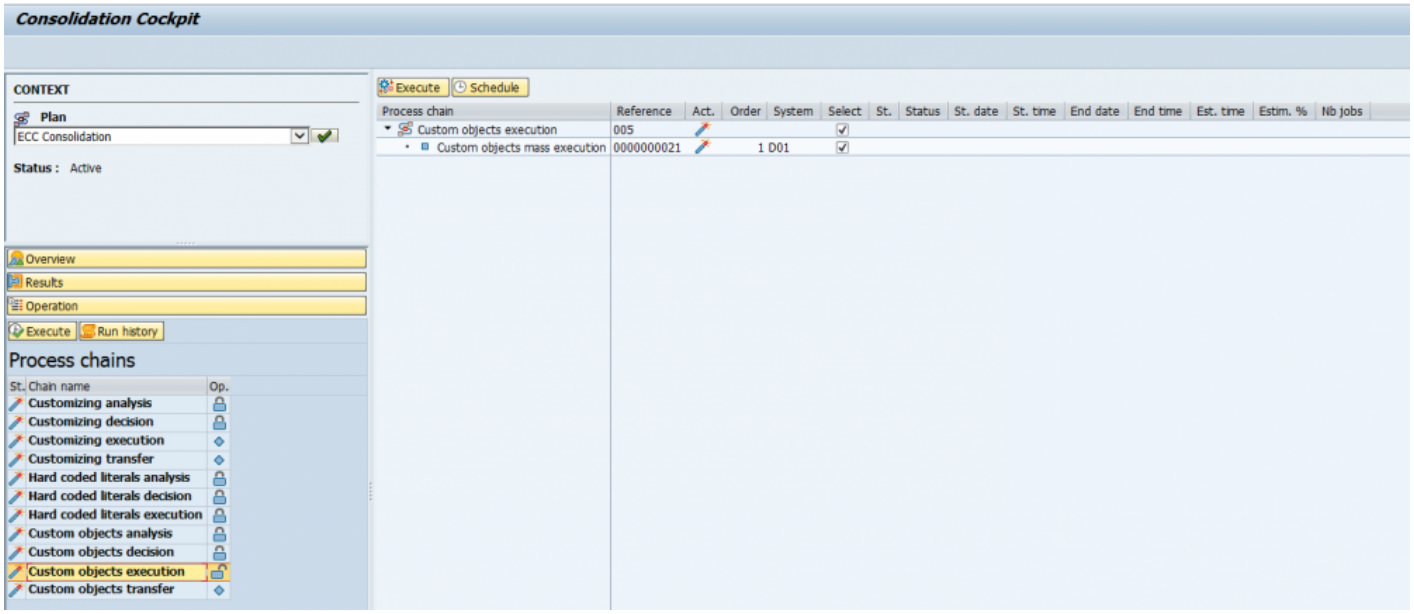
The first task is to open the execution phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.



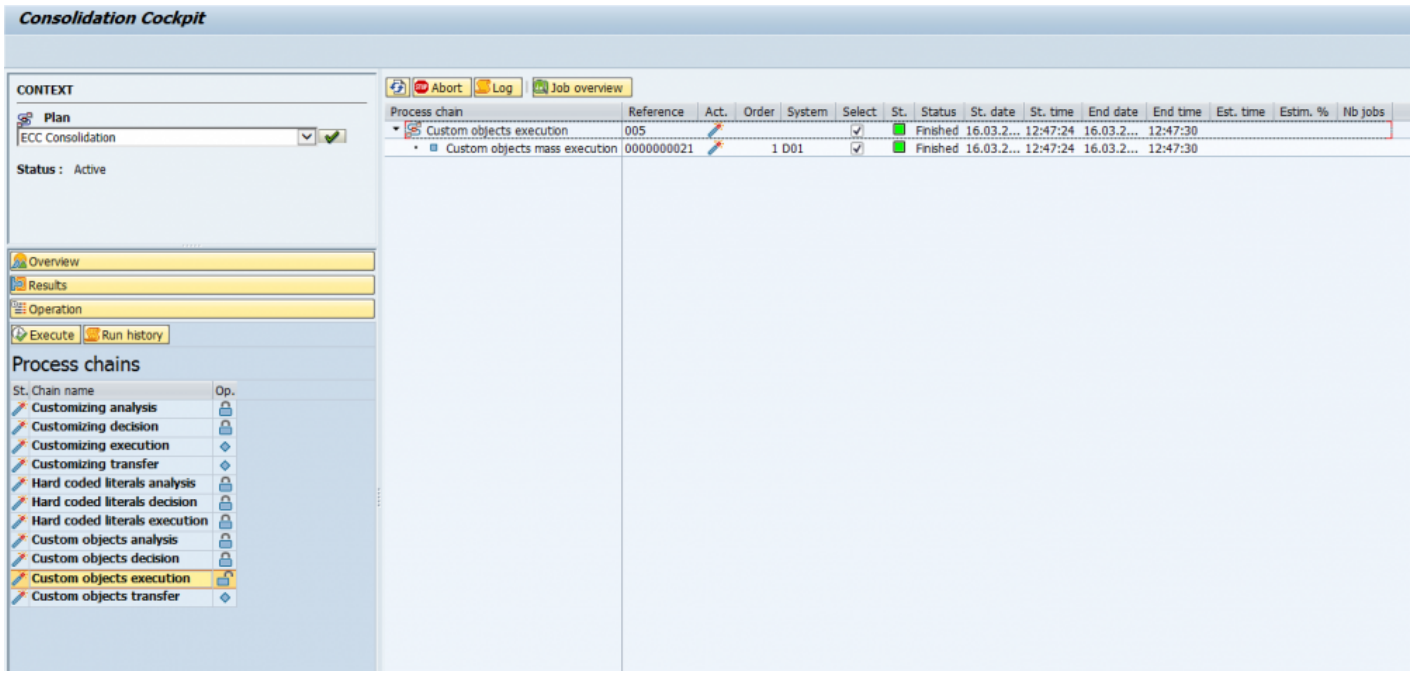
In the workflow tab select the stage ‘Custom Objects’ phase ‘Execution’ and press the ‘Open Phase button. The phase is now open for operations.



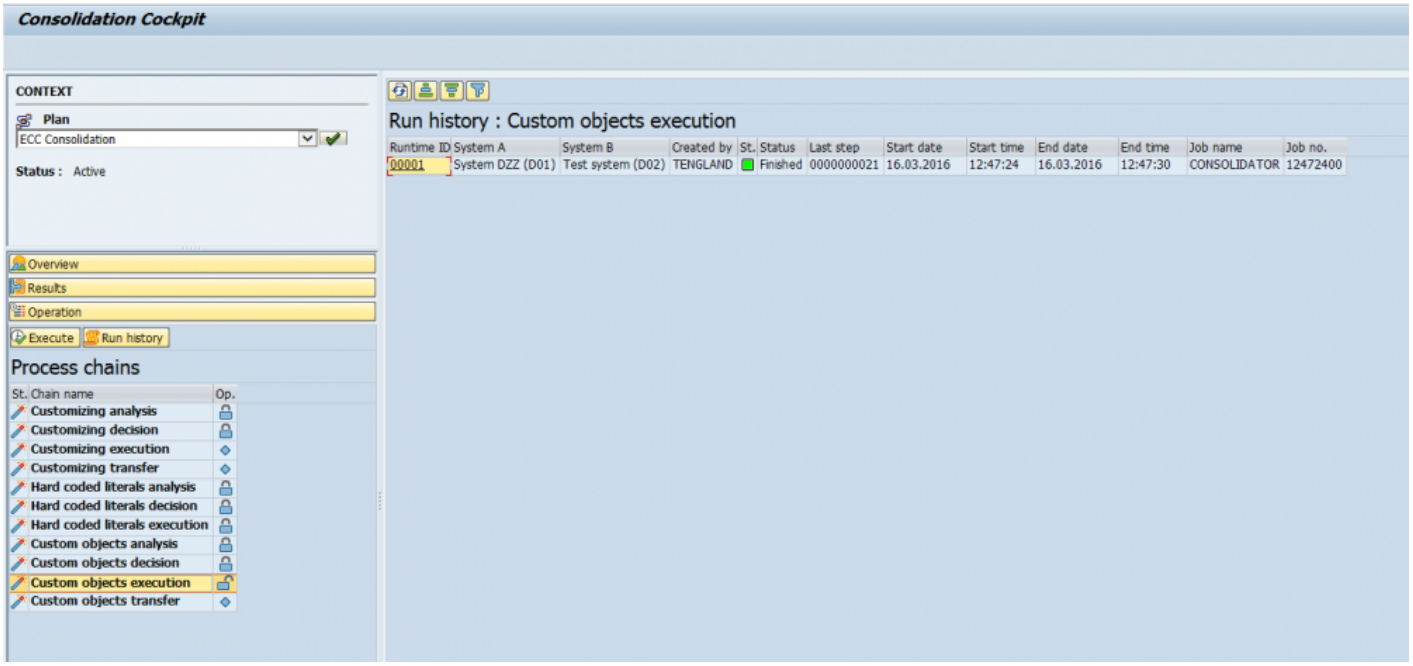
With the execution phase now open go to the ‘Operation’ drawer and select the ‘Custom Objects’ phase and press the ‘Execute’ button.



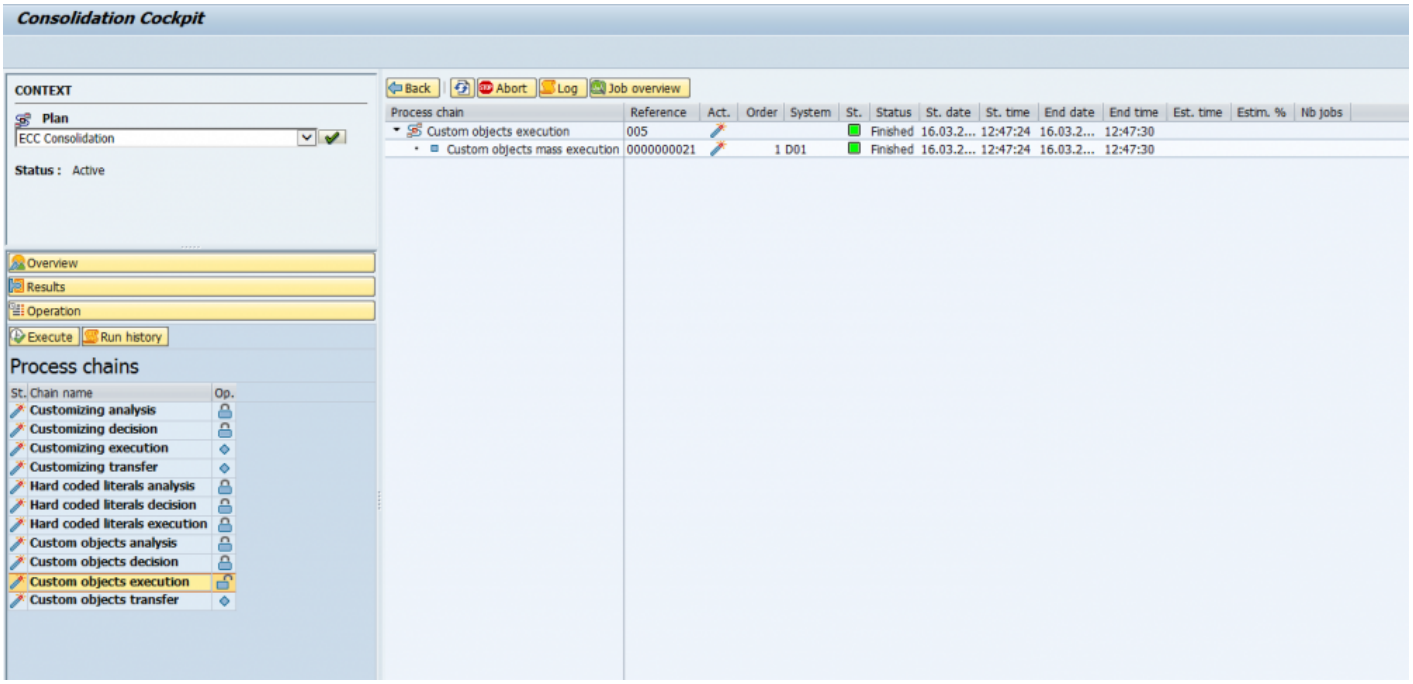
Selecting the execute button again will trigger the programs that are required to run for execution with their default settings, pressing the refresh button will show the progress of the analysis programs running.



To view past runs select the ‘Custom Objects’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.



The full run details are displayed as below, when the jobs have a status of finished when complete, it is ready to progress to the results screen.

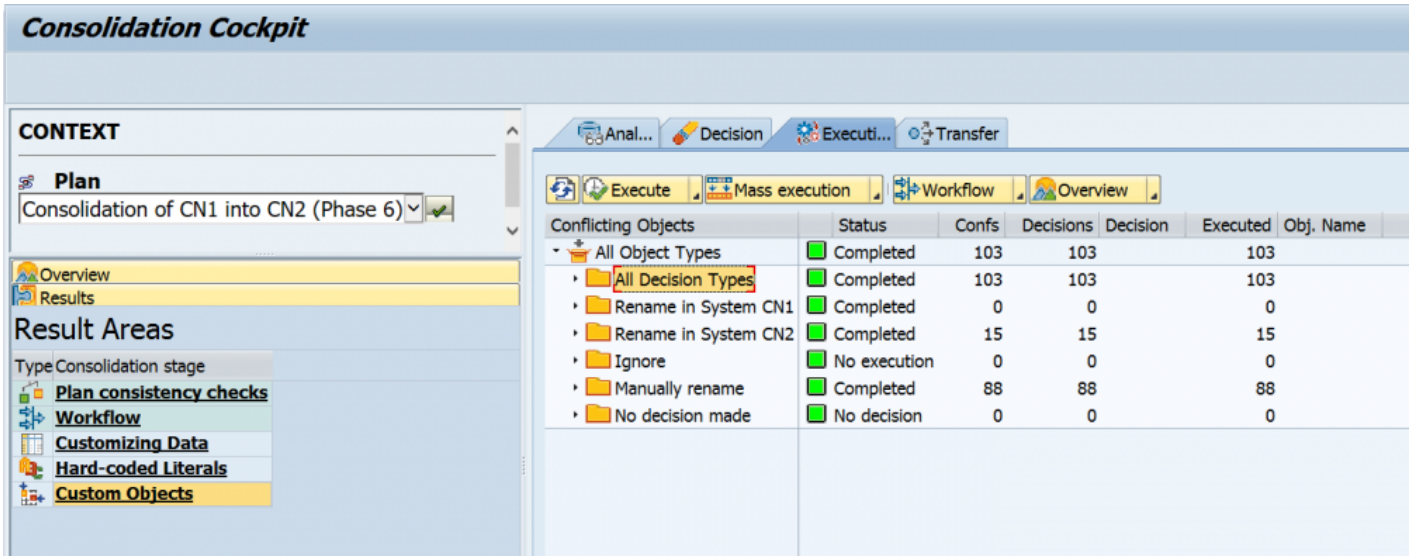


Result

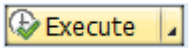
The Execution phase of the Custom Objects stage is where the renaming of objects occurs in the systems selected.

Once the Decision programs have run it is time to view the results, go to the ‘Results’ drawer and select the ‘Custom Objects’ and then navigate to the ‘Execution’ tab.

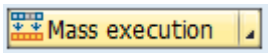
The screen below shows the number of objects grouped by decisions.



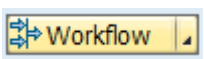
The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Execution’ button 

allows the user to run the programs for this phase individually, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Mass Execution’ button 

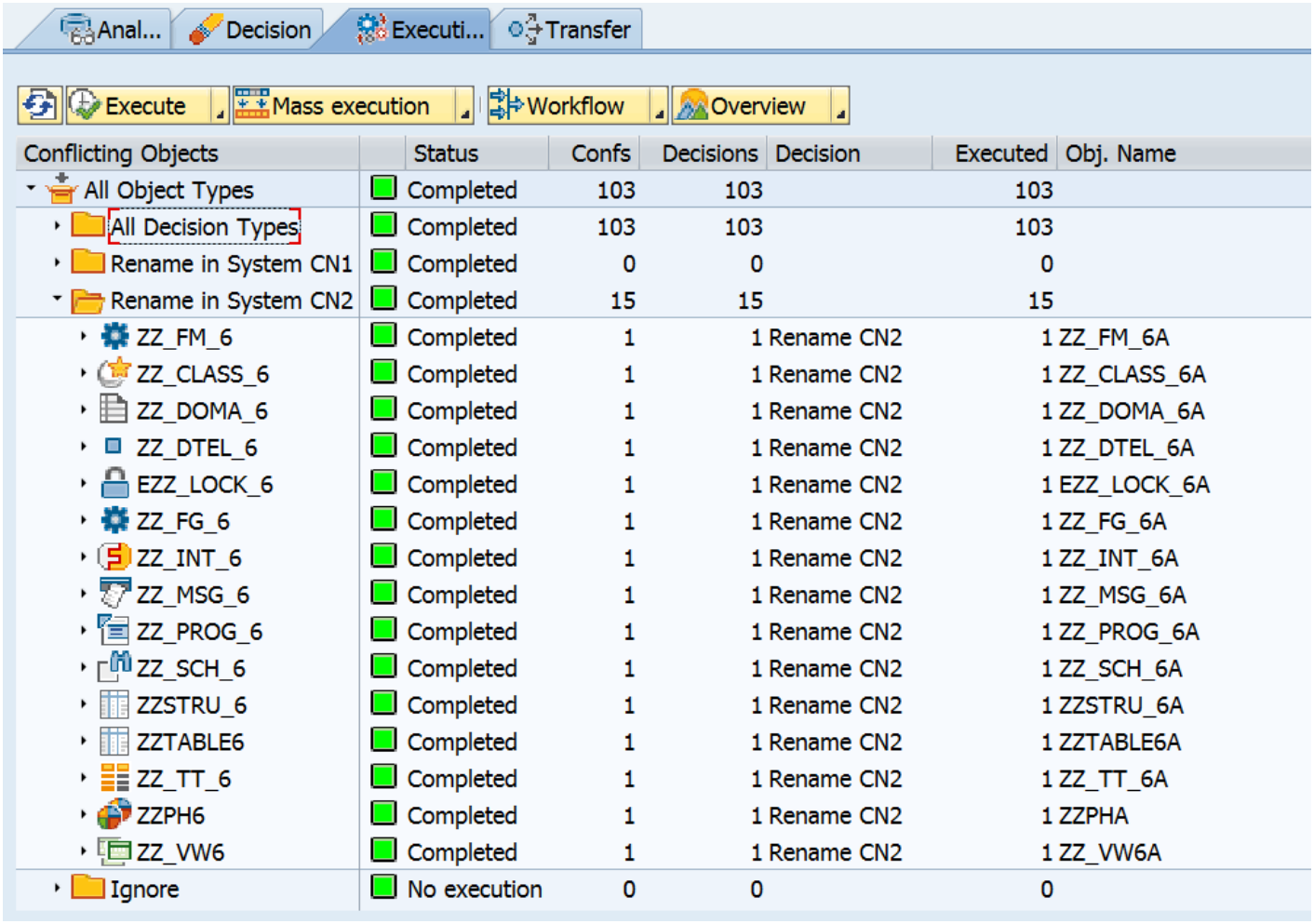
allows the user to run the programs for this phase, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

The ‘Workflow’ button 

allows the user to open and close this phase.

The ‘Overview’ button  allows the user to view the reports for this phase, see the Reporting section for more details.

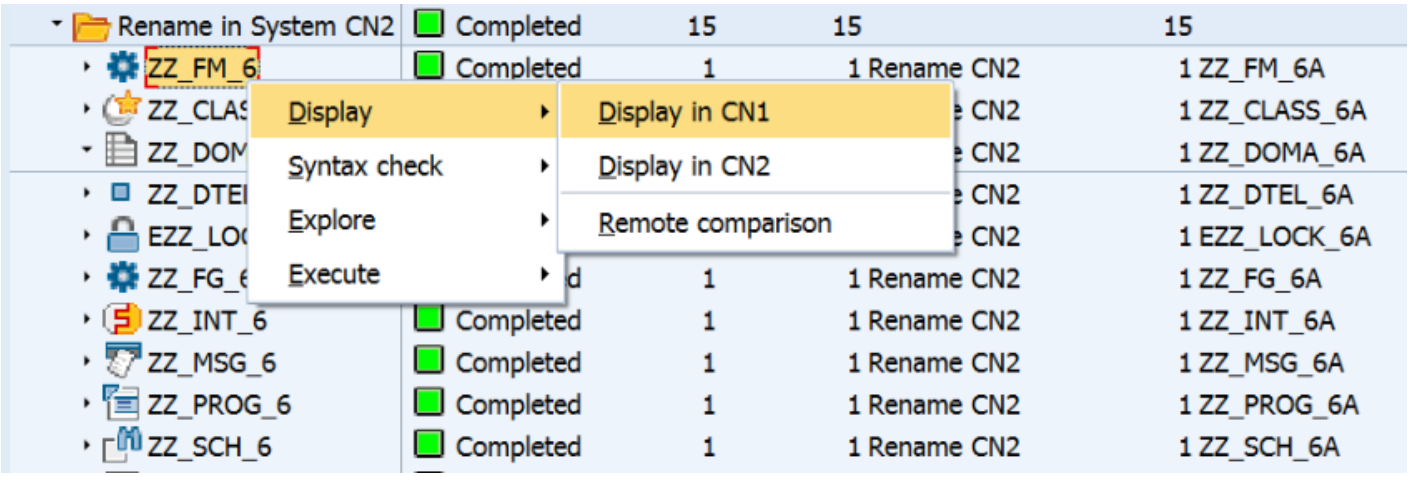
On the custom objects screen below, opening up ‘Rename in System CN2’ details of the objects renamed including the old name and new name, there are also a number of options for the status after everything is executed any failures should be investigated.



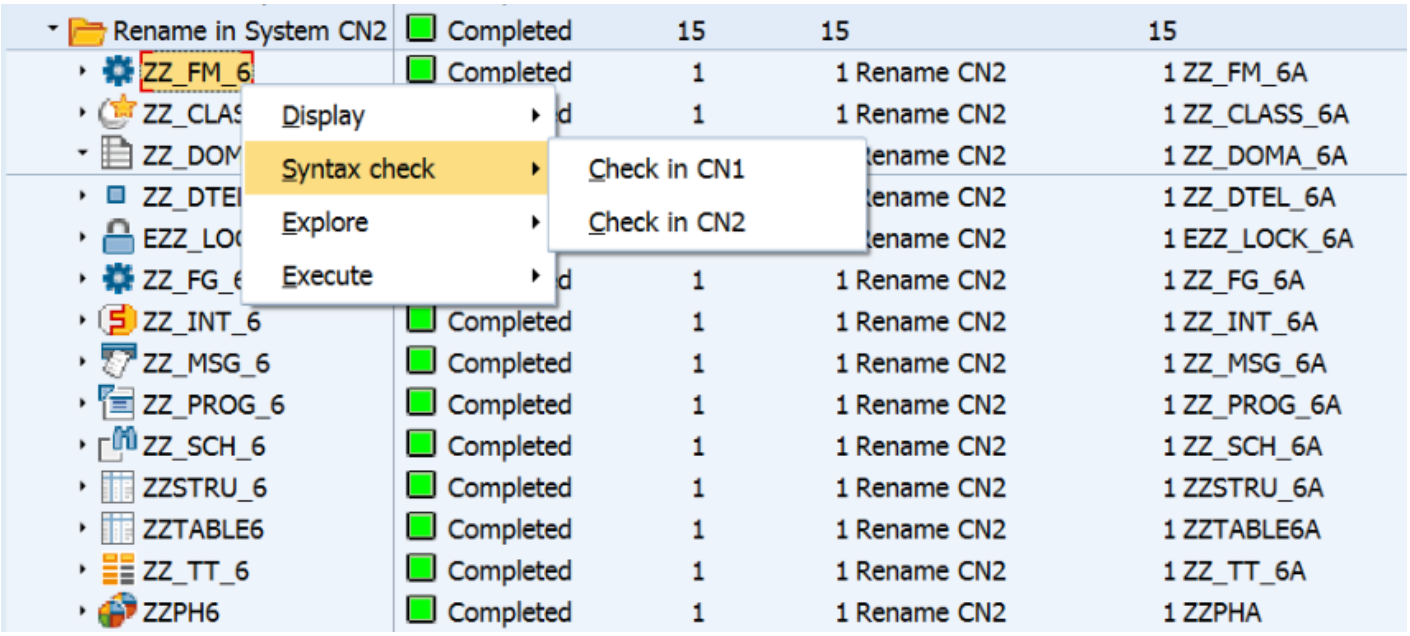
Conflicting Objects	Status	Confs	Decisions	Decision	Executed	Obj. Name
All Object Types	Completed	103	103		103	
All Decision Types	Completed	103	103		103	
Rename in System CN1	Completed	0	0		0	
Rename in System CN2	Completed	15	15		15	
ZZ_FM_6	Completed	1	1	Rename CN2	1	ZZ_FM_6A
ZZ_CLASS_6	Completed	1	1	Rename CN2	1	ZZ_CLASS_6A
ZZ_DOMA_6	Completed	1	1	Rename CN2	1	ZZ_DOMA_6A
ZZ_DTEL_6	Completed	1	1	Rename CN2	1	ZZ_DTEL_6A
EZZ_LOCK_6	Completed	1	1	Rename CN2	1	EZZ_LOCK_6A
ZZ_FG_6	Completed	1	1	Rename CN2	1	ZZ_FG_6A
ZZ_INT_6	Completed	1	1	Rename CN2	1	ZZ_INT_6A
ZZ_MSG_6	Completed	1	1	Rename CN2	1	ZZ_MSG_6A
ZZ_PROG_6	Completed	1	1	Rename CN2	1	ZZ_PROG_6A
ZZ_SCH_6	Completed	1	1	Rename CN2	1	ZZ_SCH_6A
ZZSTRU_6	Completed	1	1	Rename CN2	1	ZZSTRU_6A
ZZTABLE6	Completed	1	1	Rename CN2	1	ZZTABLE6A
ZZ_TT_6	Completed	1	1	Rename CN2	1	ZZ_TT_6A
ZZPH6	Completed	1	1	Rename CN2	1	ZZPHA
ZZ_VW6	Completed	1	1	Rename CN2	1	ZZ_VW6A
Ignore	No execution	0	0		0	

There are a number of options when using the right mouse click on objects.

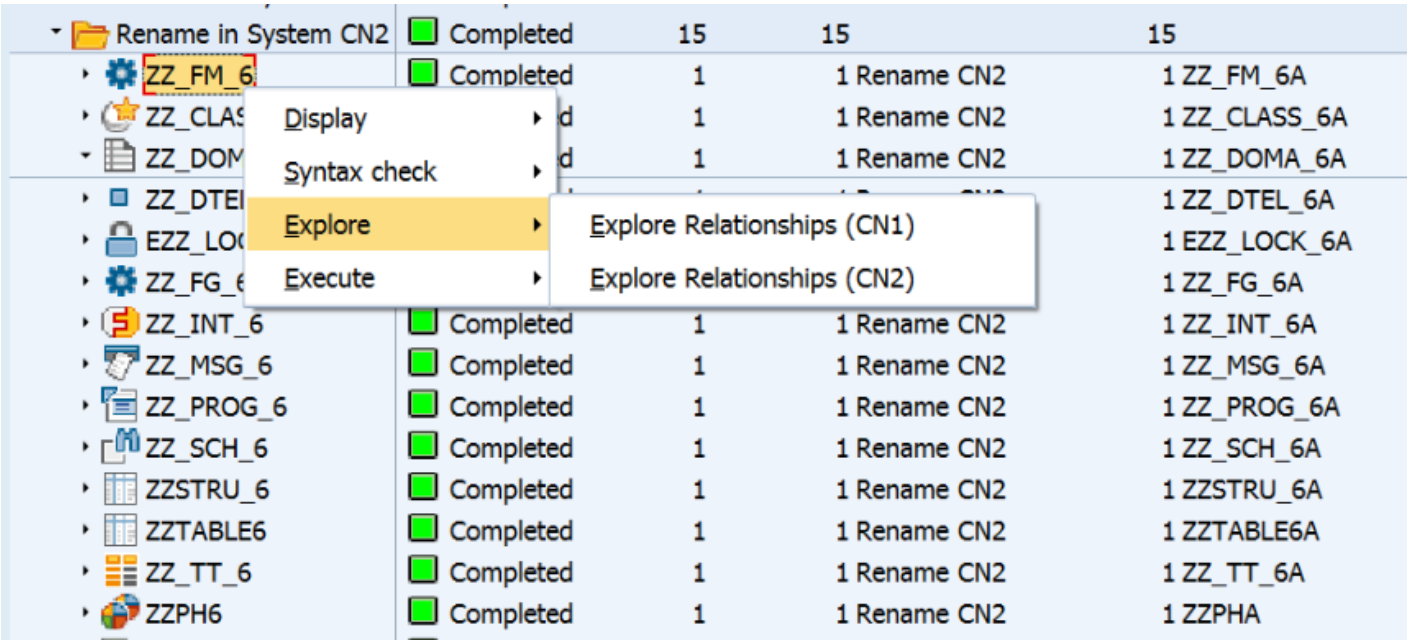
Firstly ‘Display’ lets you simply display the objects in the respective systems and perform remote comparisons.



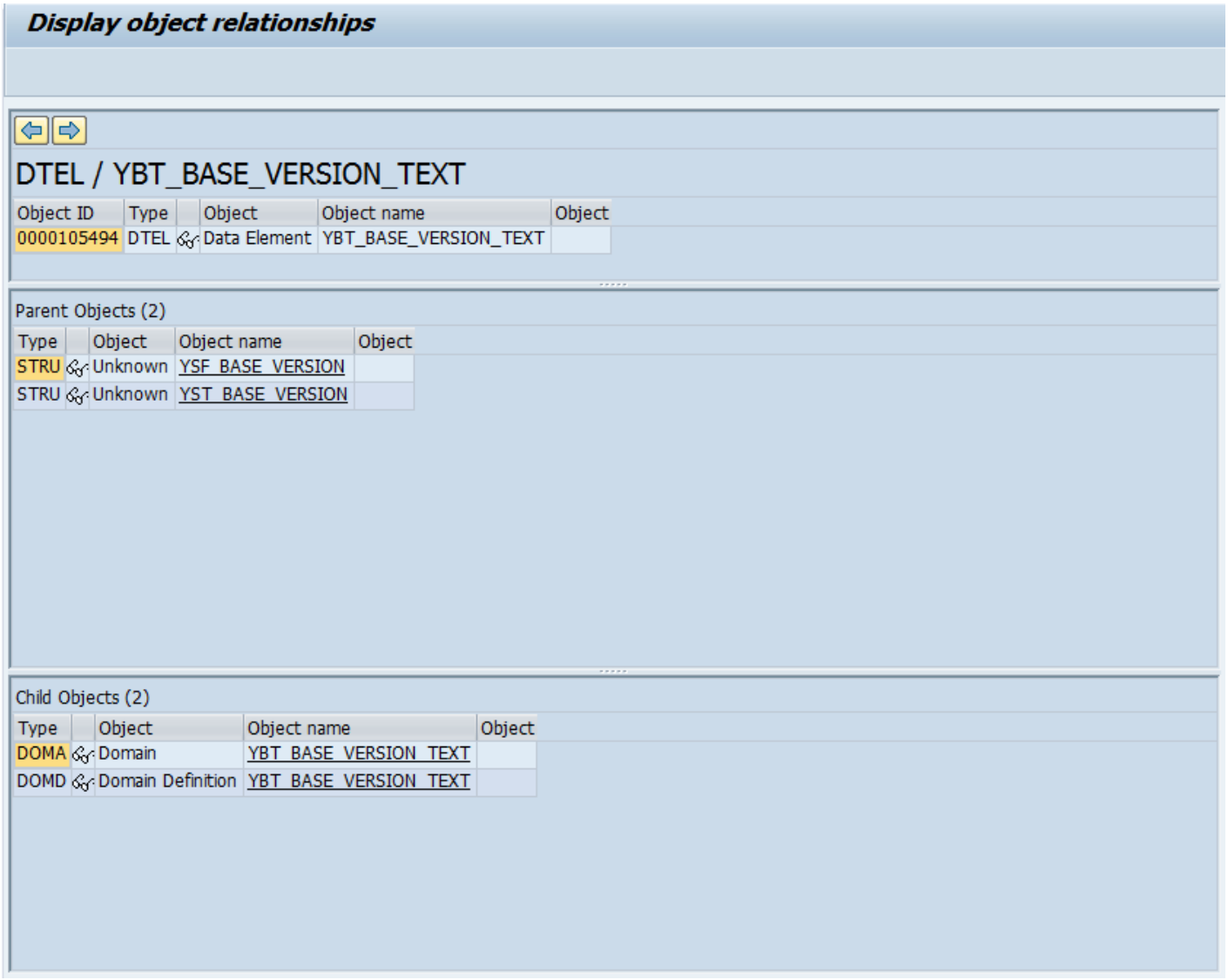
Secondly running a syntax check in the respective systems.



Thirdly ‘Explore’ this allows you to explore the relationship between objects in their respective systems.



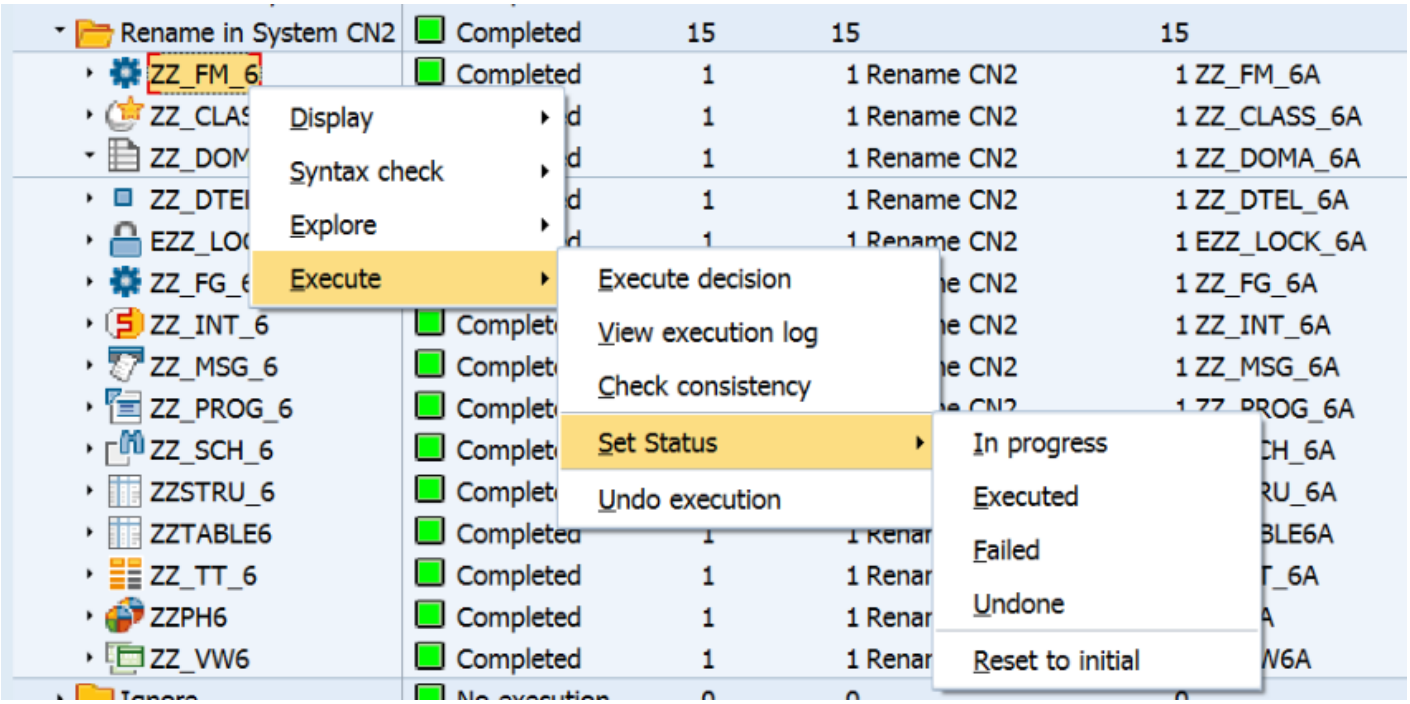
Below the screen shows the parent and child relationships that this data element has.



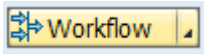
Finally ‘Execute’ has the option to execute the decision to one individual object, view the execution log to check the changes, check the consistency of the object, change the status of the object (options below) or undo a execution.

Status Options

- In Progress – Execution is taking place
- Executed – Status is updated to ‘Complete’
- Failed – Change the status to ‘Error’
- Undone – Changes the status to ‘Undone’
- Reset to Original – Changes the status to ‘Execution Pending’



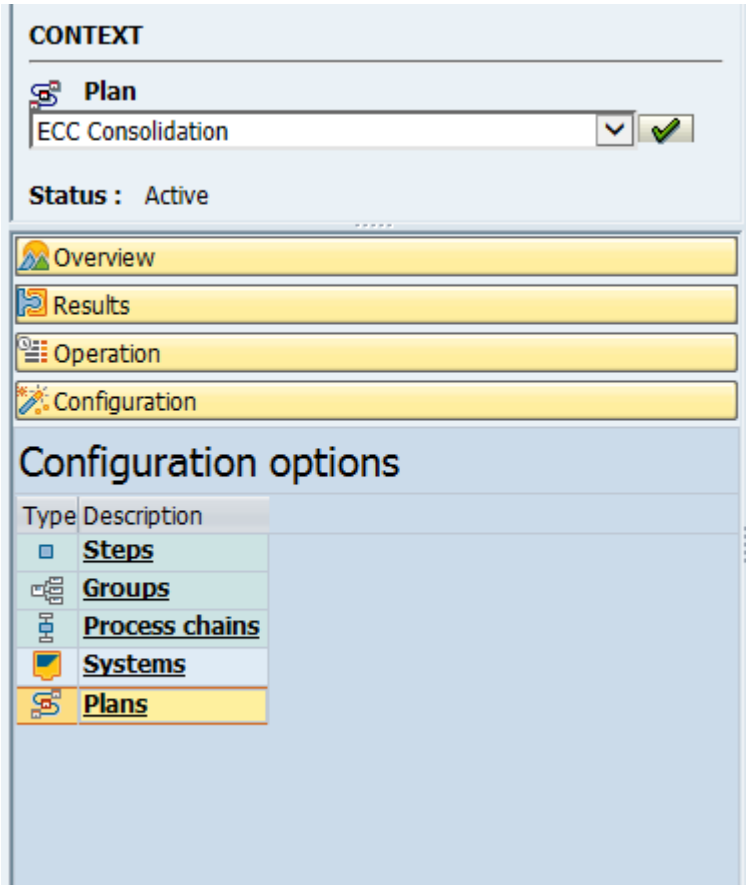
> * To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button  and select close phase. Continue to the next phase Transfer Phase

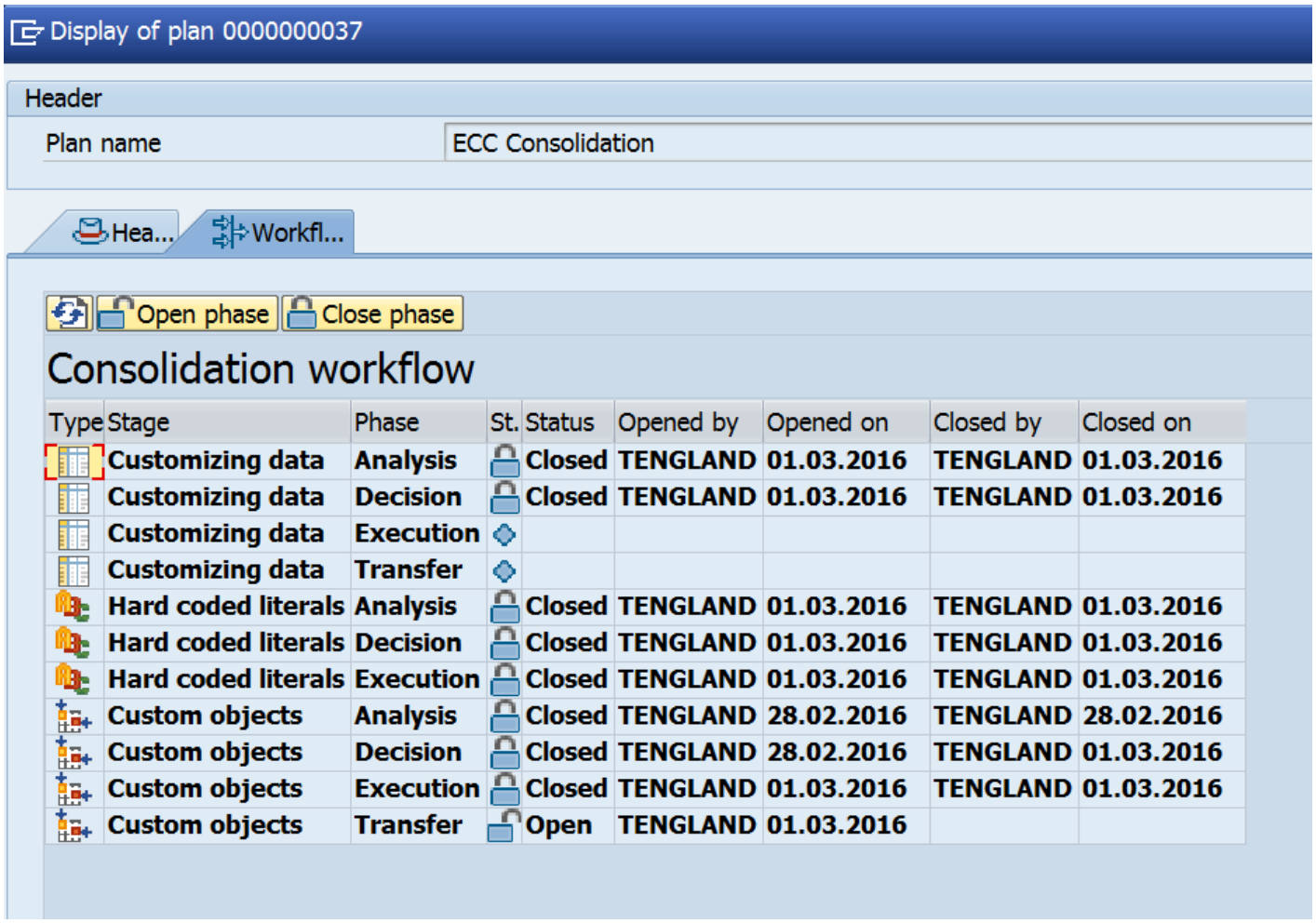
Transfer Phase

Operation

The first task is to open the transfer phase go to the ‘Configuration’ drawer and open the ‘Plans’ and then open the workflow tab.

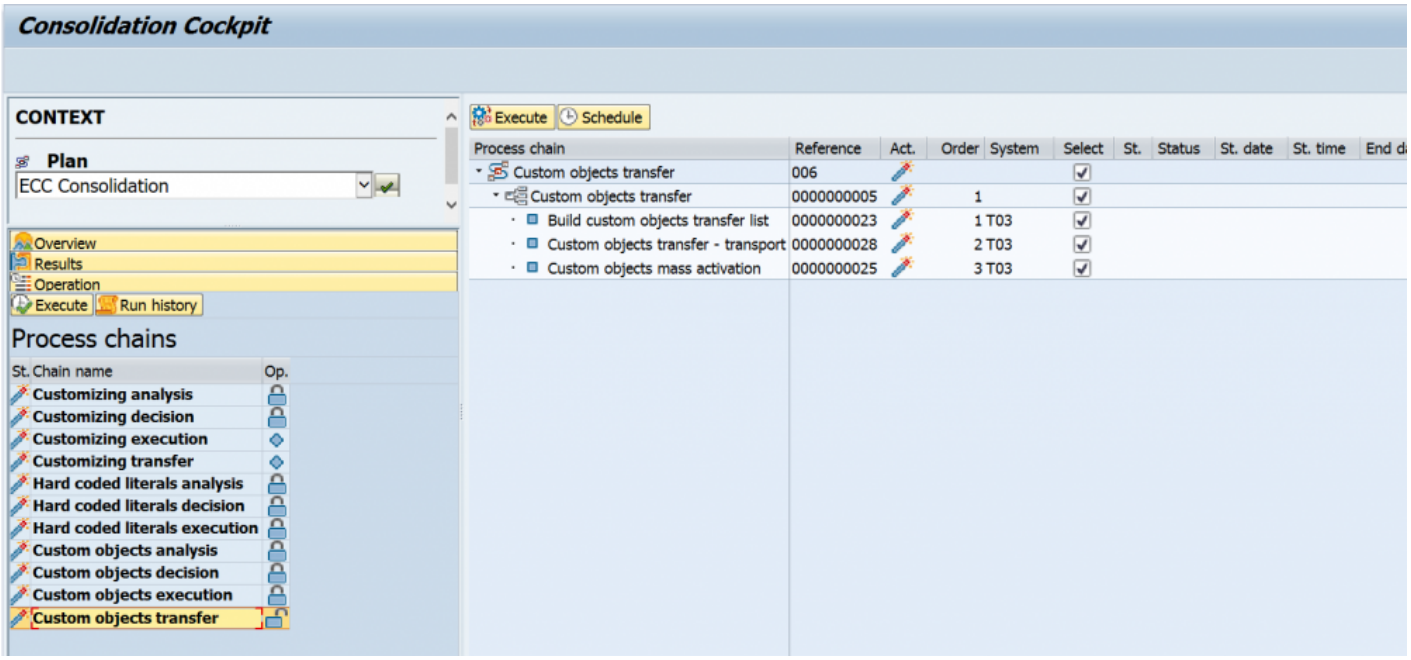


In the workflow tab select the stage ‘Custom Objects’ phase ‘Transfer’ and press the ‘Open Phase button. The phase is now open for operations.

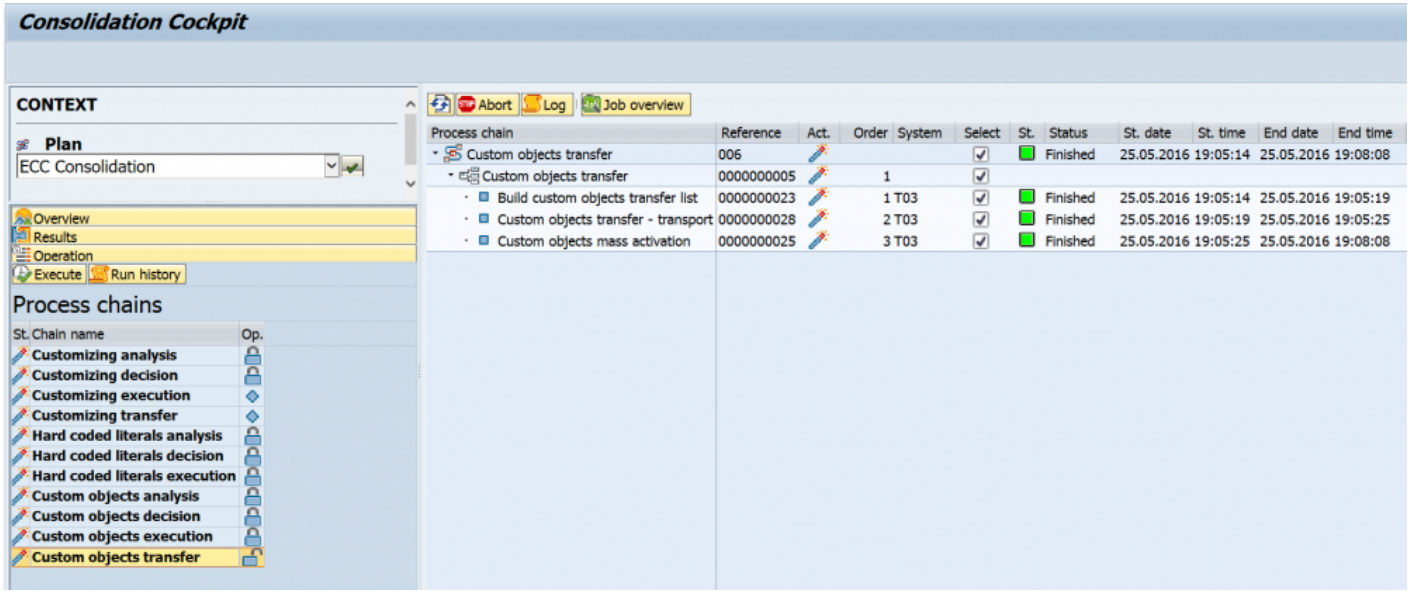


Type	Stage	Phase	St.	Status	Opened by	Opened on	Closed by	Closed on
	Customizing data	Analysis		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Customizing data	Decision		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Customizing data	Execution						
	Customizing data	Transfer						
	Hard coded literals	Analysis		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Hard coded literals	Decision		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Hard coded literals	Execution		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Custom objects	Analysis		Closed	TENGLAND	28.02.2016	TENGLAND	28.02.2016
	Custom objects	Decision		Closed	TENGLAND	28.02.2016	TENGLAND	01.03.2016
	Custom objects	Execution		Closed	TENGLAND	01.03.2016	TENGLAND	01.03.2016
	Custom objects	Transfer		Open	TENGLAND	01.03.2016		

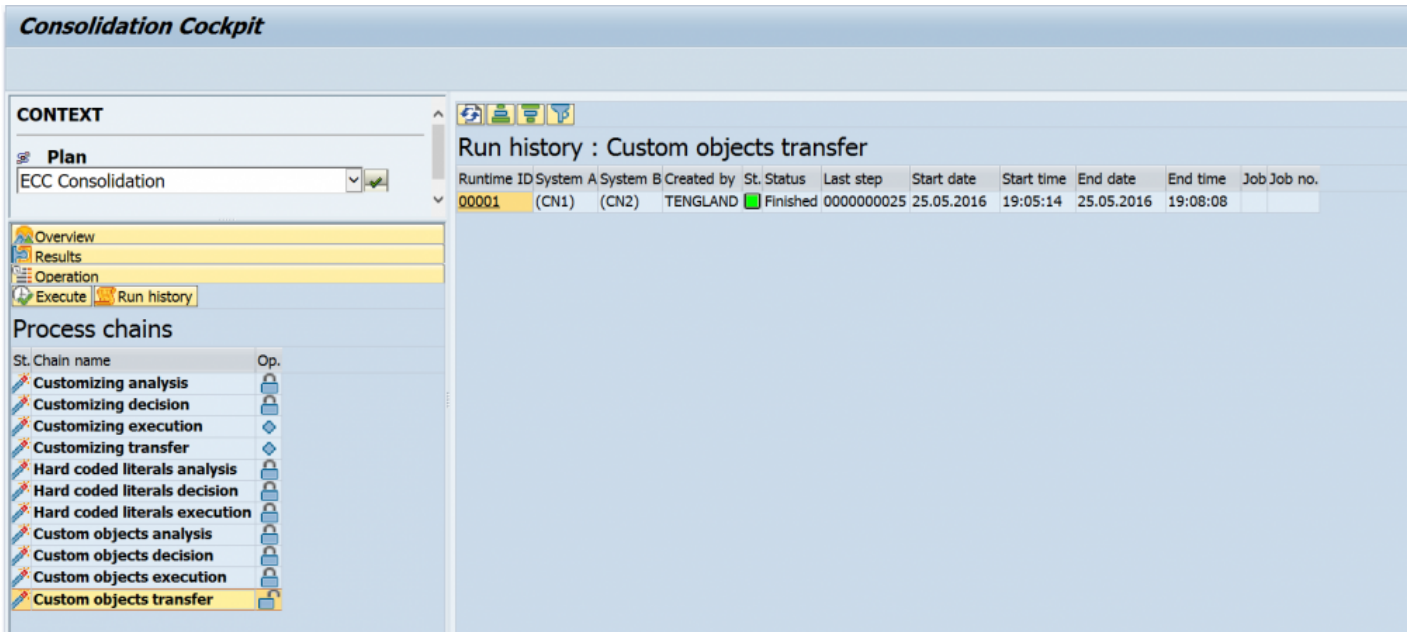
With the transfer phase now open go to the ‘Operation’ drawer and select the ‘Custom Objects Transfer’ phase and press the ‘Execute’ button.



Selecting the execute button again will trigger the programs that are required to run for the transfer with their default settings, pressing the refresh button will show the progress of the analysis programs running. When the jobs have a status of finished when complete, it is ready to progress to the results screen.



To view past runs select the ‘Custom Objects’ and press the ‘Run History’ button, all runs will then be displayed. To view the full details of the run press the Runtime ID hotspot, in this case ‘00001’.

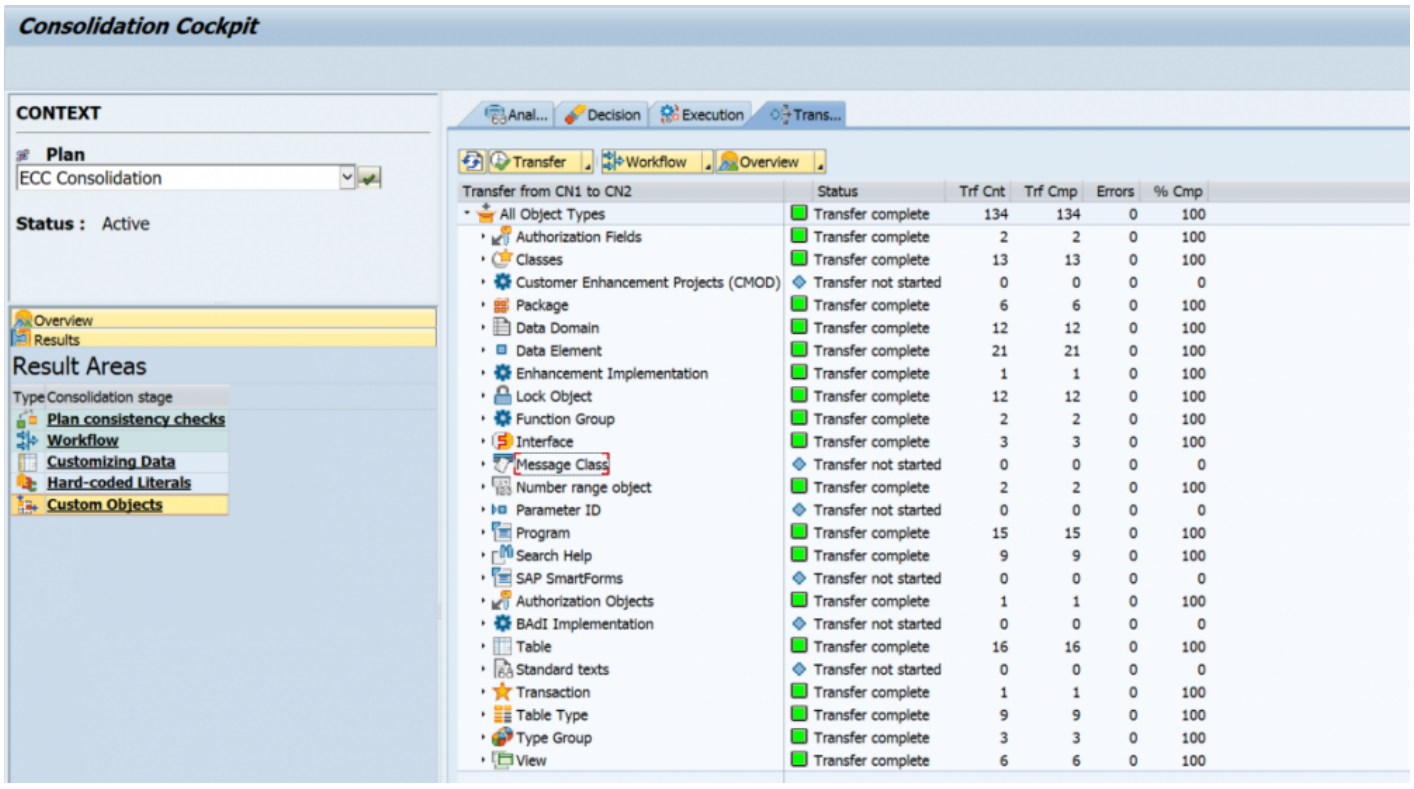

Consolidation Cockpit
CONTEXT
Plan
ECC Consolidation
Overview
Results
Operation
Execute
Run history
Process chains
St. Chain name Op.
Customizing analysis
Customizing decision
Customizing execution
Customizing transfer
Hard coded literals analysis
Hard coded literals decision
Hard coded literals execution
Custom objects analysis
Custom objects decision
Custom objects execution
Custom objects transfer
Run history : Custom objects transfer
Runtime ID System A System B Created by St. Status Last step Start date Start time End date End time Job Job no.
00001 (CN1) (CN2) TENGLAND Finished 0000000025 25.05.2016 19:05:14 25.05.2016 19:08:08

Result

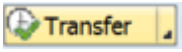
The Transfer phase of the Custom Objects stage is where the transport of changes to the target system occurs.

Once the Transfer programs have run it is time to view the results, go to the ‘Results’ drawer and select the ‘Custom Objects’ and then navigate to the ‘Transfer’ tab.

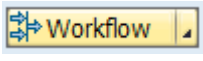
The screen below shows the Custom Objects grouped by object type with the numbers of objects in each type, the percentage that have been transferred and any errors.



The buttons on this screen operate by clicking the right hand down arrow  details on what each button does are as below.

The ‘Transfer’ button 

allows the user to transfer the changes, however, it is recommended the user does not use this and completes this through the operation drawer as this adds greater clarity.

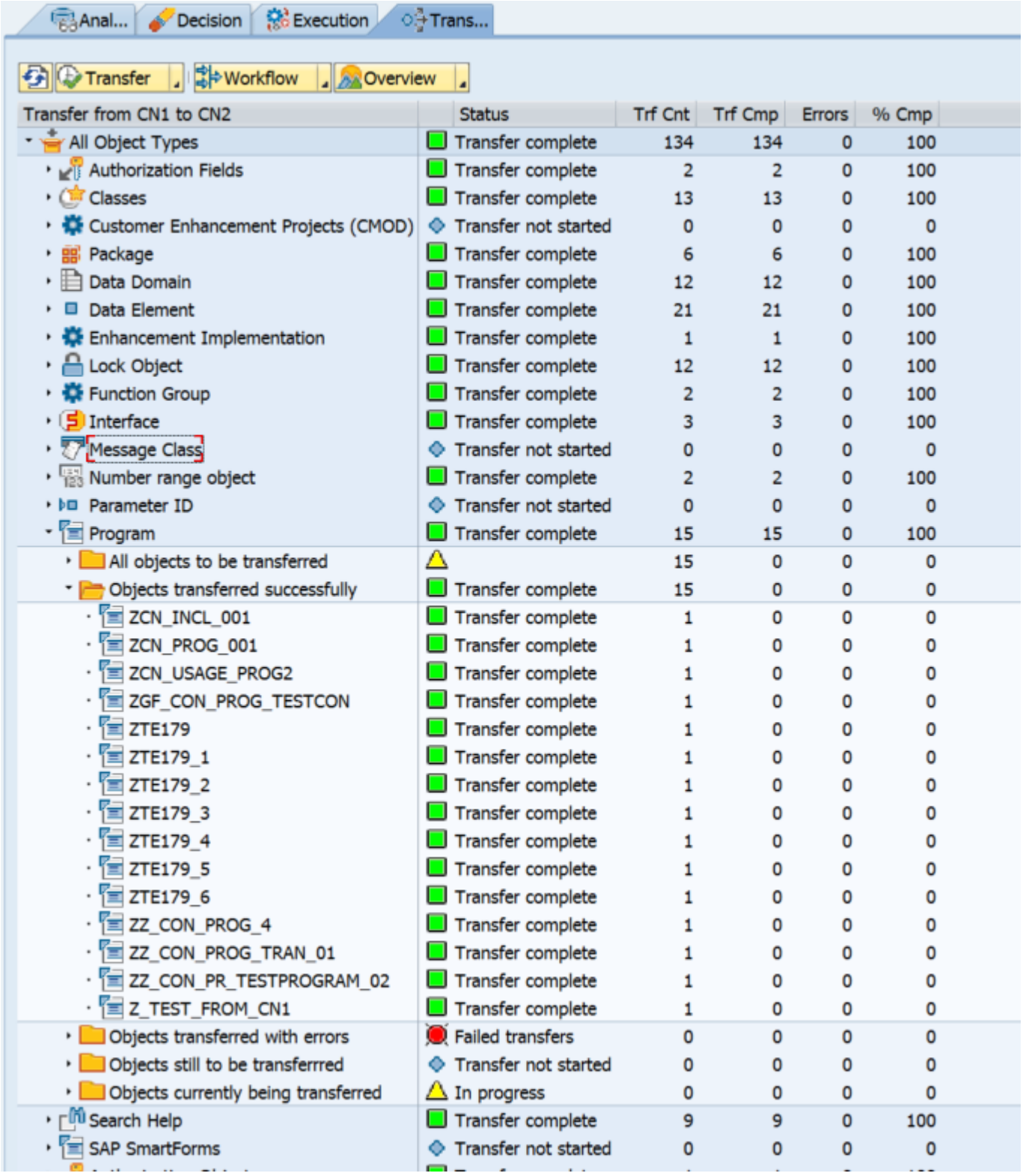
The ‘Workflow’ button 

allows the user to open and close this phase.

The ‘Overview’ button 

allows the user to view the reports for this phase, see the Reporting section for more details.

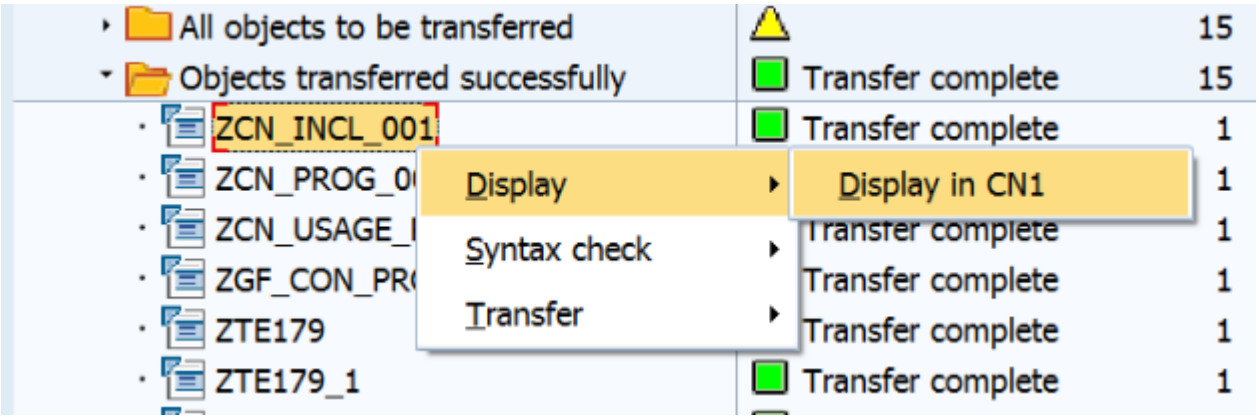
On the custom objects screen below, opening up an Object Type provides groupings based on the status of the objects, effectively if errors are found or the transfers are not complete then you can quickly find these objects via the status.



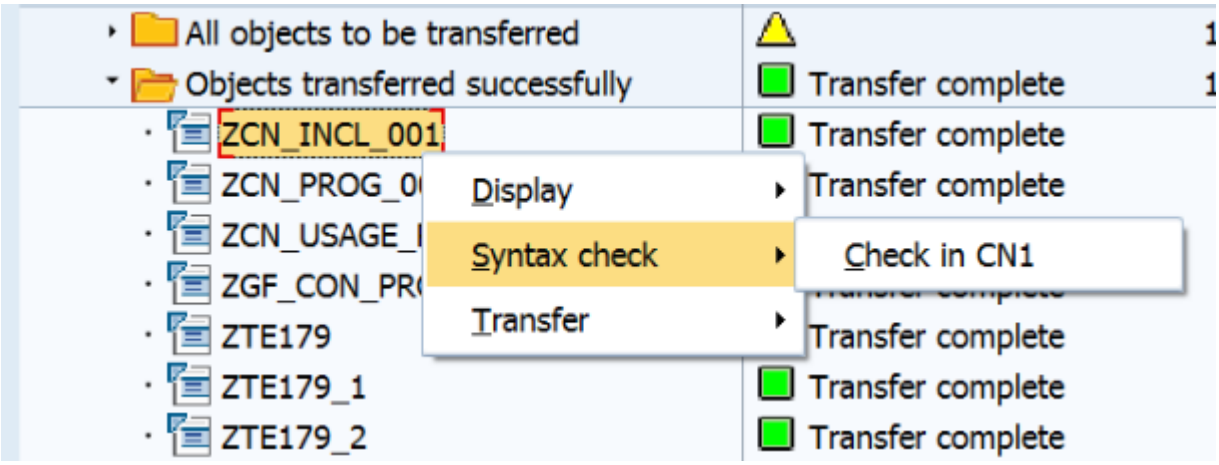
Transfer from CN1 to CN2	Status	Trf Cnt	Trf Cmp	Errors	% Cmp
All Object Types	Transfer complete	134	134	0	100
Authorization Fields	Transfer complete	2	2	0	100
Classes	Transfer complete	13	13	0	100
Customer Enhancement Projects (CMOD)	Transfer not started	0	0	0	0
Package	Transfer complete	6	6	0	100
Data Domain	Transfer complete	12	12	0	100
Data Element	Transfer complete	21	21	0	100
Enhancement Implementation	Transfer complete	1	1	0	100
Lock Object	Transfer complete	12	12	0	100
Function Group	Transfer complete	2	2	0	100
Interface	Transfer complete	3	3	0	100
Message Class	Transfer not started	0	0	0	0
Number range object	Transfer complete	2	2	0	100
Parameter ID	Transfer not started	0	0	0	0
Program	Transfer complete	15	15	0	100
All objects to be transferred		15	0	0	0
Objects transferred successfully	Transfer complete	15	0	0	0
ZCN_INCL_001	Transfer complete	1	0	0	0
ZCN_PROG_001	Transfer complete	1	0	0	0
ZCN_USAGE_PROG2	Transfer complete	1	0	0	0
ZGF_CON_PROG_TESTCON	Transfer complete	1	0	0	0
ZTE179	Transfer complete	1	0	0	0
ZTE179_1	Transfer complete	1	0	0	0
ZTE179_2	Transfer complete	1	0	0	0
ZTE179_3	Transfer complete	1	0	0	0
ZTE179_4	Transfer complete	1	0	0	0
ZTE179_5	Transfer complete	1	0	0	0
ZTE179_6	Transfer complete	1	0	0	0
ZZ_CON_PROG_4	Transfer complete	1	0	0	0
ZZ_CON_PROG_TRAN_01	Transfer complete	1	0	0	0
ZZ_CON_PR_TESTPROGRAM_02	Transfer complete	1	0	0	0
Z_TEST_FROM_CN1	Transfer complete	1	0	0	0
Objects transferred with errors	Failed transfers	0	0	0	0
Objects still to be transferrred	Transfer not started	0	0	0	0
Objects currently being transferred	In progress	0	0	0	0
Search Help	Transfer complete	9	9	0	100
SAP SmartForms	Transfer not started	0	0	0	0

There are a number of options when using the right mouse click on objects.

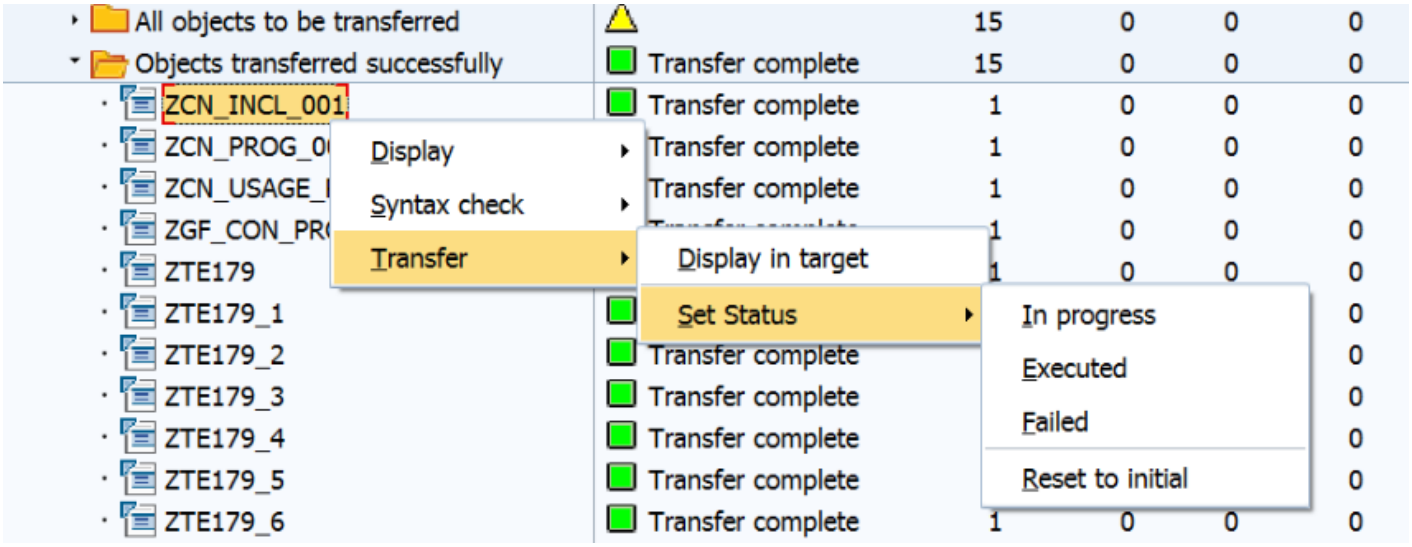
Firstly ‘Display’ lets you simply display the object.



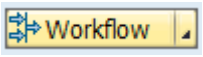
Secondly ‘Syntax Check’ this allows you to run a syntax check on the object.



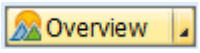
Thirdly ‘Transfer’ lets you display the object in the target and update the status if required.



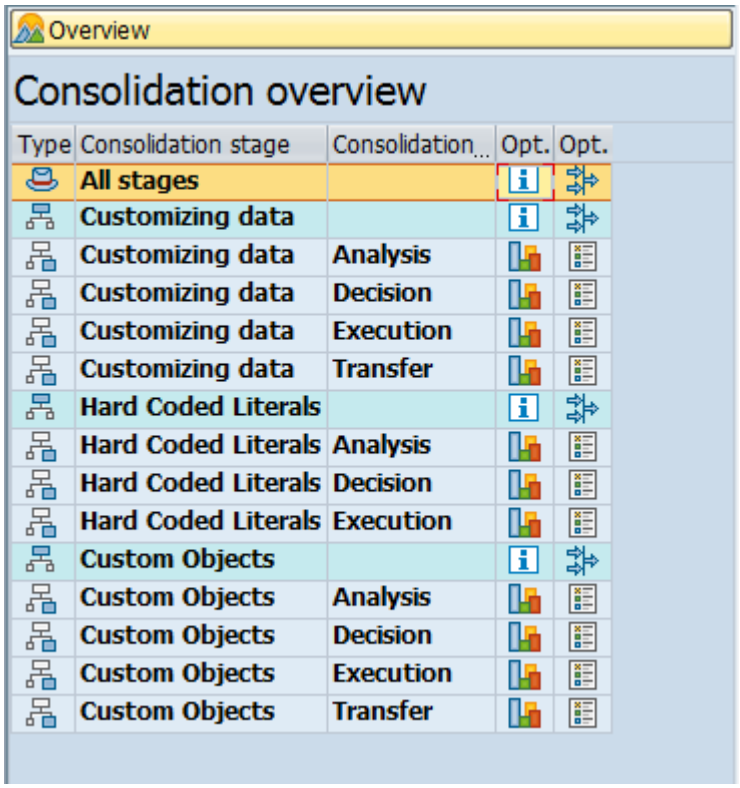
> * To keep the phases in order once you close a phase it cannot be reopened

When you are certain you are ready to close the phase use the  option on the ‘Workflow’ button  and select close phase.

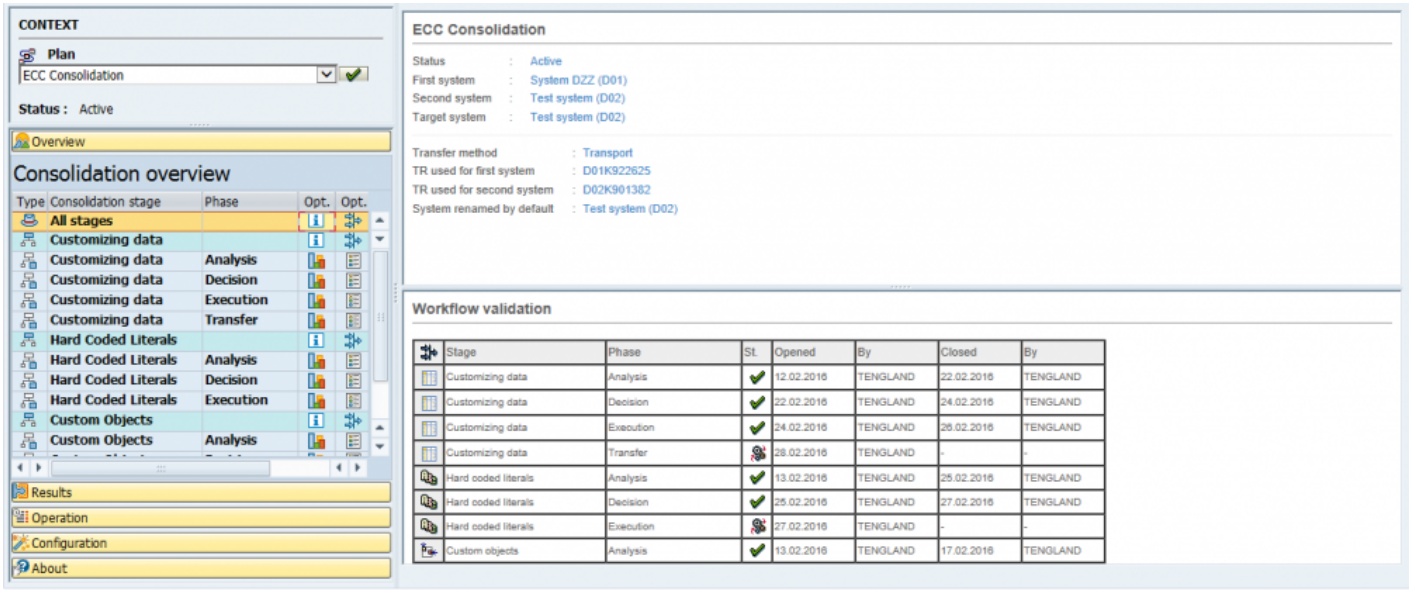
Reporting

Reporting is held in the ‘Overview’ drawer as below, this involves a number of reports for each phase with high level overview reports for each stage and all stages. The same specific reports can also be viewed via the ‘Results’ tabs for each phase with the ‘Overview’ button 

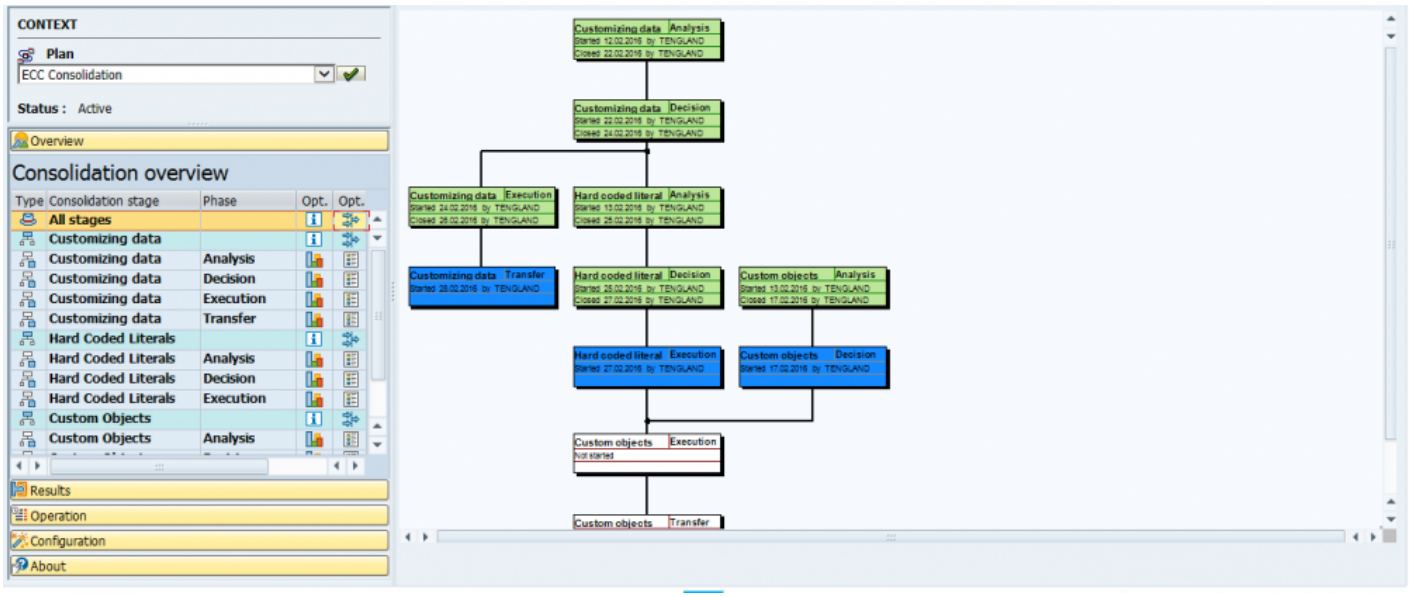
allowing users to view the reports for that specific phase.



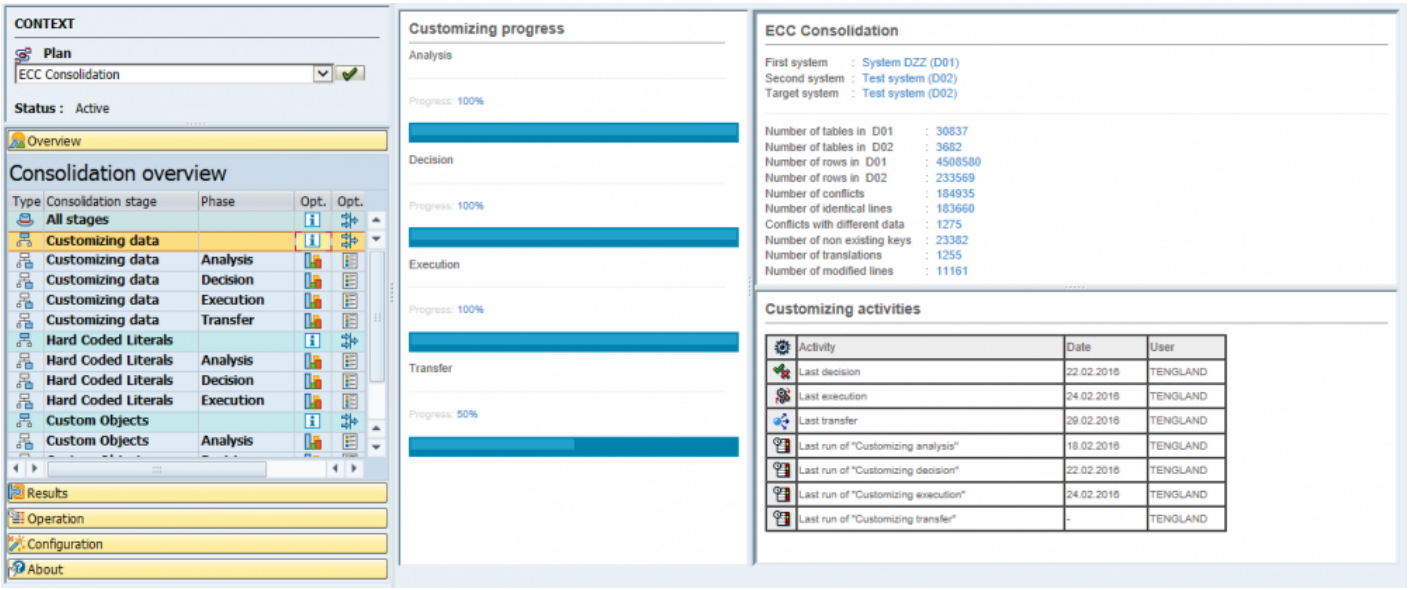
The ‘All stages’ information button  can be used to gain an overview of all the stages in the plan.



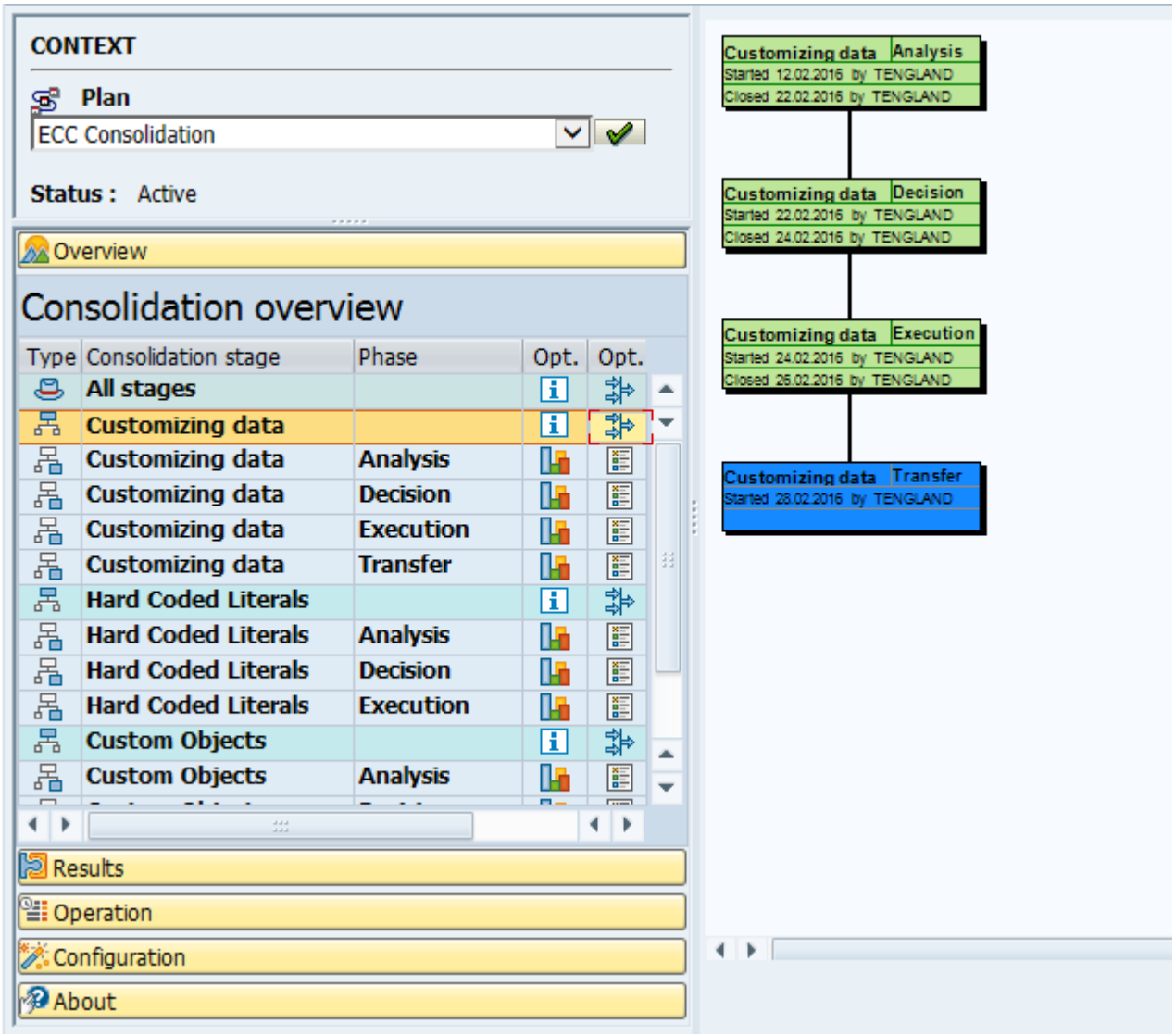
The ‘All stages’ relationships button  can be used to gain an overview of all the stages their links and open and closed timings in the plan.



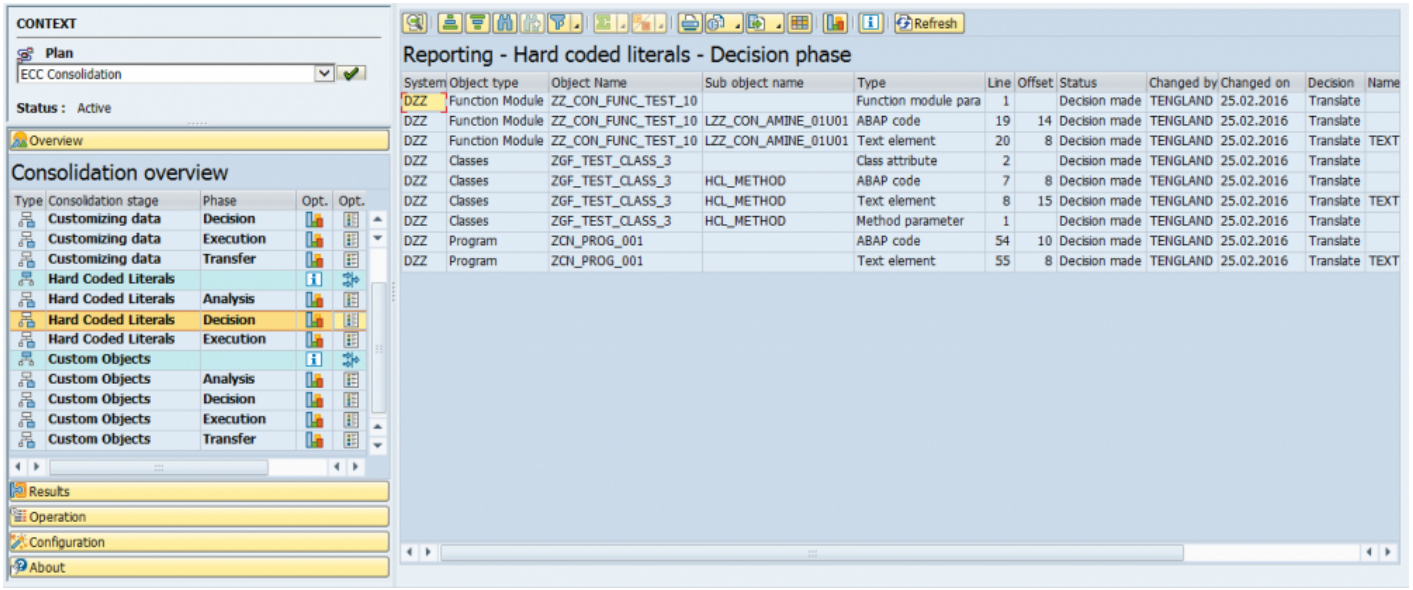
The ‘Customizing Data’ information button  can be used to gain an overview of the whole ‘Customizing Data’ stage in the plan. This works in the same way for the other stages.



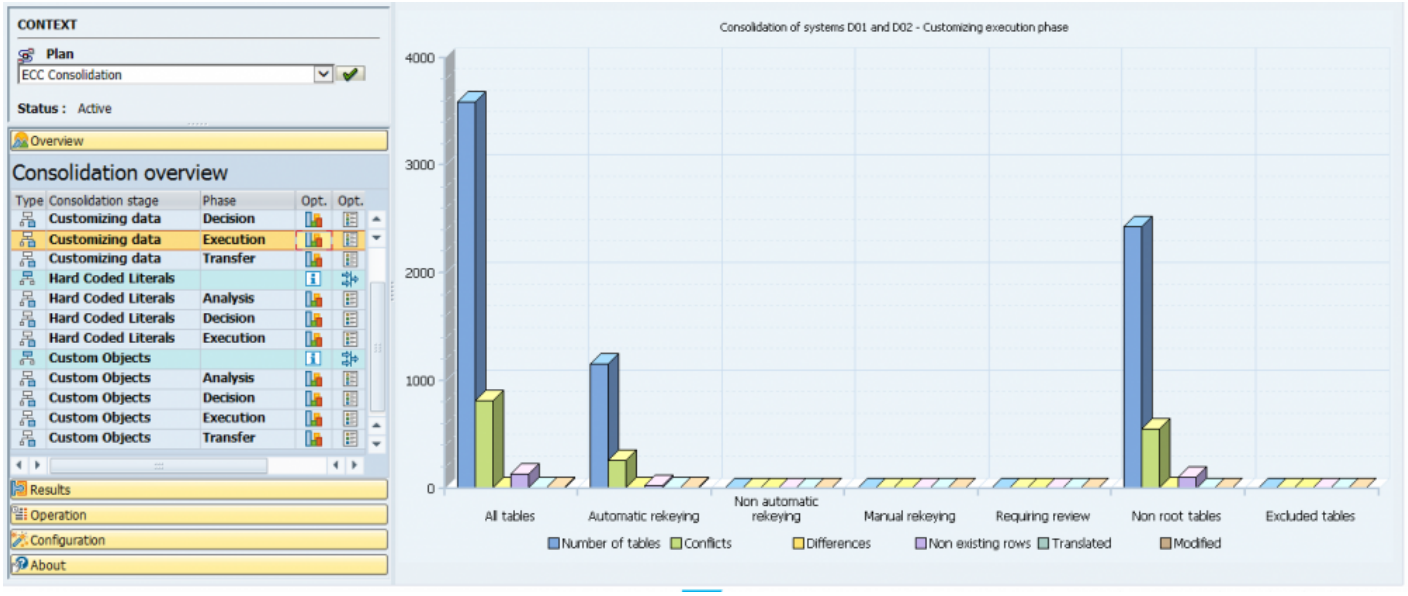
The ‘Customizing Data’ relationships button  can be used to gain an overview of the whole ‘Customizing Data’ stage the links and open and closed timings in the plan. This works in the same way for the other stages.



The ‘Hard Code Literals’ details button  can be used to see the line by line detail of the ‘Hard Code Literals’ ‘Decision’ phase. The detail reports work in the same way for the other stages.



The ‘Customizing Data’ graph button  can be used to gain a graphical view of the ‘Customizing Data’ ‘Execution’ phase. This works in the same way for the other stages.



Support from Basis Technologies

Raising Support Tickets

To request support from Basis Technologies on any issue relating to our product sets (Transport Expresso, DevOps, Diffuser or Utilities) , a ticket should be raised via the following email address:

support@basistechnologies.com

Sending an email to this address will automatically create a ticket in Zendesk, the ticketing tool used by Basis Technologies.

Please include as much information as possible about the issue (product, version, error messages, steps to replicate, screenshot attachments) in the email. In addition, please also include your own contact details in your email.

Please reflect any high priority issues by including URGENT or HIGH PRIORITY at the start of the email subject.

Support Escalation

If you have any concerns with the service you are getting from Basis Technologies support, or wish to escalate any high priority issues please email **supportescalation@basistechnologies.com**

Require additional Information or Services?

If additional information or services relating to any of Basis Technologies product sets is required, you can contact us via the above support@basistechnologies.com address, or alternatively by contacting your assigned Basis Technologies Account Director.