

# Reverse Business Engineer



HELP.SVASARBE

**Release 4.6C**



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	Recommendation
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## Reverse Business Engineer

### Purpose

The Reverse Business Engineer (RBE™) is an offline tool that was developed in association with IBIS Prof. Thome GmbH to enable you to analyze whether and how business processes implemented in a live SAP R/3 system are currently used. The analysis operates on the basis of test rules that dictate what transaction, configuration, and master data are to be analyzed and how. The results of a completed RBE™ analysis can then be evaluated to identify areas where there is room for improvement in business process use in the R/3 system in question.

RBE™ is a central component of the third phase of ValueSAP: Continuous Business Improvement (CBI). CBI is a methodology that enables you to analyze how the business processes and systems implemented at a company are currently used. The conclusions you draw from this analysis form the basis for subsequent business process reengineering. The RBE™ can therefore assist you in:

- Comparing current process use in the different R/3 installations, clients, and organizational units of a company
- Identifying weak points in business processes
- Preparing for a release upgrade: the R/3 functionality currently in use is displayed in a structure that reflects the latest release (application component hierarchy - process view)
- Documenting an implemented R/3 system: the scope of analysis can be projected onto the Q&Adb, allowing the functionality used to be compared against the project scope defined in the Business Blueprint

By examining the analysis results, an experienced consultant should be able to identify potential for optimizing processes.

### Features

In the RBE™ (or in R/3, using ABAP report programs supplied with the RBE™), you can carry out the following activities:

- Create test rules that dictate what data is to be analyzed and how  
For any given analysis, you can create test rules and assign them to structure items to define how these structure items are to be analyzed. SAP supplies a large pool of standard test rules that you can add to as necessary.
- Extract master and transaction data from a live R/3 system  
The extracted data is written to a text file that is then imported into the RBE™ database. This text file can then form the basis for an analysis in the RBE™.
- Analyze data  
An RBE™ analysis determines which structure items (components, processes, and so on) are currently used and how often they are used. The RBE™ can also analyze specific organizational units on the basis of the users assigned to them.
- Display and evaluate analysis results  
The analysis results for the structure items can be displayed in overview form or in detail. You can also generate flexible reports based either on analyses or directly on data extracts. You can choose between:

- Non-analysis-based reports, which are based directly on data extracts, and
- Analysis-based reports based on single analyses, comparisons of two analyses, and combinations of several analyses
- Transfer data to the ASAP Q&Adb for analysis and comparison  
This functionality allows you to document current business process usage (as determined by an RBE™ analysis) in a chosen Q&Adb or to compare the project scope found by the RBE™ analysis against the scope of the implementation project.

## Constraints

If you are interested in using the RBE™, you need to be aware of the following:

- You can only extract and analyze data from R/3 systems, not from IBU solutions or New Dimension Products.
- You can only extract and analyze data from live R/3 systems with Release 3.0D or higher.
- The tool is currently only available in German and English.

## Installing the RBE™

# Installing the RBE™

## Use

The following describes procedures and hardware and software requirements for installing or upgrading the RBE™.

## Prerequisites

For upgrading the RBE™ or installing it for the first time

To install or upgrade the RBE™ successfully, you require the following hardware and software:

- 150 MB free disk space
- At least 64 MB of RAM
- CPU: at least 233 MHz
- Operating system: NT 4.0 or Windows 95, 98, or 2000
- A Microsoft Office application or the Microsoft Internet Explorer;  
You will be confronted with error messages during the RBE™ installation if you do not already have one of these applications installed. You must ensure that at least the *DCOM95.exe/DCOM98.exe* file is already installed before you start the RBE™ installation.



It is recommended that you also install Microsoft Access 97 or higher, because this significantly reduces runtimes later when you come to importing data extracted from an R/3 system to the RBE™.

For upgrading the RBE™

You must have deinstalled the old version of the RBE™.

It is strongly recommended that you create a backup of your old database and of any existing extract files, as the RBE™ version you are installing will not necessarily be compatible with the version you had before.



If you have created test rules of your own in the Reverse Modeling Engineer, you will have to transfer these to the new database manually.

## Procedure

### Install RBE™

1. Place the installation CD in your CD-ROM drive, go to your CD-ROM directory in the Windows Explorer, and double-click on the *Setup.exe* file.
2. Choose *Next >* to start the installation.
3. Accept the terms of the license agreement.
4. Read the information now displayed and choose *Next >*.

## Installing the RBE™

5. If you wish to install the tool in a different directory from the one now proposed, choose *Browse...* to select the preferred directory. Choose *Next >*.  
The installation is started.
6. A program folder is proposed for the RBE™. You can simply accept this program folder and choose *Next >*.  
You now choose one of the procedures described below, according to whether you want to update the system files now or later.



If your operating system is Windows 2000, you no longer need to update the system files. You can close the installation program and start using the RBE™ immediately.

**Install Microsoft Data Access Components Now**

1. Choose *OK*.
2. Accept the terms of the license agreement.  
The relevant files are extracted.
3. Choose *Continue* to start a search for components that have already been installed.
4. Choose *Complete* to start the setup.  
When the setup is complete, a message informs you that the installation was successful.  
Choose *OK* to confirm the message.
5. Choose *Finish* to close the installation program.

**Install Microsoft Data Access Components Later**

1. Choose *OK*.
2. Specify that you do not wish to accept the terms of the license agreement yet.
3. Choose *Finish* to close the installation program.



Later, when you want to start Microsoft Data Access Setup, go to the directory in which you installed the RBE™, double-click on the *mdac\_typ.exe* file, and follow steps 2-5 of the *Install Microsoft Data Access Components Now* procedure described above.

To start the RBE™, choose *Start → Programs → Reverse Business Engineer*.

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**General Functions**

## General Functions

### Use

There are a number of administrative functions available in the RBE™.

### Features

#### **Change Language**

You can switch between German and English at any time by choosing *Extras* → *Change Language*. You do not need to go back to the initial screen to do this.

#### **Change Database**

You do not have to use the default database *RBE.db1*. You can select another database, which can be located in another directory. To select a different database, choose *File* → *Change Database*.

#### **Compress Database**

This function allows you to improve the performance of a large database by compressing it. Elements that have already been deleted logically are deleted physically and the remaining data is clustered. This reduces the size of the database and improves reaction times. Choose *File* → *Compress Database* to have the tool reorganize the database.

#### **Save Database Under Another Name**

You can save the database you are using in a different directory under another name. To do this, choose *File* → *Save database as*.

## Working with Test Rules

### Purpose

The RBE™ comes complete with predefined test rules for the RBE™ analysis, but you can also define your own test rules. The test rules you define dictate what data will be extracted from the company's live R/3 system and how it will be analyzed in the RBE™.

The stage in the Reverse Business Engineering™ process at which you can define test rules depends on the types of test steps involved:

- You define non-transaction test steps before extracting the company data from R/3, in the [Reverse Modeling Engineer \[Page 12\]](#); This ensures that the test rules for non-transaction data can be taken into account when the RBE ABAP for data extraction is run in R/3, not just later in the RBE™ analysis itself.
- You define transaction test steps after extracting the company data from R/3; The number of times each R/3 transaction was used at the company over a specified period is determined via the Transaction Monitor and written to an extract file, which can then be imported into the RBE™ in the form of a data extract. You cannot define test steps for analyzing company-specific transactions before you have extracted the relevant company data from R/3; you can, however, define test steps for analyzing standard SAP transactions before creating a data extract, if you wish.

If you upgrade the RBE™, you have to copy any test rules you defined in the old database over to the new database manually before you can use them in an analysis. The test rules you defined in the old database can still be viewed using the new RBE™ version, as long as the old and new databases are compatible.

### Process Flow

1. [You create one or more test steps. \[Page 16\]](#)
2. [You create a new test item. \[Page 30\]](#)
3. [You assign the test steps to the test item. \[Page 31\]](#)

### Result

You have created test steps and a test item and assigned them to each other. Depending on whether you created non-transaction or transaction test steps, you can now:

- Extract the R/3 data
- Conduct the RBE™ analysis

**See also:**

[Extracting Data \[Page 32\]](#)

[Analyzing the Data \[Page 49\]](#)

## Working with the Reverse Modeling Engineer

### Use

The Reverse Modeling Engineer (RME) is a tool within the RBE™ that enables you to define the test rules that dictate what R/3 data will be analyzed in the RBE™ analysis and how. Test rules for a given structure item are expressed in the form of a test item, which is a group of test steps that are to be run through for that structure item during the analysis. There are different types of test step for analyzing the following different types of data:

- Master data
- Configuration data (Customizing and movement data)
- Transaction data

Your work in the RME involves defining test steps, grouping them together to form test items, and assigning test items to structure items from the application component hierarchy (process view).

You can use the test rules that are supplied with the RBE™, or you can create your own.

### Integration

The test rules you define here have a direct effect on the type of analysis (transaction analysis or detailed analysis) that you can conduct later.

### Prerequisites

You have chosen *Reverse Modeling Engineer* → *Reverse Modeling Engineer* in the RBE™, you have logged yourself in with your name, and you are on the main *Reverse Modeling Engineer* screen.



You are only asked to identify yourself to the RME once per RBE™ session. The login procedure ensures that any new test steps and test items you create are saved under your name, allowing you to filter out other users' test steps, for example.

### Features

#### The Structure Window

This displays the *R/3 Components – Process View 4.6C* structure, which you can expand right down to the functions level. This window displays similar information to that contained in other structure windows in the RBE™, except that it also shows you whether and, if so, what type of test items have been defined for a given structure item:

ID	Test items assigned to the structure item
[T]	Transaction test items only
[P]	General test items only
[TP]	Transaction test items and general test items

#### FIND

You can search the structure for groups of words, for individual words, for strings, and for strings

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## Working with the Reverse Modeling Engineer

separated by asterisks (wildcard search). To do this, position the cursor on the root node or on the structure item where you want the search to begin, enter your string in the FIND field, and choose FIND. The search starts from the structure item you selected and stops when it has found a match. The search sequence is as follows:

The first structure item at Level x, the level immediately below the structure item you selected, is checked. If this structure item does not match the search string, the search moves on to its subordinate structure items (Levels x+1, x+2, and so on). If no match is found with any of the structure items under the first structure item at Level x, the second structure item at Level x is searched in the same way. When a match is found, the hit is displayed in bold in the structure.

### Structure item - bookmarks

You can create a bookmark for a structure item by selecting it in the structure window and then dragging and dropping it into the *Structure item – bookmarks* frame under the structure window.

### Test items for structure item

There are two types of test item:

- Transaction test item:  
Contains only transaction test steps (also known as T test steps)
- General test item:  
Contains only non-transaction test steps (also known as P test steps) or a mixture of transaction and non-transaction test steps

### Test items

If you select a structure item in the structure window, the frame in the top right of the screen shows you the test items that are assigned to that structure item, along with the following information:

- Test Item: The test item type and number
- Text German: The German name of the test item
- Text English: The English name of the test item
- Note: Any remarks that have been entered concerning the test item
- Login: The name of the user who created the test item

Two or more test items for one structure item are always linked by an OR operator.

### Test step attributes

If you select a test item in the top right-hand frame, the frame beneath it shows you the test steps that are assigned to that test item and their attributes.

Transaction test steps have the following attributes:

- *Identifying (Ident.)*  
If this checkbox is marked, the test step will be used in the RBE™ analysis and will directly influence the status that is determined for the structure item (active, inactive, and so on). If it is not marked, but the *Relevant* checkbox is marked, the test step will be used in the analysis but will not influence the status that is determined. If neither checkbox is marked, the test step will not be used in the analysis. If you flag a test step as identifying, it is automatically flagged as relevant.
- *Relevant*  
If this checkbox is not marked, the test step will not be used in the RBE™ analysis.

## Working with the Reverse Modeling Engineer



The possible combinations of these two test step attributes and their consequences for the analysis can therefore be summarized as follows:

Identifying	Relevant	Consequences
Yes	Yes	The test step is used in the analysis and the values it determines directly influence the status that is determined for the structure item.
No	Yes	The test step is used in the analysis but the values it determines are ignored when a status is determined for the structure item. In other words, the test step determines values for information purposes only.
No	No	The test step is not used in the analysis and so will not appear on the <i>RBE Sets</i> tab when you display the analysis results.

- *Test step text*  
The name of the test step

In addition, non-transaction test steps display a *Res.* (result) attribute (yes/no). You do not have to flag these test steps as *Relevant* or *Identifying*.

You do, however, have to specify what analysis result will be found for the relevant structure item if the *Res.* attribute value is or is not found by the test step in the analysis (THEN and ELSE respectively). You can select *active*, *probably active*, *probably inactive*, *inactive*, and *informative* here.



Test steps and test items supplied with the RBE™ cannot be changed. They are identifiable by the login name or user name *SAP* in the top and bottom frames of the *Test items for structure item* group box.

#### Test step pool

In the frame on the bottom right of the screen, you see a complete list of all test steps, along with information about the type of R/3 data the test step is designed to analyze, the date the test step was created, and the R/3 release to which it applies. You can reduce the size of the list by filtering it for the particular values you are interested in, using any of the criteria just mentioned, or the test step creator, or particular strings in the test step names, or a combination of these criteria. You do this by selecting entries in the *Type of test* or *User* fields, or by entering a string in the other fields and choosing *Search*.

You can remove your filter at any time by choosing *Remove Filter*.

#### Search in structure tree

If you right click on a test step in the test step pool and choose *Search in structure tree* from the context menu, all the structure items for which this test step is used are highlighted in bold in the structure window.

#### **See also:**

[Creating Test Steps \[Page 16\]](#)

[Creating Test Items \[Page 30\]](#)

[Assigning Test Steps to Test Items \[Page 31\]](#)

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## Creating Test Steps

# Creating Test Steps

## Purpose

The RBE™ is shipped with a full complement of test steps provided by SAP, but you can also create additional ones of your own. By assigning these test steps to test items, you create your own test rules that dictate how structure items with test items will be analyzed during the RBE™ analysis.

## Process Flow

You can create the following types of test step:

- [Transaction test steps \[Page 17\]](#)
- [Non-transaction test steps \[Page 20\]](#)

## Result

You have created a test step that you can assign to a test item.

### See also:

[Creating Test Items \[Page 30\]](#)

[Assigning Test Steps to Test Items \[Page 31\]](#)

## Creating a Transaction Test Step

### Use

The RBE™ is shipped with a full complement of transaction test steps provided by SAP, but you can also create your own transaction test steps for analyzing either standard SAP transactions or company-defined transactions. These test steps can be used in both transaction analyses and detailed analyses.



You cannot rename or delete any of the test steps supplied by SAP, nor can you change the underlying data queries.

### Prerequisites

When creating a transaction test step for analyzing a company-defined transaction, you specify the data extract from which the relevant company data can be derived. This means that if you wish to create this type of transaction test step, you must have already extracted data from the company's R/3 system using the RBE™.

You are familiar with the main features of the [Reverse Modeling Engineer \[Page 12\]](#) and you are on the main *Reverse Modeling Engineer* screen.

### Procedure

1. Position the cursor anywhere in the bottom right-hand frame (the pool of test steps).
2. Right click to open the context menu.
3. Choose *New T-test step*.  
The screen *Create transaction test step* appears. Here you see a list of all the available transactions and their descriptive short texts.  
You now choose one of the procedures described below, according to whether you want to create a test step for analyzing a standard SAP transaction or a company-defined transaction.

#### Create a Test Step for a Standard SAP Transaction

1. Select the option *Only valid standard transactions*.
2. Select one transaction from the list of standard SAP transactions.
3. Choose *Create*.  
A message informs you that the test step was created successfully.
4. Choose *Quit*.  
The RME uses the English and German short texts for the transaction to generate an English and German name for the test step and adds the test step to the test step pool.
5. If you wish to define individual threshold values for the test step, select the test step in the test step pool, right click on it to open the context menu, select *Data query*, and define values as necessary.  
See: [Data Query for a Transaction Test Step \[Page 19\]](#)
6. Save your entries.  
The data query is added to the test step.

## Creating a Transaction Test Step

### Create a Test Step for a Company-Defined Transaction

1. Select the option *Check transaction codes / reports against an extract*.
2. Select a company.
3. Select a data extract for that company.
4. Select a transaction or report program from the list.
5. Choose *Create*.  
A message informs you that the test step was created successfully.
6. Choose *Quit*.  
The RME uses the English and German short texts for the transaction to generate an English and German name for the test step and adds the test step to the test step pool.



If the transaction does not have a descriptive short text in the data extract, the text *Benutzertransaktion* (German) / *User Transaction* (English) is used.

7. If you wish to define individual threshold values for the test step, select the test step in the test step pool, right click on it to open the context menu, select *Data query*, and define values as necessary.  
See: [Data Query for a Transaction Test Step \[Page 19\]](#)
8. Save your entries.  
The data query is added to the test step.



You can also edit a transaction test step you have created. Select one of the following functions from the context menu, which you open by selecting and right-clicking on the relevant transaction test step:

- *Rename test step*  
Here you can change the name and the R/3 release of the test step.
- *Delete test step*  
Confirm that you wish to delete the test step. It is then deleted from the test step pool.

## Result

You have created a transaction test step and must now [assign the test step to a test item \[Page 31\]](#) if you want to conduct an analysis using this test step.

You can also create [non-transaction test steps \[Page 20\]](#).

## Data Query for a Transaction Test Step

### Use

To define the transaction usage levels that a transaction test step will be looking for in the analysis in order to determine an analysis result, you specify threshold values for the test step in its data query.

### Prerequisites

You have created a transaction test step and you are on the *Reverse Modeling Engineer – Data Query* screen.

### Features

The *Reverse Modeling Engineer – Data Query* screen for a transaction test step contains the following fields:

- Test step name
- Std. Threshold  
You can either leave the default entry in this field (standard threshold) or you can select “-“ to define individual threshold values:
  - Standard threshold  
This is identical for all transaction test steps in the analysis. It is defined in the [analysis details \[Page 53\]](#) just before you start the analysis itself.
  - Individual threshold  
For individual transaction test steps, you can define threshold values that differ from the standard threshold values for the analysis results *active*, *probably active*, *probably inactive*, and *inactive*. If the test step in question analyzes a transaction that is only used at certain times of the year, for example, an individual threshold that takes this erratic use into account can produce more meaningful analysis results than the standard threshold. Currently, you cannot maintain an individual threshold for more than one of the three available analysis methods (sum of transactions, average of transactions, or minimum of transactions).



If you define individual threshold values for a test step, this individual threshold will be used instead of the standard one for this particular test step in the analysis. For all test steps for which you do not specifically define an individual threshold, the standard threshold will apply.

## Creating a Non-Transaction Test Step

# Creating a Non-Transaction Test Step

## Use

The RBE™ comes complete with predefined non-transaction test steps for analyzing a variety of master data and configuration data, but you can also create your own non-transaction test steps. These test steps can only be used in detailed analyses, not in transaction analyses.

There are two ways to create a non-transaction test step:

- Create a new test step from scratch  
This is the recommended approach if you know that the data query you will define for the test step cannot be copied from another test step.
- Create a new test step by copying and changing an existing test step  
This is the recommended approach if you know that the data query you are going to define for the test step will use all the same table fields as an existing data query, just with different conditions linking them in the SQL statement. This makes it easier, for example, to create a series of test steps that determine whether material master records with a number of different item category groups exist (for make-to-order production/assembly or billing, for example). The advantage of this approach is that you do not have to define each data query from scratch.



You cannot rename or delete any of the test steps supplied by SAP, nor can you change the underlying data queries.

## Prerequisites

You are familiar with the main features of the [Reverse Modeling Engineer \[Page 12\]](#) and you are on the main *Reverse Modeling Engineer* screen.

## Procedure

### Create a New Test Step

1. Position the cursor anywhere in the bottom right-hand frame (the pool of test steps).
2. Right click to open the context menu.
3. Choose *New test step*.
4. In the *Create/rename test step* dialog box that now appears, enter the following data:
  - A name for the test step
  - The test step type  
Master data test step:  
The test step analyzes data from tables that contain master data records.  
or  
Configuration test step:  
The test step analyzes data from tables that contain documents.
  - The relevant R/3 release

## Creating a Non-Transaction Test Step

5. Confirm your entries.  
The new test step is added to the pool of available test steps.  
You must now create the data query for your new non-transaction test step.  
See: [Creating a Data Query for a Non-Transaction Test Step \[Page 22\]](#)

**Copy an Existing Test Step**

1. Position the cursor anywhere in the bottom right-hand frame (the pool of test steps).
2. Right click to open the context menu and choose *Data query*.
3. Choose *Extract-fields*.  
In the *Used extract fields* group box that now appears, you see the extract fields that have already been used in data queries.



It can take a few seconds for the RME to finish displaying all the fields. Once the field you require appears, you can interrupt the display process by choosing *CLOSE*.

4. In the *Used extract fields* group box, select the table field you require.  
You now see a list of the test steps that have this table field in their data query.
5. Select the test step with the data query that you want to reuse.
6. Choose *COPY* to copy the test step.
7. In the *Create/rename test step* dialog box that now appears, make any changes that are necessary and confirm your entries.  
The data query of the test step copy appears.



If you did not specify a name of your own for the new test step, a name beginning with *Copy of:* is automatically assigned (and displayed in the *THEN* field of the *Rules for test step* group box).

8. Change the condition section of the SQL statement.
9. If you wish to define an individual threshold value for the test step, enter it in the *Threshold* field.  
See: [Details: Data Query for a Non-Transaction Test Step \[Page 27\]](#): Rules for test step
10. Save your entries.  
The RME reads the key fields and informs you that the data query for the test step was generated successfully.
11. If there are certain organizational units that you do not want the RBE ABAP to extract, right click on the corresponding key fields in the *Keys* frame of the *Data query* group box and select *Deactivate Organizational unit* from the context menu.
12. Save your entries again.

Choose *Cancel* to return to the *Reverse Modeling Engineer* screen.  
You can now assign the new test step to a test item.  
See: [Assigning Test Steps to Test Items \[Page 31\]](#)

## Creating a Data Query for a Non-Transaction Test Step

# Creating a Data Query for a Non-Transaction Test Step

## Use

The data query you define for a non-transaction test step describes the exact formulas that are to be used to calculate a result for the test step during the analysis. Data queries for non-transaction test steps differ from those defined for transaction test steps in that they describe the exact R/3 tables and fields from which data is to be read and analyzed.

There are two ways to define data sources for a non-transaction test step:

- You select data sources (Customizing tables and material master data tables) from an existing pool of possible fields.
- If the data source you require is not available in this field pool, you connect to the R/3 system whose data you intend to analyze and select the relevant table fields there.

## Prerequisites

You have created a non-transaction test step and you are on the *Reverse Modeling Engineer* screen.

## Procedure

1. In the test step pool, select the test step for which you wish to define a data query.
2. To go to the screen where you can create the relevant SQL query, right click on the test step and choose *Data query* from the context menu.  
The *Reverse Modeling Engineer – Data Query* screen appears.



For more details on the various functions available on the SQL query screen, see: [Details: Data Query for a Non-Transaction Test Step \[Page 27\]](#)

3. In the *Data query* group box, choose the display format VIEW.

Choose one of the following procedures for defining a data query:

### Create Data Query From Field Pool


1. Select the option *Field supply*. Expand the data sources structure and select a field from the type of table that contains the type of data the test step is intended to analyze. There are two types of table that can serve as a data source for a non-transaction test step:

- Customizing tables for configuration test steps
- Material master data tables for master data test steps

The first part of the SQL statement is generated (SELECT COUNT statement).

2. Choose *Condition*.  
The condition section of the SQL statement is generated.
3. Select a second field in the same table.  
This field is added to the condition section of the SQL statement.  
You now proceed as described below, according to whether or not you want to add further conditions to the SQL statement:

Creating a Data Query for a Non-Transaction Test Step

You want to	You proceed as follows:
Create an SQL statement with only one condition	<ul style="list-style-type: none"> <li>a. In the <i>Condition</i> group box, select an operator and either select or enter a value for the condition. The operator and the value are added to the SQL statement.</li> <li>b. Choose <i>END</i>.</li> </ul>
Create an SQL statement with two or more conditions	<ul style="list-style-type: none"> <li>a. In the <i>Condition</i> group box, select an operator and either select or enter a value for the condition. The operator and the value are added to the SQL statement.</li> <li>b. Choose <i>OR</i>. The second condition is generated.</li> <li>c. Select another table field. This field is added to the second condition of the SQL statement.</li> <li>d. In the <i>Condition</i> group box, select an operator and either select or enter a value for the condition. The operator and the value are added to the SQL statement.</li> </ul> <p style="text-align: center;"></p> <p>You can add further conditions in the same way. Please note that it is not currently possible to join fields from different tables in one data query.</p> <ul style="list-style-type: none"> <li>e. Choose <i>END</i>.</li> </ul>

4. Test the data query. If it contains no syntactical errors, *OK* appears in the field below the *TEST* button.
5. If you wish to define an individual threshold value for the test step, enter it in the *Threshold* field.  
See: [Details: Data Query for a Non-Transaction Test Step \[Page 27\]](#): Rules for test step
6. Save your entries.  
The RME reads the key fields and informs you that the data query for the test step was generated successfully.
7. If there are certain organizational units that you do not want the RBE ABAP to extract, right click on the corresponding key fields in the *Keys* frame of the *Data query* group box and select *Deactivate Organizational unit* from the context menu.
8. Save your entries again.

Choose *Cancel* to return to the *Reverse Modeling Engineer* screen.


**Create Data Query Via Online R/3 Connection**

**Creating a Data Query for a Non-Transaction Test Step**

1. Select the option *R/3 Online*.  
The data sources structure is replaced by a highlighted window in which you can start a search for the R/3 table that you want to use in the data query.
2. Enter the name of the table.
3. Choose *Search*.
4. Connect to the relevant R/3 system.  
The table name and descriptive short text are displayed under *Table name* and *Table text*.
5. Select the table name.  
The names and descriptive short texts for the fields in the table are displayed under *Field name* and *Field text*.
6. Select the field that you want to include in the data query.
7. Choose *Apply*.  
The SQL statement is generated, complete with its condition section.  
You now proceed as described below, according to whether or not you want to add further conditions to the SQL statement:

<b>You want to</b>	<b>You proceed as follows:</b>
Create an SQL statement with only one condition	Change the condition, if necessary, and go to Step 8 below.

Creating a Data Query for a Non-Transaction Test Step

<p>Create an SQL statement with two or more conditions</p>	<ul style="list-style-type: none"> <li>a. Select further table fields as required and choose <i>Apply</i>. The condition section of the SQL statement is replaced by the condition that was generated from the last table field you selected. All the table fields you selected are added to the Dictionary in the background.</li> <li>b. Select the option <i>Field supply</i>.</li> <li>c. From the Dictionary, select a table field that you want to include in the data query.</li> <li>d. Choose <i>Condition</i>. The condition section of the SQL statement is generated.</li> <li>e. From the Dictionary, select a second field from the same table. This field is added to the SQL statement.</li> <li>f. In the <i>Condition</i> group box, select an operator and either select or enter a value for the condition. The operator and the value are added to the SQL statement.</li> <li>g. Choose <i>OR</i>. The second condition is generated.</li> <li>h. Select another table field. This field is added to the second condition of the SQL statement.</li> <li>i. In the <i>Condition</i> group box, select an operator and either select or enter a value for the condition. The operator and the value are added to the SQL statement.</li> </ul> <p style="text-align: center;"></p> <p style="text-align: center;">Please note that it is not currently possible to join fields from different tables in one data query.</p> <ul style="list-style-type: none"> <li>j. Choose <i>END</i>.</li> </ul>
--	---

- 8. Test the data query.  
If it contains no syntactical errors, *OK* appears in the field below the TEST button.
- 9. If you wish to define an individual threshold value for the test step, enter it in the *Threshold* field.  
See: [Details: Data Query for a Non-Transaction Test Step \[Page 27\]](#): Rules for test step
- 10. Save your entries.  
The RME reads the key fields (organizational units) and informs you that the data query for the test step was generated successfully.
- 11. If there are certain organizational units that you do not want the RBE ABAP to extract, right click on the corresponding key fields in the *Keys* frame of the *Data query* group box and select *Deactivate Organizational unit* from the context menu.
- 12. Save your entries again.  
Choose *Cancel* to return to the *Reverse Modeling Engineer* screen.

## Creating a Data Query for a Non-Transaction Test Step

### Select Existing Data Query Using Extract Fields

1. Select the option *Field supply*. Choose *Extract-fields*.  
In the *Used extract fields* group box that now appears, you see the extract fields that have already been used in data queries.



It can take a few seconds for the RME to finish displaying all the fields. Once the field you require appears, you can interrupt the display process by choosing *CLOSE*.

2. Select the table field you require.  
You now see a list of the test steps that have this table field in their data query.
3. Select a test step.
4. Choose *GET*.  
The data query for the test step you selected is copied to the *Data query* group box.
5. Change the condition section, if necessary.
6. Test the data query.  
If it contains no syntactical errors, *OK* appears in the field below the *TEST* button.
7. If you wish to define an individual threshold value for the test step, enter it in the *Threshold* field.  
See: [Details: Data Query for a Non-Transaction Test Step \[Page 27\]](#): Rules for test step
8. Save your entries.  
The RME reads the key fields and informs you that the data query for the test step was generated successfully.
9. If there are certain organizational units that you do not want the RBE ABAP to extract, right click on the corresponding key fields in the *Keys* frame of the *Data query* group box and select *Deactivate Organizational unit* from the context menu.

Choose *Cancel* to return to the *Reverse Modeling Engineer* screen.

## Result

You have created the data query for a non-transaction test step and must now [assign the test step to a test item \[Page 31\]](#) if you want to conduct an analysis using this test step.

You can also create [transaction test steps \[Page 17\]](#).

## Details: Data Query for a Non-Transaction Test Step

### Use

The data query you define for a non-transaction test step describes exactly what R/3 data is to be extracted for analysis and the exact formulas that are to be used to calculate an analysis result for the test step. Data queries for non-transaction test steps differ from those defined for transaction test steps in that they not only describe the threshold value (standard or individual) that will determine the analysis result for the test step but also contain an SQL query that describes the exact R/3 table fields for which data should be extracted.

### Prerequisites

You have created a non-transaction test step and you are on the *Reverse Modeling Engineer – Data Query* screen.

### Features

#### Data query

This group box displays the SQL query, which describes the table field or fields from which data is to be taken to be analyzed by the test step. The SQL query always takes the form of a SELECT COUNT, which means that the test step counts rows that meet specified criteria (conditions) in the chosen table and the rows that are counted influence the analysis result for the test step. In the case of non-transaction test steps, this count cannot be done for specific months. You can also choose *OR* to string together a number of conditions in the SQL query so that data records for a number of different fields in the same table can be counted in the same test step.

You can display the SQL query in two different formats:

- **TEXT**  
The table fields are displayed using their descriptive short texts
- **VIEW**  
The table fields are displayed using their technical names

Once you have defined a data query, you can check it for syntactical errors by choosing *TEST*.

By clicking the *Reset test step query* bar, you can undo the entire SQL query as you have just defined it, restore a previous version of the SQL query, and update the contents of the *Keys* frame accordingly.

#### Keys

Here you can see a list of the key fields of the chosen table. These are generally organizational units. A maximum of five of these key fields can be extracted and analyzed per table. Key fields that are deactivated by right mouse click here will not be extracted.

#### Condition

By selecting logical operators and values in this group box, you can create conditions for the SQL query to define the criteria that have to be met by all the selected table fields for the purposes of the table row count.

#### Data sources

The data sources for the test step are the table fields for which you want data to be extracted for analysis. You can search for the data sources you require as follows:

**Details: Data Query for a Non-Transaction Test Step**

- In the RBE™ (*Field supply*)  
Many of the table fields you require for defining non-transaction test steps, whether already available in the RBE™ or imported to the RBE™ using the *R/3 Online* option, can be selected directly in the RBE™ in the *Field supply* view:

- Dictionary: Here you see all the tables (and their key fields) that have been imported from the relevant R/3 system using the *R/3 Online* option. You can delete the current contents of the Dictionary by choosing *Delete Dictionary*.



If test steps are stored in a central database shared by a number of users and you choose *Delete Dictionary*, all the tables that have been imported to the database so far will be deleted, not just the tables you yourself have imported.

- Customizing tables: for configuration test steps
- Material master data tables: for master data test steps
- *Extract-fields* button  
You can click this button to display a list of the table fields that have already been used in data queries and of the test steps for which these data queries were defined (a type of where-used list).

**COPY**

For creating a copy of a test step you have selected in the where-used list

**GOTO**

For going directly to the data query of a test step you have selected in the where-used list

**GET**

For copying the data query of a test step you have selected in the where-used list to the current data query

**SHOW**

For returning to the complete list of all the table fields that have already been used in data queries

**CLOSE**

For interrupting the list display process if it is still running or for closing the *Used extract fields* group box

- In the relevant R/3 system (*R/3 Online*)  
You can connect to the relevant R/3 system directly and import required table information to the RBE™ so that the table fields can be selected for inclusion in data queries.

**Rules for test step**

In this group box, you define the formula and the threshold value that the data query will use to determine the analysis result (in the case of non-transaction test steps: *yes* or *no*) for the test step. The threshold value can be one of the following:

- Standard threshold (default setting)  
This value is identical for all non-transaction test steps in the analysis and is defined along with all the other analysis details just before you start the analysis itself.
- Individual threshold  
If you deselect the standard threshold setting and enter an individual value here, this

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**Details: Data Query for a Non-Transaction Test Step**

individual threshold value will be used instead of the standard one for this particular test step in the analysis.



- Data queries for non-transaction test steps differ from those for transaction test steps in that they cannot produce analysis results broken down by month.
- You can choose *Rename test step* at any time to change the name of the test step (displayed in the *THEN* field).
- You can also choose *New test step* to create a new test step without having to leave the data query screen.

## Creating Test Items

## Creating Test Items

### Use

Every structure item (in the process view of the application component hierarchy) for which a status (*active*, *probably active*, and so on) is to be determined by the analysis must be assigned at least one test item, to which a number of test steps, linked within the test item by AND or OR, are assigned. You can create the following types of test item:

- Transaction test items (also known as T test items)
- General test items (also known as P test items)

### Prerequisites

You are on the main *Reverse Modeling Engineer* screen.

### Procedure

1. In the structure window, select a structure item for which you wish to create a test item.
2. Position the cursor in the top right frame of the *Test items for structure item* group box. The type of test item you are allowed to create for the structure item is dependent on the types of test item, if any, that already exist for this structure item:

ID displayed alongside the structure item	You can create
[P] or No ID	One or more general test items and one transaction test item
[TP] or [T]	General test items only

3. Right click to open the context menu, and choose:
  - For a general test item: *New test item*  
A test item is created with an automatically generated name, creation date, and creation time.
  - For a transaction test item: *New T-test item*
4. To assign a name of your choice to the new test item, choose *Rename test item* from the context menu and enter a new name and any remarks you want to make about the test item.



To delete a test item, select *Delete test item* from the context menu. This also deletes any assignments that had been made between the test item and test steps from the test step pool.

## Assigning Test Steps to Test Items

### Use

Every structure item for which an RBE™ analysis result is to be determined must be assigned at least one test item, which in turn must contain at least one test step. Once you have created a test item for a structure item, you assign test steps to the test item to define the test rules that will apply to this structure item during the analysis.

### Prerequisites

You are on the main *Reverse Modeling Engineer* screen.

### Procedure

1. In the top right frame of the *Test items for structure item* group box, select a test item.



When choosing the test item to which you are going to assign test steps, bear in mind the following:

- You can assign transaction test steps to either a transaction test item or a general test item  
If the structure item in question already has a transaction test item supplied by SAP assigned to it, this is the only test item to which it is possible to assign further transaction test steps for this structure item.
  - Non-transaction test steps can only be assigned to a general test item  
General test items supplied by SAP cannot be changed, so you cannot assign further test steps to them. This means that non-transaction test steps can only be assigned to general test items that you have created yourself.
2. In the test step pool, select a test step that you want to assign to the test item you selected.
  3. Drag and drop the test step from the test step pool to the frame above it.  
The test step is assigned to the selected test item and the test step attributes are displayed in the middle frame.

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**Extracting Data**

## Extracting Data

### Purpose

As RBE™ analyses are based on data from a live R/3 system, you have to extract the relevant data from R/3 and import it to the RBE™. You extract the necessary data in R/3 using an ABAP report program supplied with the RBE™ (the RBE ABAP). The R/3 data extracted by the RBE ABAP is collected in a spool file (an extract file), which you then download from R/3 to your PC in the form of a text file. Later, you import this text file into the RBE™ database to use as the basis for RBE™ analyses and reports.

### Process Flow

1. [You check the settings in the Transaction Monitor. \[Page 33\]](#)
2. [You generate the ABAP supplied \(for extracting the data and writing it to an extract file\) and execute this report program in R/3. \[Page 34\]](#)

## Checking the Transaction Monitor

### Use

For the RBE™ analysis to be meaningful, the data that is extracted from the R/3 system should cover a reasonable period of time. In the Transaction Monitor, you can check the parameters currently set for the period for which data is to be extracted and change these parameters, if necessary.

### Prerequisites

The Transaction Monitor has been started. It comes ready-activated with the R/3 System, so it will be active (unless it has been deactivated in the meantime).

### Procedure

1. Choose transaction ST03.
2. To display the statistical data for the period for which data is to be extracted, choose *Workload* → *Reorganization* → *Parameters* → *Performance Database*.
3. Check the number of months currently set.



The setting should be a period of at least two months.

4. If necessary, choose *Modify Parameters* to change the parameters.

## Generating and Executing the RBE ABAP

### Purpose

The ABAP report program supplied with the RBE™ extracts data from the live R/3 system according to the test rules you defined and converts this data into an extract file that can be downloaded as a text file to your PC. You have to execute this ABAP in R/3, so you must first create and generate it there. This simply involves transferring the source code supplied with the RBE™ to the R/3 ABAP Editor.

### Prerequisites

You are working in an R/3 system with Release 3.0D or higher. If you are not, you will not be able to generate the RBE ABAP.

### Process Flow

1. [You save the text file containing the RBE ABAP locally to your PC and modify the text file if necessary. \[Page 35\]](#)
2. [You generate the RBE ABAP. \[Page 36\]](#)
3. [You execute the RBE ABAP. \[Page 37\]](#)

### Result

You now have an extract file in the form of a text file that you can import into the RBE™ database as a data extract on which you can base analyses.

## Saving the ABAP Text File Locally

### Use

Before you can generate and execute the RBE ABAP in R/3, you must export the ABAP text file containing the necessary source code from the RBE™ to your PC. If you wish to incorporate your own test rules (non-transaction test steps) into the ABAP to influence what data is extracted, you must then modify the text file accordingly.

### Procedure

1. In the RBE™, choose *Data Manager* → *Create RBE ABAP*.
2. Choose a directory in which to save the text file.  
The RBE™ saves the ABAP text file that you require to generate the ABAP report program in R/3 to this directory.



If you wish, you can save the ABAP text file under a different name.

### Result

You have saved the text file locally and can use the source code contained in the file to generate the RBE ABAP in R/3.

#### See also:

[Generating the RBE ABAP \[Page 36\]](#)

## Generating the RBE ABAP

## Generating the RBE ABAP

### Procedure

1. To create the ABAP report program that will first extract the data and then convert it to an extract file that you can download to your PC, go to the R/3 ABAP Editor (transaction SE38).
2. In the *Program* field, enter a name beginning with “Z”.
3. Choose *Create*.
4. Define the following attributes for the program you are creating:
  - Title: Enter a short text that describes the program.
  - Type: Online program
  - Application: Cross-Application
5. Save the attributes.
6. Choose *Source code*.
7. Delete the first line of the source code.
8. Upload to the ABAP Editor the text contained in the text file that you saved to your PC in [Saving the ABAP Text File Locally \[Page 35\]](#). The way you do this depends on the release level of the R/3 system you are in:

Release <= 3.0E	Release > 3.E but < 4.6A
<ol style="list-style-type: none"> <li>a. Open the text file in Notepad.</li> <li>b. Select and copy the entire text file.</li> <li>c. Insert the copied text into the source code by choosing <i>Block/buffer</i> → <i>Copy to clipboard</i>.</li> </ol>	<ol style="list-style-type: none"> <li>a. Choose <i>Utilities</i> → <i>Upload/Download</i> → <i>Upload...</i></li> <li>b. To insert the text file into the source code, select the file from the directory you saved it to and choose <i>OK</i>.</li> </ol>

9. Check the program for syntax errors.
10. Choose *Program* → *Generate* to save the program and generate it.

### Result

You have generated the RBE ABAP report program in R/3 and can now start it.

#### See also:

[Executing the RBE ABAP \[Page 37\]](#)

## Executing the RBE ABAP

### Prerequisites

You have generated the ABAP report program for extracting the data in R/3. You are on the *ABAP Editor: Initial Screen*.

### Procedure

1. Select the RBE ABAP using the input help in the *Program* field.
2. Choose *Execute*.
3. Specify the client from which the data is to be extracted.
4. If necessary, shorten the data extract period you specified in the Transaction Monitor. The default values that are displayed here are the first day of the first month specified in the Transaction Monitor and the last day of the last month.
5. To specify the type of data to be extracted, select one of the following options:
  - WORKLOAD: Transaction data only
  - ALL: All data (transaction data, configuration data, master data)



The option you select here dictates the type of analysis you can conduct later. If you select WORKLOAD, you will only be able to conduct a transaction analysis later, not a detailed analysis based on all data types.

6. Start the job. To monitor the progress of the job, choose *Background Jobs*. The *Job Overview: Alphabetic* screen appears.
7. To update the status displayed for the job, choose *Refresh* at intervals until the status changes from *Active* to *Finished*.
8. Select the job and choose *Spool list* to display the spool number.
9. Make a note of the spool number.

### Result

The data you require was extracted in the background and converted to an extract file. You will need the spool number to download this file to your PC.

#### See also:

[Downloading the Extract File \[Page 38\]](#)

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**Downloading the Extract File**

## Downloading the Extract File

### Prerequisites

You have executed the RBE ABAP and you are in the *Execute* mode of the ABAP Editor.

### Procedure

1. Enter the spool number that you made a note of when the data extraction job finished.
2. Select the directory to which the extract file is to be saved, if different from the default directory.
3. Choose *Download extract* to start the download.  
The system issues a message to inform you that the download was successful.
4. Choose *Continue* to confirm this message.

### Result

The extract file has been saved to your PC in the form of a text file that you can import into the RBE™ as a data extract on which you can base analyses.

**See also:**

[Importing the Data \[Page 39\]](#)

## Importing the Data

### Purpose

Once you have created a data extract using the RBE ABAP and downloaded it to your PC in the form of an extract file, you can import it into the RBE™ database. This involves using the RBE™ Extraction Tool to define the company from whose system the data was extracted, specify data extract and import details, and start the import. You cannot include data from multiple clients of an R/3 system in one import.

Every step of the import procedure is logged and displayed in real time in a frame on the right of the screen.

### Prerequisites

You have extracted data from an R/3 system.

### Process Flow

1. [You define the company from whose system the data was extracted. \[Page 40\]](#)
2. [You define data extract and import details. \[Page 41\]](#)
3. [You assign users to the organizational units to be analyzed \[Page 45\]](#) if you intend to use the data extract you are importing as the basis for organizational-unit-based analyses.

In addition, any data extracts and analyses that are already available in another database can be imported to your current RBE™ database.

See: [Importing Companies \[Page 47\]](#)

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**Defining Companies**

## Defining Companies

### Use

Here, you enter the details of the company from whose system the data was extracted (or select a company whose details have already been entered in the RBE™).

### Prerequisites

You have chosen *Data Manager* → *Extraction Tool* in the RBE™ and you are on the *Select Company* tab page.

### Procedure

1. In the *Company:* field, enter a name if you are creating a new company or select an existing company.
2. If you are creating a new company, enter the relevant details in the bottom half of the tab and save your entries.



You cannot create a company twice. In other words, you cannot create two company records with the same name.

If you want to change the details for an existing company, select the company using the possible entries button in the *Company:* field, make the required changes, and save your entries.

#### See also:

[Importing the Data Extract \[Page 41\]](#)

## Importing the Data Extract

### Use

Here, you define the data extract and task type(s) for the data import and start the import. The task types allow you to define exactly what type of statistical information is to be imported into the RBE™.

### Prerequisites

You have saved an extract file to your PC. You have chosen *Data Manager* → *Extraction Tool* in the RBE™ and you have defined a company for the data extract.

The databases supplied with the RBE™ (RBE.db1 and rbeapp.db1) are in Microsoft Access 97 format. If you have Microsoft Access 2000 installed, you will have to convert the databases. For further information, please consult the Microsoft Access 2000 help file:

*Getting Started with Microsoft Access* → *Converting Microsoft Access Databases* → *Convert a database* → *Convert a previous-version Access database to Microsoft Access 2000*.



During conversion, the databases are automatically assigned the file extension *.mdb*. Before you can work with these databases, you have to change the file extension back to *.db1*. Proceed as follows:

- If you have put the converted databases in the same directory as the original databases, first change the file names of the original databases to avoid any confusion.
- Then change the file extensions of the converted databases so that you once again have two files called *RBE.db1* and *rbeapp.db1*.

It is recommended that you convert the databases, as this reduces the runtime of the import.

### Procedure

1. On the *Select Extract* tab, enter a name for the data extract and save it, or select an existing data extract.



If this is a new data extract (as opposed to an existing one you have selected to add further data to), you cannot give it a name that has already been used for another data extract.

2. On the *Data Import* tab, select the option *Import SAP extract from available Extract file*.
3. Open the text file containing the R/3 data you extracted (the extract file).
4. Select the client on the basis of which you want data to be imported.
5. Select one or more task types to define what type of statistical information is to be imported. The following task types exist:

Task type	Information imported if this task type is selected
-----------	--

### Importing the Data Extract

01 - Dialog	A record of every dialog step is imported. This means that every change of screen can be taken into account later in analyses based on the imported data.
02 - Update (V1)	Only records of dialog steps where the database was updated using update task 1 are imported.
03 - Spool	-
04 - Background	A record of every step of every background job is imported.
05 - Enqueue	-
06 - Buffer synchronisation	-
07 - Cyclic background ABAP	-
08 - Update (V2)	Only records of dialog steps where the database was updated using update task 2 are imported.
09 - Not assigned	-
FD - Application Link Enabling (ALE)	-
FE - Remote Function Call (RFC)	-
FF - CPI-C	-



The default selection is all task types, but you can deselect as many task types as you wish.

Do not forget that your task type selection here will affect the results of analyses that you conduct later on the basis of the imported data, because only statistics records with the task types you select here will be imported from the Transaction Monitor. Statistics records are created for the workload monitor, a part of CCMS that is used to monitor system performance.

- Choose *Import selected R/3 client*.  
The data import is started.



For further information on task types and their role in the data import, see *Example: Task Types (Data Import)*.

## Result

The data you specified has been imported for the company you specified. The *Select Extract* tab now displays the parameters of the data extract that was imported (the contents of the data extract, the R/3 system from which the data was extracted and its release, the relevant R/3 client and language, and the date on which the data was extracted).

If necessary, you can also [assign users to organizational units \[Page 45\]](#) for this or another data extract.

If this is not necessary, you can proceed immediately with the [analysis of the data \[Page 49\]](#).

## Example: Task Types (Data Import)

When transactions and report programs are used in R/3, certain information is posted to statistics records. The following examples show what statistical information can be imported into the RBE™. Here, transactions are used and report programs are run in the background by user Smith in the month of December.

### Key

k = Number of steps performed in a background job

m = Number of changes of screen

n = Number of documents created

When user Smith creates a sales order using transaction VA01, the following information is posted to the statistics records:

Task type	Month	User	Frequency	Transaction/Report
01	12	Smith	m	VA01
02	12	Smith	1	VA01
08	12	Smith	1	VA01

When user Smith creates invoices via a billing due list using transaction VF04, the following information is recorded:

Task type	Month	User	Frequency	Transaction/Report
01	12	Smith	m	VF04
02	12	Smith	n	RSM13000
08	12	Smith	n	VF04

When user Smith creates invoices by running a background job from transaction VF06, the following information is recorded:

Task type	Month	User	Frequency	Transaction/Report
01	12	Smith	m	VF06
04	12	Smith	1	SDBILLDL
02	12	Smith	n	RSM13000
08	12	Smith	n	RSM13000

When user Smith creates invoices by running report SAPMV60S or RV60SBT1 in the background, the following information is recorded:

Task type	Month	User	Frequency	Transaction/Report
01	12	Smith	k	SAPMV60S or RV60SBT1

**Example: Task Types (Data Import)**

04	12	Smith	1	SAPMV60S or RV60SBT1
02	12	Smith	n	RSM13000
08	12	Smith	n	RSM13000



Report RSM13000 is used for update control.

A further example is transaction F-22 (*Enter Customer Invoice*). In this case, however, the invoices are actually posted using a second transaction: FB00 (*Accounting Editing Options: Document entry*).

## Assigning Users to Organizational Units

### Use

You can assign users or user groups to organizational units. You need to make this assignment if you intend to conduct organizational-unit-based analyses, perhaps to compare business process usage in different plants of the same company. The combination of the user-to-organizational-unit assignment you make here and the user-to-transaction-code assignment determined from the Transaction Monitor enables the RBE™ to determine to a high degree of accuracy which transactions were used in which organizational units.

You can also copy assignments that have been made for one data extract to another data extract, or you can import users or user groups to assign them to an organizational unit of your choice.



If you do not make any user-to-organizational-unit assignments, every user in the client will be taken into account in the analyses you base on this data extract. Users that have been neither actively assigned to nor deselected from an organizational unit appear in black type on the *User Assignment* tab page.

### Prerequisites

You have selected the company and the data extract to which the assignment is to apply and you are on the *User Assignment* tab page.

### Procedure

#### Assign Users and User Groups Manually

1. In the *Organizational units* group box, expand the client structure and select the organizational unit to which you wish to assign users.
2. In the *R/3 User* group box, right click on any users or user groups that you do not wish to be assigned to the organizational unit and select *User is not relevant* to deactivate them. The users or user groups that you have deactivated are grayed out and will not be taken into account in analyses based on this data extract.
3. Drag and drop relevant user(s) and/or user group(s) from the *R/3 User* group box to the lower frame in the *Organizational units* group box. These users are now assigned to the organizational unit you selected and appear in blue type in the *R/3 User* group box. When you click on a user in the top frame of the *R/3 User* group box, the organizational units to which that user is now assigned are displayed in the lower frame.



If you intend to compare organizational units when you conduct analyses based on this data extract, you should ensure that each user is only assigned to one of the organizational units you wish to compare.

#### Copy Assignments From Another Data Extract

### Assigning Users to Organizational Units

1. In the *Transfer User Assignments* group box, select the data extract from which you wish to copy the user assignments to this data extract.
2. If you wish to copy the user status (*relevant/not relevant*) as well, mark the *Transfer userstatus* checkbox. Users with the status *not relevant* are not taken into account in analyses.
3. In the frame beneath the data extract field in the *Transfer User Assignments* group box, select the assignment you wish to copy.
4. Choose *Apply*.

### Import Users and User Groups

1. In the *Organizational units* group box, select the organizational unit to which you wish the users or user groups you are about to import to be assigned.
2. In the *Batch input* group box, select the appropriate import option.
3. Choose *Import*.
4. Select the text file containing the users or user groups that you wish to import. The text file is imported and the users or user groups it contains are automatically assigned to the organizational unit you selected. A message informs you that the file was imported successfully.



At any time, you can delete assignments you have made as follows:

- Individual assignments: Right mouse click on an entry in the lower frames of the *R/3 User* or *Organizational units* group boxes and choose *Delete*.
- All assignments you have made for this data extract: Choose *Clear all user assignments*.

## Importing Companies

### Use

You can import companies (that is, the data extracts and analyses that have been created for them) into your current RBE™ database from another database. You can import a company in full or, if the company in question already exists in your current database, you can simply import the analyses you require.

### Prerequisites

You have chosen *Data Manager* → *Import Company* and you are on the *RBE – Import company* dialog box.

### Procedure

#### Import a new company in full

1. Select *Import all company data*.
2. Position the cursor in the *Import Company:* field. A dialog box appears, allowing you to navigate to the directory containing the database (RBE.db1) from which you wish to import the company. Open this database.
3. If the database contains more than one company, select the company you wish to import and confirm your selection.  
In the *Analyses:* box, you can see the analyses that exist for the company you have selected.
4. Choose *OK* to start the import.  
A message informs you that the analyses and data extracts of the selected company were imported successfully.

#### Import selected analyses for an existing company

1. Select *Import analyses to an existing company*.
2. Position the cursor in the *Import Company:* field. A dialog box appears, allowing you to navigate to the directory containing the database (RBE.db1) from which you wish to import the company. Open this database.
3. If the database contains more than one company, select the company you wish to import and confirm your selection.  
In the *Analyses:* box, you can see the analyses that exist for the company you have selected.
4. Deselect any analyses that you do not wish to import.
5. In the *Import to:* field, select the company in your current database to which you wish to add the selected analysis or analyses.
6. Choose *OK* to start the import.  
A message informs you that the analyses and data extracts of the selected company were imported successfully.

---

**Importing Companies****Result**

All or some of the data extracts and analyses of the company you selected have been imported successfully into your current RBE™ database and can be used there as the basis for further analyses or reports.

## Analyzing the Data

### Purpose

A data extract that has been imported into the RBE™ can be used as the basis for a variety of analyses in the Reverse Modeling Assistant (RMA).

### Prerequisites

You have imported a data extract for a particular company into the RBE™.

### Process Flow

1. [You create, define details for, and start a new analysis. \[Page 50\]](#)
2. [You change or copy an existing analysis and start the new version of the analysis. \[Page 59\]](#)

### Result

The analysis was conducted using your analysis criteria and the results are available to be displayed and/or processed further.

#### See also:

[Displaying the Analysis Results \[Page 61\]](#)

[Transferring the Analysis Results to the ASAP Q&Adb \[Page 67\]](#)

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**Creating a New Analysis**

## Creating a New Analysis

### Purpose

You wish to create a new analysis and define detailed analysis criteria. This includes:

- Selecting the data extract on which you wish the analysis to be based
- Selecting the analysis type
- Defining the scope of the analysis
- Specifying the method to be used to determine the status of transactions
- Specifying threshold values for each status (including, in a detailed analysis, a threshold value for material/configuration test steps)

### Prerequisites

You have imported a data extract for a particular company into the RBE™.

### Process Flow

1. [You define basic data for your analysis. \[Page 51\]](#)
2. You define analysis details:
  - for a [transaction analysis \[Page 53\]](#)
  - for a [detailed analysis \[Page 56\]](#)

### Result

The analysis was conducted and the results are available to be displayed and/or processed further.

**See also:**

[Displaying the Analysis Results \[Page 61\]](#)

[Transferring the Analysis Results to the ASAP Q&Adb \[Page 67\]](#)

[Generating Reports \[Page 73\]](#)

## Defining Basic Data for the Analysis

### Use

To create a new analysis, the first thing you must do is define its basic data. This includes:

- The company for which the analysis is to be conducted (you can also specify a contact person at the company, if you wish)
- The data extract on which the analysis is to be based
- The scope of analysis

### Prerequisites

You have imported the data extract on which you wish to base your analysis into the RBE™.

### Procedure

#### Create New Analysis

1. Choose *Reverse Modeling Assistant* → *Conduct analysis*.
2. Select a company and choose *Next* >.
3. In the field at the top of the next dialog box, enter a name for your analysis. Choose *Save analysis*.  
The name of your analysis is copied to the *Name* field in the bottom half of the dialog box.
4. Enter your name (*Analyst*) and the name of a contact person at the company (if required) and choose *Save analysis* again.
5. Choose *Next* >.
6. Select the data extract on which you intend to base your analysis.  
The *Content of Extract*: group box displays the content of the data extract, allowing you to see whether or not it is purely transaction-based.
7. Choose *Next* >.
8. Select the structure for the scope of analysis: the process view of the application component hierarchy.
9. Choose *Next* >.
10. Define the scope of analysis.



- Keep the scope of analysis small, maybe limiting it to just one component and its subordinate structure items. This keeps the analysis results meaningful and shortens the runtime of the analysis itself.
- If you are basing your analysis on a data extract that only contains transaction data, there is no point including functions in the scope of analysis, so you should ensure that the *No functions* checkbox is marked.

The following table explains how to define the scope of analysis:

## Defining Basic Data for the Analysis

You want to	Proceed as follows:
Transfer a structure item and all subordinate items to the scope of analysis	<ol style="list-style-type: none"> <li>a. In the <i>Normal View</i>, click on the node that you want to transfer with its subordinate structure items.</li> <li>b. If you want the functions to be included, deselect the <i>No functions</i> option.</li> <li>c. Choose &gt;&gt;.</li> </ol>
Transfer a structure item without its subordinate items to the scope of analysis	<ol style="list-style-type: none"> <li>a. In the <i>Normal View</i>, click on the node that you want to transfer.</li> <li>b. Choose &gt;.</li> </ol>
Remove a structure item and all subordinate items from the scope of analysis	<ol style="list-style-type: none"> <li>a. In the <i>Scope of analysis</i>, click on the node that you want to remove with its subordinate structure items.</li> <li>b. Choose &lt;&lt;.</li> </ol>
Clear the current scope of analysis (remove all structure items)	Choose <i>Clr.</i>



You cannot change the structure displayed in the *Normal View*, so you cannot add further structure items to it.

## Result

You have defined basic data for the analysis and can proceed to [define the analysis details \[Page 56\]](#).

## Defining Analysis Details for a Transaction Analysis

### Use

Once you have defined the basic data for your analysis, you can proceed to specify more detailed analysis criteria. You proceed as described below if you wish to conduct a **transaction analysis**. In this type of analysis, only transaction test items are taken into account. Moreover, only the “identifying” transaction test steps in these test items have a direct effect on the analysis results. You specify the following:

- The organizational unit(s) or client to be analyzed
- The specific data extract segments that you wish to base the analysis on
- The analysis type (in this case, transaction analysis)
- The method to be used to determine the status of transactions  
 The Transaction Monitor calculates the number of times each transaction was used in each month of the period covered by the data extract. This is called a time series analysis or trend analysis. The values calculated can be used in the RBE™ analysis to determine the status of transactions using one of three methods: by taking the sum of the values, the average of the values, or a minimum value.
- The number of times a transaction must be used to be assigned a particular status
- The appearance of structure items in the scope of analysis

### Prerequisites

You have [created an analysis with its basic data \[Page 51\]](#) (or you have selected an existing analysis) and you are on the *Reverse Modeling Assistant – Set details of analysis* screen. If you intend to analyze specific organizational units, you must have assigned users to them for this data extract.

In contrast to the prerequisites for a detailed analysis, it does not matter whether you specified that the data extract should include all data (*ALL*) or just transaction data (*WORKLOAD*).

### Procedure

1. In the *Set Organizational Units* group box, select organizational units or clients as follows, according to the type of report you wish to generate later from the analysis results:

Type of report	Client/organizational unit you select
Single analysis of one client	You do not have to select a client here because the client was already selected for the data extract and is proposed here by default.
Organizational-unit-based single analysis	You select one or more organizational units.
Comparison of two or more single-client analyses	See “Single analysis of one client”
Comparison of two or more organizational-unit-based analyses	You should only select <u>one</u> organizational unit per analysis, as you cannot restrict your selection later.

## Defining Analysis Details for a Transaction Analysis



The tool performs an OR operation to determine the extract data to be analyzed. In other words, any extract data that is valid for at least one of the selected organizational units will be used in the analysis.

7. If you wish the analysis to be based on a smaller dataset than the one you originally extracted, select one or more individual entries in the *Set Details of Extract* group box. These entries are then displayed with a gray background and only these segments will be taken into account in the analysis.



Bear in mind that selecting the current (incomplete) month can falsify the results of the time series analysis for transactions.

If you choose *Details...*, you see a number of default settings that can be changed. By default, the *Transaction check (overview)* and *average of transactions* options are selected and the threshold values for transactions are as follows:

- inactive  $\leq 5$
- probably inactive  $> 5$
- probably active  $> 10$
- active  $> 15$

The *Shade inactive elements* option is also selected by default. This setting specifies that structure items that are found to be inactive by the analysis are to be colored gray in the analysis results.

You now proceed as described below, according to whether or not you want to change any of these default settings.

### Accept All Default Settings

Choose *Next >* to start the analysis.

You are notified by popup as soon as the analysis is complete.



You cannot work in the RBE™ while the analysis is in progress. This can take anywhere between one and ninety minutes, depending on the scope of the analysis and the organizational units to be analyzed.

### Change Default Settings

1. Choose *Details...*
3. You can choose one of three options for the method that transaction test steps are to use to determine the status of transactions:
  - Average of transactions  
If you select this option, transactions are assigned a status according to the sum of the number of times they were used each month in the data extract period divided by the number of months in the data extract period. This average value is displayed in the analysis results.

### Defining Analysis Details for a Transaction Analysis

- Sum of transactions  
If you select this option, transactions are assigned a status according to the sum of the number of times they were used each month in the data extract period. This sum total value is displayed in the analysis results.
  - Minimum of transactions  
If you select this option, transactions are assigned a status according to their smallest monthly usage during the data extract period. This smallest value is displayed in the analysis results.
4. You must then define the number of times a transaction must be used to be assigned a particular status (*active*, *inactive*, and so on). You can overwrite the default values with different values every time you conduct a new analysis.



The values you define here will be used for all transaction test steps in the analysis except for those for which you defined individual values in the Reverse Modeling Engineer (RME).



You select the *sum of transactions* option and enter the number 10 in the *active* field. Each transaction is then analyzed as follows: if the sum of the number of times the transaction was used each month in the data extract period is more than 10, the transaction is assigned the status *active*.

6. If you do not want structure items that are found to be inactive by the analysis to be colored gray in the analysis results, deselect the *Shade inactive elements* option.



If you leave this option selected, the tool will, firstly, color all inactive structure items gray in the analysis results and, secondly, run a background consistency check on the structure. Any theoretically active node with only inactive subnodes will then automatically be colored gray as well.

9. Choose *Next >* to start the analysis.  
You are notified by popup as soon as the analysis is complete.



You cannot work in the RBE™ while the analysis is in progress. This can take anywhere between one and ninety minutes, depending on the scope of the analysis and the organizational units to be analyzed.

## Result

The transaction analysis was conducted using your analysis criteria. You can now display the results of your analysis.

### See also:

[Displaying the Analysis Results \[Page 61\]](#)

## Defining Analysis Details for a Detailed Analysis

### Use

Once you have defined the basic data for your analysis, you can proceed to specify more detailed analysis criteria. You proceed as described below if you wish to conduct a **detailed analysis**. In this type of analysis, all test items (in other words, both transaction test items and general test items) are taken into account. You specify the following:

- The analysis type (in this case, detailed analysis)
- The method to be used to determine the status of transactions  
The Transaction Monitor calculates the number of times each transaction was used in each month of the period covered by the data extract. This is called a time series analysis or trend analysis. The values calculated can be used in the RBE™ analysis to determine the status of transactions using one of three methods: by taking the sum of the values, the average of the values, or a minimum value.
- The number of times a transaction must be used to be assigned a particular status
- The threshold value for material/configuration test steps
- The appearance of structure items in the scope of analysis
- The specific data extract segments that you wish to base the analysis on
- The organizational unit(s) or client to be analyzed

### Prerequisites

You have [created an analysis with its basic data \[Page 51\]](#) (or you have selected an existing analysis) and you are on the *Reverse Modeling Assistant – Set details of analysis* screen. If you intend to analyze specific organizational units, you must have assigned users to them for this data extract.

When you created the data extract, you specified that it should include all data (you selected *ALL*).

### Procedure

1. Choose *Details...*
2. In the *Set analysis type* group box, choose *Complete check (detail)*.
4. You can choose one of three options for the method that transaction test steps are to use to determine the status of transactions:
  - Average of transactions  
If you select this option, transactions are assigned a status according to the sum of the number of times they were used each month in the data extract period divided by the number of months in the data extract period. This average value is displayed in the analysis results.
  - Sum of transactions  
If you select this option, transactions are assigned a status according to the sum of the number of times they were used each month in the data extract period. This sum total value is displayed in the analysis results.

**Defining Analysis Details for a Detailed Analysis**

- Minimum of transactions  
If you select this option, transactions are assigned a status according to their smallest monthly usage during the data extract period. This smallest value is displayed in the analysis results.
5. You must then define the number of times a transaction must be used to be assigned a particular status (*active*, *inactive*, and so on).  
You can overwrite the default values with different values every time you conduct a new analysis.



The values you define here will be used for all transaction test steps in the analysis except for those for which you defined individual values in the Reverse Modeling Engineer (RME).



You select the *sum of transactions* option and enter the number 10 in the *active* field. Each transaction is then analyzed as follows: if the sum of the number of times the transaction was used each month in the data extract period is more than 10, the transaction is assigned the status *active*.

5. You can define a threshold value for non-transaction test steps. Then in the analysis, all non-transaction test steps are assigned the status *yes* or *no* according to whether or not they exceed this threshold value. The value you define here will be used for all non-transaction test steps in the analysis except for those for which you defined an individual threshold value in the Reverse Modeling Engineer (RME).
7. If you do not want structure items that are found to be inactive by the analysis to be colored gray in the analysis results, deselect the *Shade inactive elements* option.



If you leave this option selected, the tool will, firstly, color all inactive structure items gray in the analysis results and, secondly, run a background consistency check on the structure. Any theoretically active node with only inactive subnodes will then automatically be colored gray as well.

8. If you wish the analysis to be based on a smaller dataset than the one you originally extracted, select one or more individual entries in the *Set Details of Extract* group box.



Bear in mind that selecting the current (incomplete) month can falsify the results of the time series analysis for transactions.

8. In the *Set Organizational Units* group box, select organizational units or clients as follows, according to the type of report you wish to generate later from the analysis results:

Type of report	Client/organizational unit you select
Single analysis of one client	You do not have to select a client here because the client was already selected for the data extract and is proposed here by default.
Organizational-unit-based single analysis	You select one or more organizational units.

**Defining Analysis Details for a Detailed Analysis**

Comparison of two or more single-client analyses	See “Single analysis of one client”
Comparison of two or more organizational-unit-based analyses	You should only select <u>one</u> organizational unit per analysis, as you cannot restrict your selection later.



The tool performs an OR operation to determine the extract data to be analyzed. In other words, any extract data that is valid for at least one of the selected organizational units will be used in the analysis.

10. Choose *Next >* to start the analysis.

You are notified by popup as soon as the analysis is complete.



You cannot work in the RBE™ while the analysis is in progress. This can take anywhere between one and ninety minutes, depending on the scope of the analysis and the organizational units to be analyzed.

## Result

The detailed analysis was conducted using your analysis criteria. You can now display the results of your analysis.

**See also:**

[Displaying the Analysis Results \[Page 61\]](#)

## Editing an Analysis

### Use

You can change, copy, or delete an existing analysis. Copying or changing an existing analysis allows you to skip a number of the steps you would have to perform to create an analysis from scratch, such as defining a completely new scope of analysis, for example. If you copy an analysis (rather than change it), you can also base your new analysis on a different data extract than you used for the original analysis.

### Prerequisites

At least one analysis already exists, you have chosen *Reverse Modeling Assistant* → *Conduct analysis* and selected a company, and you are in the *Analysis* group box.

### Procedure

#### Change Analysis

1. Select an analysis.  
The attributes of the analysis are displayed.
2. If you wish, choose *Content* to display the content of the data extract.  
Then choose < *Back* to return to the *Analysis* group box.
3. To display the existing scope of analysis, choose *Next* >.
4. Change the scope of analysis as necessary.  
You can remove or add structure items as you see fit.  
See: [Defining Basic Data for the Analysis \[Page 51\]](#), step 10.
5. Change the analysis details, if necessary.  
See: [Defining Analysis Details \[Page 56\]](#)
6. To start the changed analysis, choose *Next* >.



You cannot work in the RBE™ while the analysis is in progress. This can take anywhere between one and ninety minutes, depending on the scope of the analysis and the organizational units to be analyzed. You are notified by popup as soon as the analysis is complete.

#### Copy Analysis

1. Select an analysis.  
The attributes of the analysis are displayed.
2. Choose *Copy analysis*.  
You can use the same data extract for your new analysis as you used for the original analysis, or you can select a different data extract.

You want to	Proceed as follows:
Use the same data extract for your new analysis as you used for the original analysis	Choose <i>No</i> in the dialog box that appears.

## Editing an Analysis

Use a different data extract for your new analysis than you used for the original analysis	<ol style="list-style-type: none"><li>a. Choose <i>Yes</i> in the dialog box that appears.</li><li>b. Select the data extract you require and choose <i>Next &gt;</i>.</li></ol>
--	--

A copy of the analysis you selected is created.



The dialog box described above does not appear if there is only one data extract currently available for the company in question.

3. Enter header data for the new analysis, not forgetting to give it a new name.
4. Choose *Save analysis* and then *Next >*.  
The analysis details, the company, and (if you chose *No* in step 2) the data extract are copied.
5. Change the scope of analysis as necessary.  
You can remove or add structure items as you see fit.  
See: [Defining Basic Data for the Analysis \[Page 51\]](#), step 10.
6. Change the analysis details, if necessary.  
See: [Defining Analysis Details \[Page 56\]](#)
7. To start the copied analysis, choose *Next >*.



You cannot work in the RBE™ while the analysis is in progress. This can take anywhere between one and ninety minutes, depending on the scope of the analysis and the organizational units to be analyzed. You are notified by popup as soon as the analysis is complete.

### Delete Analysis

1. Select the analysis you wish to delete.
2. Choose *Delete analysis*.

## Displaying the Analysis Results

### Use

Once you have conducted an analysis, you can display the results in various ways and according to a number of criteria.

### Prerequisites

You have chosen *Reverse Modeling Assistant* → *Show analysis results* and selected an analysis that you conducted earlier.

### Features

The results of your analysis are displayed in two frames:

#### Scope of analysis

This frame, on the left, shows the scope of analysis structure you defined prior to conducting the analysis. Structure items that were found by the analysis to be inactive appear gray in the structure. Any node with only inactive structure items as its subnodes automatically appears gray as well.

You can also see in this frame the status that was assigned to a particular structure item during the analysis as a result of the various test steps that were performed. The status appears next to the structure item as a symbol in parentheses:

Symbol	Meaning
[+]	Active
[-]	Inactive
[?]	Probably active or probably inactive
[i]	Informative
No symbol	There were no test rules; no result could be determined for the structure item.

#### Results

This frame, on the right, shows detailed, graphical analysis results for a structure item that you have clicked on in the *Scope of analysis* frame. There are two different views on the analysis results in this frame:

- Results**  
 This tab page shows you the status that was determined for structure items during the analysis according to the analysis criteria you specified.  
 You can display this information in a *Normal view* (for a specific structure item that you have clicked on in the *Scope of analysis* frame) or in a *Total view* (for all structure items in alphabetical order).

See: [Displaying the Results \[Page 63\]](#)

- RBE Sets**  
 This tab page shows you what test steps were run through for a structure item and what

## Displaying the Analysis Results

values were determined for each test step. Usually, the majority of test steps are assigned to process structure items.

See: [Displaying RBE Sets \[Page 65\]](#)

You can also click the following pushbuttons to display further helpful information about analysis results:

- *Legend*  
The legend explains all the symbols and icons used to differentiate the structure items and analysis results.
- *Statistics*  
The statistics provide you with an overview of the total number of structure items that were analyzed and the total number of structure items that were assigned each status by the analysis. You can display these statistics for a specific type of structure item by clicking the *Components*, *Processes*, or *Functions* pushbuttons here.
- *Analysis Info*  
Here you can display a wealth of background information relevant to the analysis, such as the basic data and the analysis details that you defined for the analysis.

You can generate reports on the basis of the analysis results you have displayed; you can also transfer the results to the ASAP Q&Adb.

**See also:**

[Generating Reports \[Page 73\]](#)

[Transferring the Analysis Results to the ASAP Q&Adb \[Page 67\]](#)

## Displaying the Results

### Use

You can display the results of your analysis using various different display options.

### Integration






Unless you deselected the *Shade inactive elements* option when you defined the analysis details, structure items that were found by the analysis to be inactive appear gray in the scope of analysis structure. Any node with only inactive structure items as its subnodes automatically appears gray as well.

### Features

The results of your analysis are displayed on the *Results* tab. There are two views available:

- *Normal view*  
This displays the results for selected structure items. Click on a structure item in the *Scope of analysis* frame to display the results for all subordinate structure items.
- *Total view*  
This displays the results for all structure items, sorted alphabetically.

Both views display results as follows:

Icon	Status	Meaning
	Active	The structure item is used.
	Probably active	The structure item is used to a certain extent.
	Probably inactive	The structure item is used occasionally.
	Inactive	The structure item is not used.
	Informative	None of the test steps defined for the structure item were flagged as <i>identifying</i> , so the only analysis result that could be determined for the structure item was the result <i>informative</i> .
No icon	No result	No results could be determined because no test rules were defined for the structure item.

On the *Results* tab, you can also hide or show structure items of a chosen status. You do this by selecting or deselecting statuses at the bottom of the tab page.

You can also select *Component* or *Process* in the *Element type* field to display only these types of structure item.

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**Displaying the Results**

You can double-click on a structure item on the *Results* tab to display the detailed results for that structure item, including the values determined for any test steps that were performed.

See: [Displaying RBE Sets \[Page 65\]](#)

## Displaying RBE Sets

### Use

You can display the test steps that were run through for a given structure item during the analysis and the values that were determined for those test steps.

### Integration

The status that a structure item receives on the *Results* tab is derived directly from the values determined for its various test steps and displayed on the *RBE Sets* tab.

### Features

#### General Information on Test Steps

If you select in the *Scope of analysis* frame or on the *Results* tab a structure item that has test steps, the *RBE Sets* tab displays the following data:

- The type of each test step:
  - Tran.: Transaction data
  - Conf.: Configuration data
  - M. Data: Master data
- The test steps in question form
- The value determined for each test step
- For transaction test steps only: a trend, if one could be determined, in the use of the transaction (the outcome of the time series analysis)
- The analysis result for each test step



The values and results displayed for each transaction test step on the *RBE Sets* tab were calculated on the basis of the method you selected earlier for determining the status of transactions:

Option you selected	Values/results displayed
Sum of transactions	Under <i>Number/Value</i> : The total number of times the transaction was used in the data extract period
Average of transactions	Under <i>Number/Value</i> : The total number of times the transaction was used in the data extract period divided by the number of months in the period
Minimum of transactions	Under <i>Number/Value</i> : The smallest monthly usage during the data extract period  Under <i>Result</i> : A status of <i>active</i> only if the smallest monthly usage exceeds the threshold value you defined for active transactions

A transaction test step can have one of the following results:

## Displaying RBE Sets

- Active
- Probably active
- Probably inactive
- Inactive
- Informative



The result *informative* indicates that the transaction test step was defined in the Reverse Modeling Engineer as relevant, but not identifying. The value determined for this test step is ignored when the analysis result for the whole test item is determined.

A non-transaction test step can have the result *yes* or *no*.

## Time Series Analysis

In addition, the time series analysis for transaction test steps can identify trends in the use of transactions. This is only possible if the values available for the transaction in question span a period of at least three months. You can see the results of each time series analysis on the *RBE Sets* tab under *Trends*. The symbols used denote the following:

Value	Meaning
(No value)	No trend
0	Constant
+	Rising
++	Rising sharply
-	Falling
--	Falling sharply
+-	Alternating

When you click on a transaction test step on the *RBE Sets* tab, a dialog box appears, displaying a breakdown of how many times the transaction was used in each month.

If the analysis you conducted was based on only a subset of the months covered by the data extract, you can mark the *Show all months* checkbox at the bottom of this dialog box to display the values for all the months you originally extracted.

### See also:

[Displaying the Analysis Results \[Page 61\]](#)

## Transferring the Analysis Results to the ASAP Q&Adb

### Purpose

The RBE™ gives you the option of transferring the results of an analysis you have conducted to a Question & Answer database (Q&Adb). You can do this:

- To document the current use of your Q&Adb
- To compare the implementation project scope against the current scope determined by the RBE™ analysis

### Prerequisites

You have conducted an RBE™ analysis and you want to transfer the results to a Q&Adb.

### Process Flow

1. [You accept or change the default transfer values \(for structure items with the analysis results active and inactive\) and define transfer values \(for structure items with other analysis results\). \[Page 68\]](#)
2. [You transfer the analysis-related data to a Q&Adb of your choice. \[Page 70\]](#)

### Result

The results of the analysis have been transferred to the Q&Adb and can be evaluated further there.

## Defining Transfer Values

## Defining Transfer Values

### Use

If you wish to transfer analysis results to the Q&Adb, you should define *active* or *inactive* transfer values for all the structure items that were found to have a status other than *active* or *inactive* by the analysis. This is advisable for reasons of consistency, as the Q&Adb can only distinguish active and inactive structure items.

### Prerequisites

You have chosen *Data Manager* → *Create Transfer File* and selected the analysis for which you wish to define transfer values.

### Procedure



The RBE™ automatically assigns default transfer values of *active* and *inactive* to structure items that were found to be *active* or *inactive* by the analysis. But these are the only analysis results that can be transferred unless you also define transfer values yourself for the other structure items. The only transfer value of relevance to the Q&Adb is the value *active*.

#### Define Transfer Value for a Structure Item Manually

1. Choose the *Results* tab.
2. Select the structure item for which you wish to define a transfer value.  
The structure item is given a gray background.
3. Right click on your selected structure item on the *Results* tab to open the context menu.
4. Select a transfer value.
5. If you wish, specify the reason for choosing the transfer value that you did.  
The transfer value for the structure item you selected has now been defined.



Another way to define the transfer value for a structure item is to choose the *Change transfer values automatically* tab and select the required transfer value in the field next to the relevant analysis result.

However, as this method applies the transfer value you select not just to your selected structure item but to all structure items with the same analysis result, you cannot specify a reason for your choice of transfer value.

#### Define Transfer Values to Apply Automatically to All Structure Items

1. Choose the *Change transfer values automatically* tab.
2. If you want to use the pre-prepared set of standard transfer values for the various possible analysis results, choose *Standard settings* (unless the standard settings are already displayed).

The standard settings are as follows:

Result	Transfer value
--------	----------------

Active	Active
Probably active	Active
Probably inactive	Inactive
Inactive	Inactive
Informative	Inactive
No result	Inactive

3. If you want the transfer values as they appear on this tab page (standard settings or your own settings) to override any transfer values you defined manually on the *Results* tab, select the *Overwrite transfer values changed manually* option.
4. Choose *Change*.

## Result

You have defined transfer values for the structure items that were analyzed. Choose *Next >* to start the transfer.

See: [Transferring Data to the Q&Adb \[Page 70\]](#).

## Transferring Data to the Q&amp;Adb

## Transferring Data to the Q&Adb

### Use

There are two ways of transferring RBE™ data to the Q&Adb:

- As of 4.6A: Direct transfer to AcceleratedSAP
- As of 4.6C: Via creation of a transfer file that can be imported into the Q&Adb

Only structure items with the transfer values *active* and *inactive* can be included in the transfer of data to the Q&Adb.

### Prerequisites

You have defined the transfer values and you are on the *Reverse Modeling Assistant – Select Application for Transfer* screen.

See: [Defining Transfer Values \[Page 68\]](#)

The transfer can only be performed by a project manager.



Before you start the transfer, consider creating a new project to transfer the RBE™ analysis results to. This ensures that you do not unintentionally overwrite parts of the old Q&Adb project scope with the new scope transferred from the RBE™.

### Procedure

#### Transfer Data Directly to the Q&Adb

1. In the *Applications:* group box, select the option *Direct transfer to ASAP (starting from Release 4.6 A)*.
2. Select an existing project and log yourself on.
3. Select one of the following options:

Option	Consequences for the Q&Adb
Reset the structure (select the option <i>Reset complete ASAP structure</i> )	All structure items in the SAP Reference Structure of the chosen Q&Adb will be set to out of scope in the project.
Do not reset the structure	All structure items in the SAP Reference Structure of the chosen Q&Adb will remain in scope in the project.



You can combine the two options to update an ASAP project with RBE™ analysis results in stages, for example as follows:

**Transferring Data to the Q&Adb**

- In the RBE™, you conduct an Analysis 1 for selected components, such as FI and CO. You select the option of resetting the structure and transfer RBE™ Scope 1 to the Q&Adb.
  - On a subsequent occasion, you conduct an Analysis 2 for another component, such as LO. You transfer RBE™ Scope 2 to the same Q&Adb, specifying this time that the structure should not be reset. This ensures that the structure items that were set to in scope by Analysis 1 can remain in scope when the results of Analysis 2 are transferred to the Q&Adb.
4. Choose *Next* >.
- The details of the transfer, including the structure items and their status, are logged in a log file. Save this file in a directory of your choice.
- A message informs you that the Q&Adb was updated successfully.

**Transfer Data to the Q&Adb Using a Transfer File**

1. In the *Applications:* group box, select the option *Write Transfer File*. Choose *Next* >. The *Reverse Modeling Assistant – Select Values for Transfer File* dialog box appears.
2. Select one of the following options:

Option	Consequences for the Q&Adb
Reset the structure (select the option <i>Reset complete ASAP structure</i> )	All structure items in the SAP Reference Structure of the chosen Q&Adb will be set to out of scope in the project.
Do not reset the structure	All structure items in the SAP Reference Structure of the chosen Q&Adb will remain in scope in the project.



When transferring data to the Q&Adb, it is recommended that you restrict the structure items included in the transfer file to processes, as these are the only structure items that can be set to in scope in the SAP Reference Structure.

3. Choose *Next* >.
4. Specify a name and a directory for the transfer file.  
A message informs you that the file was downloaded successfully.  
For a description of the contents of the transfer file, see [Transfer File - Contents \[Page 72\]](#).
5. To import the transfer file into the Q&Adb, use the import functionality provided in the Q&Adb.  
For further information on transferring analysis results from the RBE™ to the Q&Adb, please see the Q&Adb help file.

**Result**

The RBE™ analysis results were transferred to the Q&Adb and the Q&Adb was updated. Structure items with the transfer value *active* were set to in scope in the project. Structure items that were not analyzed are not included in the project scope. Finally, a consistency check was run on the SAP Reference Structure in the Q&Adb.

## Transfer File - Contents

### Definition

The transfer file contains all the analysis-related data that can be imported into the Q&Adb or graphical documentation tools for further processing. When this file is imported into the Q&Adb, all the structure items that have the status *active* and *inactive* in the file are set to in scope and out of scope respectively in the Q&Adb.

### Structure

The transfer file contains the following data:

In the header:

- Company ID
- Company name
- Data extract ID
- Data extract name
- Date on which the data extract was created
- Analysis ID
- Analysis name
- Date on which the analysis was conducted
- R/3 release of the application component hierarchy analyzed
- Indicator as to whether the structure in the Q&Adb should be reset or not (1 = yes, 0 = no)

In the body:

- Object GUID
- Technical object number
- Object type:
  - BMPC for modules
  - BMPV for variants
  - BMEF for functions
  - HFHT for components in the application component hierarchy
- Analysis result (status) of the structure item before transfer values were defined
- Transfer value defined for the structure item

## Generating Reports

### Purpose

You can generate analysis-based and non-analysis-based reports that you can use as the basis for your evaluation of current business process usage in the company in question. Analysis-based reports fall into three categories:

- A report based on a single analysis
- A report that compares two or more analyses
- A report that combines a number of analyses

Non-analysis-based reports are generated on the basis of a data extract. They can be used to display the organizational structure, or the current usage of company-defined transactions, R/3 report programs, or standard SAP transactions not assigned to the company's application component hierarchy.

### Prerequisites

To be able to effectively evaluate the reports and make recommendations as to how business processes could be optimized in the company you have analyzed, you need to have the following profile:

- General knowledge and experience  
Detailed knowledge of the business processes to be optimized. This means at least three years' experience of implementing R/3 systems and comprehensive business process modeling expertise.
- Special knowledge and experience  
Detailed knowledge of business processes in the relevant industry. This means at least three years' R/3 consulting experience.

### Process Flow

1. [You generate a report based on a single analysis. \[Page 83\]](#)
2. [You generate a report that compares two or more single analyses. \[Page 85\]](#)
3. [You combine a number of single analyses in a report or in a new analysis. \[Page 87\]](#)
4. [You generate a non-analysis-based report. \[Page 90\]](#)



In all cases, you are supported in your work by the [Report Viewer \[Page 74\]](#).

## Working with the Report Viewer

### Use

The Report Viewer is the tool that is used to display your reports. Once you have displayed a report, the Report Viewer offers you a number of other functions. You can, for example, export the report or search for specific strings in the text. The Report Viewer is opened automatically when you generate a non-analysis-based report, a report based on a single analysis, a report that compares two or more analyses, or a report that combines a number of analyses.

### Features

The Report Viewer displays all reports in a similar layout with the same basic information:

- The report type
- The report option
- The report scope (if defined) and the relevant structure item(s)
- Analysis results for the structure items (if appropriate) and additional information (such as values and trends for individual transaction test steps, for example)
- The name of the company, of the data extract, and (in an analysis-based report) of the analysis or analyses, and the creation date

The Report Viewer also supports the following other functions:

- Navigating using a structure view and tab pages

For some reports, you can click the structure icon in the menu bar to add a structure to the left of the report, allowing you to navigate more easily between the structure items that are displayed in the list of the report. When you click on an item in this structure, you go directly to the corresponding line in the list of the report. As some items can occur more than once, a path is provided as further information to help you identify the relevant structure item. If you double-click on a structure item in the list of the report, a tab page bearing the name of the structure item and containing the analysis data displayed for that particular structure item in the list of the report is created automatically alongside the structure tab page. This allows you to print analysis results for individual structure items.

If you want to remove a particular tab page, select it and click the red cross icon in the menu bar. Alternatively, you can right click on the tab page you want to close and choose *Close current drilldown view* from the context menu (the fifth menu option).

These navigation options are only available for the following reports:

- Non-analysis-based reports with the report type *User Transactions/not assigned*
- Reports based on a single analysis with the report type *List with RBE Sets*
- Reports based on a single analysis with the report type *List without RBE Sets (sort according to components)*
- Reports based on a single analysis with the report type *List with RBE Sets (sort according to components)*
- Reports that compare two or more analyses with the report type *List with RBE Sets*

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**Working with the Report Viewer**

- Searching for strings  
You can search for strings of up to seven characters in the text of the report. To do this, enter the string in the field to the left of the binoculars icon in the menu bar and click the icon.
- Exporting the report  
You can save the report in a number of formats.
  - Format:
    - Various text file formats
    - Various Microsoft Excel versions
    - HTML
    - Lotus
  - Destination:
    - Application  
The file is downloaded then opened.
    - Disk file  
The file is downloaded to a directory of your choice.
    - Exchange Folder  
The file is downloaded to a private or public Exchange Folder.
    - Lotus Notes Database  
The file is downloaded using the database type of your choice.
    - Microsoft Mail (MAPI)  
The file is downloaded and can be dispatched as an e-mail.
- Printing the report

## Report

## Report

### Definition

A report in the context of the RBE™ is a means of collating RBE™ analysis results according to specific criteria and in a specific layout so that you have a clear basis for business evaluations. Reports are displayed on-screen using the Report Viewer and can also be printed from there. You can also save reports so that you can display them again whenever you wish.

### Use

You can generate RBE™ reports to:


- Display the results of a single analysis as a report
- Compare two or more analyses
- Combine a number of analyses
- Display other, non-analysis-based information as a report

### Structure

When you choose the function for generating a report, you are asked to select one of the report options described under *Use*. Just before displaying the report, you select a report type to determine the contents and layout of the report. The report types that are available here depend on the report option you selected initially. Before displaying the report, you can also select or deselect various report display options to filter the contents of the report further. The report display options that are offered depend on the report type selected. The report types and report display options you can select in each case are explained in detail in the tables below.

#### Single Analyses

Report no.	Report type	Report display options
1(a)	<p><i>Structure tree</i></p> <p>The structure items that were transferred to the scope of report and their analysis results are displayed in a structure that mirrors the application component hierarchy.</p>	<p><i>Results – basis analysis</i></p> <p>You can deselect one or several analysis results, for example to generate a report that shows you only structure items with the status <i>active</i>.</p>
2(a)	<p><i>List without RBE Sets</i></p> <p>The structure items that were transferred to the scope of report are displayed in an alphabetical list, with the corresponding analysis results alongside.</p>	<p><i>Results – basis analysis → see 1(a)</i></p>





<p>3(a)</p>	<p><i>List with RBE Sets</i></p> <p>The structure items that were transferred to the scope of report are displayed in an alphabetical list, along with the following information for each structure item:</p> <ul style="list-style-type: none"> <li>• The analysis result</li> <li>• The test steps that were performed</li> <li>• Values determined by the test steps</li> <li>• Any trends that could be determined</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Results – basis analysis</i> You can deselect one or several analysis results, for example to generate a report that shows you only structure items with the status <i>active</i>.</li> <li>• <i>Trends</i> The trends displayed in the report correspond to the trends you saw on the <i>RBE Sets</i> tab when you displayed the analysis results. See the <i>Time Series Analysis</i> section of <a href="#">Displaying RBE Sets [Page 65]</a>. If you select specific trends in the report display options, the report will filter out any transaction test steps that did not find these trends.</li> <li>• <i>Show all Transactions</i> <ul style="list-style-type: none"> <li>– This option is selected: All transactions (even those that were not used at all and therefore have the value 0) are displayed in the report.</li> <li>– This option is deselected: Only transactions that were used at least once (transaction value &gt; 0) are displayed in the report.</li> </ul> </li> </ul>
<p>4</p>	<p><i>Top transactions</i></p> <p>The transactions that fall within the scope of the report are displayed in a list in descending order of use.</p> <p>The following information is displayed for each transaction:</p> <ul style="list-style-type: none"> <li>• The structure item to which it belongs and the overall status determined for the structure item</li> <li>• The value (the number of times it was used)</li> <li>• Any trends that could be determined</li> </ul>	<p><i>Results – basis analysis</i> → see 3(a)</p> <p><i>Trends</i> → see 3(a)</p> <p></p> <p>For this report type, it is recommended that you do not deselect any trends.</p>

## Report


5	<p><i>List without RBE Sets (sort according to components)</i></p> <p>The structure items that were transferred to the scope of report are displayed in alphabetical order, but grouped under main components (Level 1 of the application component hierarchy), with the corresponding analysis results alongside.</p>	<p><i>Results – basis analysis</i> → see 1(a)</p>
6	<p><i>List with RBE Sets (sorted according to components)</i></p> <p>The structure items that were transferred to the scope of report are displayed in alphabetical order, but grouped under main components (Level 1 of the application component hierarchy). The following information is displayed for each structure item:</p> <ul style="list-style-type: none"> <li>• The analysis result</li> <li>• The test steps that were performed</li> <li>• Values determined by the test steps</li> <li>• Any trends that could be determined</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Results – basis analysis</i> You can deselect one or several analysis results, for example to generate a report that shows you only structure items with the status <i>active</i>.</li> <li>• <i>Trends</i> The trends displayed in the report correspond to the trends you saw on the <i>RBE Sets</i> tab when you displayed the analysis results. See the <i>Time Series Analysis</i> section of <a href="#">Displaying RBE Sets [Page 65]</a>. If you select specific trends in the report display options, the report will filter out any transaction test steps that did not find these trends.</li> <li>• <i>Show all Transactions</i> <ul style="list-style-type: none"> <li>– This option is selected: All transactions (even those that were not used at all and therefore have the value 0) are displayed in the report.</li> <li>– This option is deselected: Only transactions that were used at least once (transaction value &gt; 0) are displayed in the report.</li> </ul> </li> </ul>

## Comparisons of Two or More Analyses

Report no.	Report type	Report display options
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<p>1(b)</p>	<p><i>Structure tree</i></p> <p>The structure items that were transferred from the scope of the basis analysis to the scope of report are displayed in a structure that mirrors the application component hierarchy, along with the following information for each structure item:</p> <ul style="list-style-type: none"> <li>• The analysis result determined in the basis analysis</li> <li>• The analysis result determined in the comparison analysis</li> <li>• A symbol to tell you at a glance which analysis results match (-) and which analysis results differ (✓) in the analyses</li> </ul> <p> You can only compare a basis analysis and <b>one</b> comparison analysis using this report type.</p>	<p><i>Results – basis analysis</i> You can deselect one or several analysis results, for example to generate a report that shows you only structure items with the status <i>active</i>.</p> <p><i>Results – comparison analysis</i> See <i>Results – basis analysis</i></p> <p> If you deselect specific analysis results under <i>Results – basis analysis</i> or <i>Results – comparison analysis</i>, the report that is generated will show only those structure items for which both the basis <b>and</b> the comparison analysis results match the relevant report display options.</p> <p> You select <i>active</i>, <i>probably active</i>, and <i>probably inactive</i> under <i>Results – basis analysis</i> and <i>active</i> under <i>Results – comparison analysis</i>. The report shows you only those structure items that were found to be <i>active</i> by the comparison analysis <b>and also active, probably active, or probably inactive</b> by the basis analysis.</p>
<p>2(b)</p>	<p><i>List without RBE Sets</i></p> <p>The structure items that were transferred from the scope of the basis analysis to the scope of report are displayed in an alphabetical list, along with the following information for each structure item:</p> <ul style="list-style-type: none"> <li>• The analysis result determined in the basis analysis</li> <li>• The analysis result determined in the comparison analysis or analyses</li> <li>• A symbol to tell you at a glance which analysis results match (-) and which analysis results differ (✓) in the analyses</li> </ul> <p> These symbols are not displayed if you selected more than one comparison analysis.</p>	<p><i>Results – basis analysis</i> and <i>Results – comparison analysis</i> → see 1(b)</p>

## Report

3(b)	<p><i>List with RBE Sets</i></p> <p>The structure items that were transferred from the scope of the basis analysis to the scope of report are displayed in an alphabetical list, along with the following information for each structure item:</p> <ul style="list-style-type: none"> <li>• Values determined by the test steps</li> <li>• The analysis result determined in the basis analysis</li> <li>• The analysis result determined in the comparison analysis or analyses</li> <li>• A symbol to tell you at a glance which analysis results match (-) and which analysis results differ (✓) in the analyses</li> </ul>  <p>These symbols are not displayed if you selected more than one comparison analysis.</p>	<p><i>Results – basis analysis and Results – comparison analysis</i> → see 1(b)</p> <p><i>Show all Transactions</i></p> <ul style="list-style-type: none"> <li>• This option is selected: All transactions (even those that were not used at all and therefore have the value 0) are displayed in the report.</li> <li>• This option is deselected: Only transactions that were used at least once (transaction value &gt; 0) are displayed in the report.</li> </ul>
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## Combined Analyses

Report no.	Report type	Report display options
1(c)	<p><i>Structure tree</i></p> <p>The structure items that were transferred to the scope of report and their analysis results are displayed in a structure that mirrors the application component hierarchy.</p>	<p><i>Results – basis analysis</i></p> <p>You can deselect one or several analysis results, for example to generate a report that shows you only structure items with the status <i>active</i>.</p>
2(c)	<p><i>List without RBE Sets</i></p> <p>The structure items that were transferred to the scope of report are displayed in an alphabetical list, with the corresponding analysis results alongside.</p>	<p><i>Results – basis analysis</i> → see 1(c)</p>



Combined analyses can be saved to disk, in which case you can also generate reports for them at a later date following the procedures you would use to generate reports based on single analyses or reports that compare analyses. When using those procedures to generate reports involving combined analyses, however, you cannot select report types with RBE sets.

**Non-Analysis-Based Reports**

Report no.	Report type	Report display options
1(d)	<p><i>Organizational Structure</i></p> <p>The company's organizational units are displayed in a hierarchical structure, within which they are grouped according to organizational unit type, as follows:</p> <ul style="list-style-type: none"> <li>• Company code</li> <li>• Plant</li> <li>• Storage location</li> <li>• Purchasing organization</li> <li>• Sales organization</li> <li>• Distribution channel</li> <li>• Division</li> <li>• Shipping point</li> <li>• Maintenance planning plant</li> <li>• Personnel area</li> <li>• Operating concern</li> <li>• Business area</li> <li>• Controlling area</li> <li>• FM area</li> </ul>	

## Report

2(d)	<p><i>User Transactions/not assigned</i></p> <p>Company-defined transactions and report programs and standard SAP transactions not assigned to the company's application component hierarchy are displayed in a list in descending order of use. The following information is displayed for each transaction/report program:</p> <ul style="list-style-type: none"> <li>• The transaction code or report name</li> <li>• The descriptive short text for the transaction/report program</li> <li>• The parameters (in the case of transactions, this can be a report program that is called, for example; in the case of report programs, it is the <i>last changed by</i> parameter)</li> <li>• Values determined by the test steps</li> <li>• The attributes assigned when the report program or transaction was created (type, status, and application)</li> </ul>	<p><i>Selection</i> (all combinations possible)</p> <p>R/3 Transactions and R/3 Reports</p> <ul style="list-style-type: none"> <li>• <i>SAP-Standard</i>: Transactions and report programs that are part of the standard R/3 System but are not assigned to the company's application component hierarchy</li> <li>• <i>Customer</i>: Transactions and report programs that are defined by the company itself (that is, they are not part of the standard R/3 System) and were used at least once in the data extract period</li> <li>• <i>Customer (not used)</i>: Transactions and report programs that are defined by the company itself but were not used in the data extract period</li> </ul> <p>Others: Transactions and report programs that do not fall into the above categories</p>
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## Generating a Single-Analysis Report

### Use

You can generate various different types of report that display the results of a single analysis in different layouts, as follows:

- In a structure that mirrors the scope of report [*Structure tree*]
- In alphabetical order by structure item name [*List without RBE Sets*]
- In alphabetical order by structure item name with the addition of test steps, values, and trends [*List with RBE Sets*]
- In descending order of use, measured according to the frequency with which the transactions covered by the scope of analysis are used [*Top transactions*]
- In alphabetical order by structure item name, but grouped under main components [*List without RBE Sets (sort according to components)*]
- In alphabetical order by structure item name, grouped under main components, with the addition of test steps, values, and trends [*List with RBE Sets (sort according to components)*]

### Prerequisites

You have conducted the analysis for which you wish to generate a report.

### Procedure

1. Choose *Analysis Reports* → *Analysis Reports*.
2. In the *Analysis results – Reports* dialog box, select the option *Evaluation of single Analyses* and choose *Next >*. The *Analysis Results - Reports (Analysis selection)* screen appears.
3. In the *Existing analyses* frame, expand the company structure to display the analyses that are available to be selected. Double-click on one of these analyses to transfer it to the *Selected analyses* frame. The analysis you have selected now appears in blue type in the *Existing analyses* frame.  
When you click on an analysis or a data extract in the *Existing analyses* frame, corresponding details are automatically displayed on the right of the screen.



You can double-click the analysis in the *Selected analyses* frame to remove it from the list.

4. Choose *Next >*.
5. Transfer from the *Scope of analysis* to the *Scope of Report* those structure items that you wish to see included in the report. The following table explains how to define the scope of report:

<b>You want to</b>	<b>Proceed as follows:</b>
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### Generating a Single-Analysis Report

Transfer a structure item and all subordinate items to the scope of report	<p>d. In the <i>Scope of analysis</i>, click on the node that you want to transfer with its subordinate structure items.</p> <p>e. If you want the functions to be included, deselect the <i>No functions</i> option.</p> <p>f. Choose &gt;&gt;.</p>
Transfer a structure item without its subordinate items to the scope of report	<p>c. In the <i>Scope of analysis</i>, click on the node that you want to transfer.</p> <p>d. Choose &gt;.</p>
Remove a structure item and all subordinate items from the scope of report	<p>c. In the <i>Scope of Report</i>, click on the node that you want to remove with its subordinate structure items.</p> <p>d. Choose &lt;&lt;.</p>
Clear the current scope of report (remove all structure items)	Choose <i>Clr.</i>

6. Select a report type.  
See: [Report \[Page 76\]](#), *Single Analyses: Report type*
7. If you need to filter out certain data to keep the report a manageable size, deselect options as appropriate from the ones that are displayed for your report type.  
See: [Report \[Page 76\]](#), *Single Analyses: Report display options*
8. Choose *Show*.  
Your report is displayed using the Report Viewer.  
See: [Working with the Report Viewer \[Page 74\]](#)

## Comparing Two or More Analyses

### Use

You can compare a basis analysis with one or more comparison analyses and display the comparison in a report. This allows you to identify differences between the business process usage of two different plants in the same company, for example. Alternatively, you can compare analyses that were conducted for two different clients in the same system or in two different systems.

To determine the layout of the report, you choose an appropriate *report type* from the report types that are possible for the number of comparison analyses you have selected. You can display the report in the following layouts:

- In a structure that mirrors the scope of report [*Structure tree*] (**one** comparison analysis only)
- In alphabetical order by structure item name [*List without RBE Sets*]
- In alphabetical order by structure item name with the addition of test steps, values, and trends [*List with RBE Sets*]



You can compare the basis analysis with a maximum of five comparison analyses in a single report.

### Prerequisites

You have conducted the analyses whose results you wish to compare and they had the same structure items in their scope of analysis. It is important to ensure that the analyses are genuinely comparable. For example, if you wish to compare organizational-unit-based analyses, the analyses should be based on the same data extract. You should also avoid comparing analyses based on data extract periods of different lengths and analyses for which different transaction threshold values were defined.

### Procedure

1. Choose *Analysis Reports* → *Analysis Reports*.
2. In the *Analysis results – Reports* dialog box, select the option *Comparison of Analyses* and choose *Next* >.
3. In the *Existing analyses* frame, expand the company structures to display the analyses that are available to be selected. Double-click on at least two of these analyses to transfer them to the *Selected analyses* frame. The analyses you have selected now appear in blue type in the *Existing analyses* frame.

When you click on an analysis or a data extract in the *Existing analyses* frame, corresponding details are automatically displayed on the right of the screen.



You can double-click an analysis in the *Selected analyses* frame to remove it from the list.

Bear in mind that when you define the scope of report in step 5, you will only be able to select structure items from the scope of the **basis** analysis. As the analysis at the

## Comparing Two or More Analyses

top of the list in the *Selected analyses* frame is automatically the basis analysis, you may need to rearrange the list before you continue.

4. Choose *Next* >.
5. Transfer from the *Scope of analysis of the selected basis analysis* to the *Scope of Report* those structure items that you wish to see included in the comparison report. The following table explains how to define the scope of report:

You want to	Proceed as follows:
Transfer a structure item and all subordinate items to the scope of report	<ol style="list-style-type: none"> <li>g. In the <i>Scope of analysis</i>, click on the node that you want to transfer with its subordinate structure items.</li> <li>h. If you want the functions to be included, deselect the <i>No functions</i> option.</li> <li>i. Choose &gt;&gt;.</li> </ol>
Transfer a structure item without its subordinate items to the scope of report	<ol style="list-style-type: none"> <li>e. In the <i>Scope of analysis</i>, click on the node that you want to transfer.</li> <li>f. Choose &gt;.</li> </ol>
Remove a structure item and all subordinate items from the scope of report	<ol style="list-style-type: none"> <li>e. In the <i>Scope of Report</i>, click on the node that you want to remove with its subordinate structure items.</li> <li>f. Choose &lt;&lt;.</li> </ol>
Clear the current scope of report (remove all structure items)	Choose <i>Clr</i> .



If you are comparing **two** analyses, the report will only contain analysis results for those structure items that are present in **both** scopes of analysis. Structure items that you transfer to the scope of report that are not present in the scope of the comparison analysis will be ignored.

If you are comparing **more than two** analyses, the report will contain analysis results for **all** the structure items you transfer from the scope of the basis analysis to the scope of report.

6. Select a report type.  
See: [Report \[Page 76\]](#), *Comparisons of Two or More Analyses: Report type*
7. If you need to filter out certain data to keep the report a manageable size, deselect options as appropriate from the ones that are displayed for your report type.  
See: [Report \[Page 76\]](#), *Comparisons of Two or More Analyses: Report display options*
8. Choose *Show*.  
Your report is displayed using the Report Viewer.  
See: [Working with the Report Viewer \[Page 74\]](#)

## Combining Analyses

### Use

You can combine the results of as many analyses as you like and display them in one report or save them as a new analysis for which you can generate a report at a later date. You can display the report with the combined analysis results in the following layouts (report type in italics):

- In a structure that mirrors the scope of report [*Structure tree*]
- In alphabetical order by structure item name [*List without RBE Sets*]

If you save the combined analysis results as a new analysis, you can use this combined analysis later as you would use any single analysis. This means that you can generate a report for it following the procedures you would use to generate a report based on a single analysis or a report that compares analyses. When generating reports involving combined analyses, however, you cannot select report types that produce a detailed breakdown of analysis results by test step (*List with RBE Sets*).

### Prerequisites

You have conducted a number of analyses that you wish to combine.

### Procedure

1. Choose *Analysis Reports* → *Analysis Reports*.
2. In the *Analysis results – Reports* dialog box, select the option *Summary of Analyses* and choose *Next >*. The *Analysis Results - Reports (Analysis selection)* screen appears.
3. In the *Existing analyses* frame, expand the company structure to display the analyses that are available to be selected. Double-click on at least two of these analyses to transfer them to the *Selected analyses* frame. The analyses you have selected now appear in blue type in the *Existing analyses* frame.  
When you click on an analysis or a data extract in the *Existing analyses* frame, corresponding details are automatically displayed on the right of the screen.



You cannot combine analyses of different companies.  
You can double-click an analysis in the *Selected analyses* frame to remove it from the list.


4. Choose *Next >*.
5. Select one of the analyses.
6. Transfer from the *Scope of analysis* to the *Scope of Report* those structure items that you wish to see included in the report.

<b>You want to</b>	<b>Proceed as follows:</b>
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## Combining Analyses

Transfer a structure item and all subordinate items to the scope of report	<p>j. In the <i>Scope of analysis</i>, click on the node that you want to transfer with its subordinate structure items.</p> <p>k. If you want the functions to be included, deselect the <i>No functions</i> option.</p> <p>l. Choose &gt;&gt;.</p>
Transfer a structure item without its subordinate items to the scope of report	<p>g. In the <i>Scope of analysis</i>, click on the node that you want to transfer.</p> <p>h. Choose &gt;.</p>
Remove a structure item and all subordinate items from the scope of report	<p>g. In the <i>Scope of Report</i>, click on the node that you want to remove with its subordinate structure items.</p> <p>h. Choose &lt;&lt;.</p>
Clear the current scope of report (remove all structure items)	Choose <i>Clr.</i>

7. Mark the *Consolidate to inactive items* checkbox or leave it blank, depending on how you want conflicting analysis results to be consolidated:
- *Consolidate to inactive items* selected:  
If one analysis produced the result *active* and another the result *inactive* for the same structure item, the consolidated result for that structure item in the report will be *inactive*.
  - *Consolidate to inactive items* not selected:  
If one analysis produced the result *active* and another the result *inactive* for the same structure item, the consolidated result for that structure item in the report will be *active*.
8. Choose *Create*.  
Specify whether or not you want to save the combined analysis results as a new analysis.

Save as new analysis	Do not save as new analysis
<p>Confirm the prompt with <i>Yes</i> and <i>OK</i>. The analysis is saved with a new name.</p> <p></p> <p>You cannot create an analysis twice. In other words, you cannot give the analysis a name that has already been used for another analysis.</p> <p>Once you have saved the new analysis, you can treat it as a regular single analysis. In other words, you can generate a report for it following the procedures you would use to generate a report based on a single analysis or a report that compares analyses. When generating reports involving combined analyses, however, you cannot select report types with RBE sets.</p>	<p>At the confirmation prompt, choose <i>No</i> and <i>OK</i>.</p>

9. Select a report type.  
See: [Report \[Page 76\]](#), *Combined Analyses: Report type*
10. If you need to filter out certain analysis results to keep the report a manageable size, deselect options as appropriate.  
See: [Report \[Page 76\]](#), *Combined Analyses: Report display options*
11. Choose *Show*.  
Your report is displayed using the Report Viewer.  
See: [Working with the Report Viewer \[Page 74\]](#)

## Generating Non-Analysis-Based Reports

# Generating Non-Analysis-Based Reports

## Use

Non-analysis-based reports are the exception among the reports in that they are based not on analyses but directly on a data extract. You can generate the following types of report without the need to conduct an analysis first:

- A hierarchical representation of the company's organizational units [*Organizational Structure*]
- A list, in descending order of use, of company-defined transactions and R/3 report programs and of the standard SAP transactions that are not assigned to the company's application component hierarchy [*User Transactions/not assigned*]

## Prerequisites

You have created the data extract on which you will base your report.

## Procedure

3. Choose *Analysis Reports* → *Analysis Reports*.
4. In the *Analysis results – Reports* dialog box, select the option *Non-analysis-based Reports* and choose *Next >*. The *Non-analysis-based Reports - Extract selection* screen appears.
4. In the *Existing extracts* frame, expand the company structure to display the data extracts that are available to be selected. Double-click on one of these data extracts to transfer it to the *Selected extracts* frame. The data extract you have selected now appears in blue type in the *Existing extracts* frame.  
When you click on a data extract in the *Existing extracts* frame, corresponding details are automatically displayed on the right of the screen.



You can double-click a data extract in the *Selected extracts* frame to remove it from the list.

4. Choose *Next >*.
5. Select a report type.  
See: [Report \[Page 76\]](#), *Non-Analysis-Based Reports: Report type*
6. If you need to filter out certain data to keep the report a manageable size, deselect options as appropriate from the ones that are displayed for your report type.  
See: [Report \[Page 76\]](#), *Non-Analysis-Based Reports: Report display options*
7. Choose *Show*.  
Your report is displayed using the Report Viewer.  
See: [Working with the Report Viewer \[Page 74\]](#)