

How-To Guide

SAP Business One 8.82

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PUBLIC

How to Work with SAP Crystal Reports in SAP Business One

All Countries

Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

Document History

Version	Date	Change
1.0	2012.10.31	This is the first update of <i>How to Work with SAP Crystal Reports in SAP Business One</i> since we adopted the new Microsoft Word template. Updates involve: <ul style="list-style-type: none">• Token syntax for referencing parameters• Link arrow
1.1	2013.01.31	<ul style="list-style-type: none">• Separate installation of the Crystal Reports integration component• Link arrow functionality for user-defined objects

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1 Introduction

The SAP Business One 8.82 release provides integration with the SAP Crystal Reports, version for the SAP Business One application, allowing you to create, view, and manage reports and layouts.

Note

In addition to the SAP Crystal Reports software, SAP Business One supports Print Layout Designer (PLD). You can use either one to create layouts for SAP Business One documents. For more information about working with PLD, go to <http://service.sap.com/smb/sbocustomer/documentation>.

The key features of integration with SAP Crystal Reports software include:

- SAP Crystal Reports, version for the SAP Business One application

You can save reports and layouts from within SAP Crystal Reports for SAP Business One to SAP Business One databases. You can create reports and layouts more easily using SAP Business One database tables that are arranged according to the modules in the SAP Business One *Main Menu*.

Using the SAP Crystal Reports software, you can draw data from SAP Business One tables and company databases as selection criteria. Additionally, you can create controls in reports and layouts that are aligned with standard SAP Business One user interface (UI) elements.

Note

This document includes the processes and procedures involved in working with the SAP Crystal Reports software. However, these processes and procedures relate to the SAP Business One context only. For more detailed information about working with the SAP Crystal Reports software, see the SAP Crystal Reports online help that is accessible from SAP Crystal Reports software or from the SAP Crystal Reports DVD.

- SAP Crystal Reports viewer

This WYSIWYG (what you see is what you get) application provides you with an accurate print preview of reports and documents, and enables exporting reports to PDF and other formats. In addition, you can use the filtering function of the viewer by entering different values in the parameter panel. For more information, see *SAP Crystal Reports Viewer*.

- Report and layout management

In SAP Business One 8.82, you can access a report and layout management window. From one location, you can manage the properties of reports and layouts created with the SAP Crystal Reports software, PLD layouts, and layouts created by third parties. In addition, you can define layout printing sequences. The *Report and Layout Manager* window allows you to export and import reports and layouts that are created with SAP Crystal Reports. For more information, see *Report and Layout Manager Window*.

- Master layouts

You can create a master layout that can be applied to various document types. For example, a master layout that is created for a sales invoice can be applied to sales quotations or deliveries. For more information, see *Master Layouts*.

- Multilanguage translator

You can maintain multiple translations of a report created with the SAP Crystal Reports software. For more information, see *Working with Multilanguage Reports*.

- Accessibility of source documents

You can add drilldown functionality to a report by adding link arrows to display related details about specific objects when previewing a report created with SAP Crystal Reports in SAP Business One. For more information, see *Adding Drilldown Functionality with Link Arrows*.

1.1 Installing SAP Crystal Reports for SAP Business One

Note

You do not need to install the SAP Crystal Reports viewer in a separate procedure. It is an integral part of the SAP Business One 8.82 core product.

Installation for Patch Level 10 and Lower

Up to SAP Business One 8.82 patch level 10, to ensure that the SAP Business One data sources and the *Add-ins* menu are available in the SAP Crystal Reports designer, follow the installation sequence below:

1. On the SAP Crystal Reports DVD that is provided with SAP Business One 8.82, locate and run the setup file *SAP Crystal Reports 2008 SP03*.
2. Install SAP Business One 8.82.

Note

For more information about installing SAP Crystal Reports, and installing and upgrading SAP Business One, see the *Administrator's Guide* that is provided on the SAP Business One product DVD.

Installation for Patch Level 11 and Higher

As of SAP Business One 8.82 patch level 11, you must install SAP Crystal Reports 2011 to use SAP Business One data sources and have the *Add-ins* menu available in the SAP Crystal Reports designer.

To ensure that the SAP Business One data sources and the *Add-ins* menu are available in the SAP Crystal Reports designer, you must install the Crystal Reports integration component separately. The integration package script `Business One Crystal Report Integration Package.exe` is located in the `...Packages\SAP CRAddin Installation` folder of the SAP Business One product DVD.

For more information, see the *Administrator's Guide* that is provided on the SAP Business One product DVD.

1.2 Terms and Definitions

The following terms are used in this document:

Term	Definition
SAP Crystal Reports, version for	Software that is designed to work in conjunction with SAP Business One for

Term	Definition
the SAP Business One application	creating layouts for SAP Business One reports and documents
SAP Crystal report	Determines what to be included in a report through selection criteria
SAP Crystal Reports layout	Determines the print preview and printed appearance of a document
master layout	SAP Crystal Reports layout that is applicable to multiple document types
SAP Business One data source	Data repository from which to retrieve SAP Business One tables organized in a hierarchical tree structure according to the modules in the SAP Business One <i>Main Menu</i>
token	Special format of a parameter name containing SQL-syntax code in a report or layout created with SAP Crystal Reports software. You use tokens to create different types of report selection criteria and their controls for use in SAP Business One.
SAP Crystal Reports viewer	Fully integrated component of SAP Business One 8.82 that lets you view reports and layouts that are created with SAP Crystal Reports software
printing sequence	Defined set of rules for printing documents

1.3 Related Documentation

This document refers to some other materials, as listed below:

Document	Location
<i>User Interface Standards and Guidelines</i>	http://service.sap.com/smb/sbocustomer/documentation and choose Release Family 8.8 → SDK and Custom Development
Print Layout Designer documentation and training materials available on the Print Layout Designer landing page	http://channel.sap.com/sbo/pld (accessible by partners only)
SDK online help file <i>SDK_EN.CHM</i>	http://service.sap.com/smb/sbocustomer/documentation and choose Release Family 8.8 → SDK and Custom Development Available also on the SAP Business One product DVD and in the download package from SAP Service Marketplace
SAP Business One <i>Administrator's Guide</i>	http://service.sap.com/smb/sbocustomer/documentation and choose Release Family 8.8 → System Administration Available also on the SAP Business One product DVD and in the download package from SAP Service Marketplace
SAP Crystal Reports 2008 online help	Available from within the SAP Crystal Reports software
SAP Crystal Reports <i>User Guide</i>	Available on the SAP Crystal Reports DVD

2 Basic Operations

You create reports with SAP Crystal Reports and save them as either reports or layouts in SAP Business One, depending on your needs.

2.1 Overview

There are many procedures and sub-procedures involved in the processes of working with SAP Crystal Reports. A typical high-level flow of procedures is as follows:

1. Create a report with SAP Crystal Reports
2. Import the report as either a Crystal report or Crystal Reports layout
3. Run the report or apply the layout to a document
4. Export the report or layout

Figure 1 is a high-level representation of the workflow for working with SAP Crystal Reports for SAP Business One:

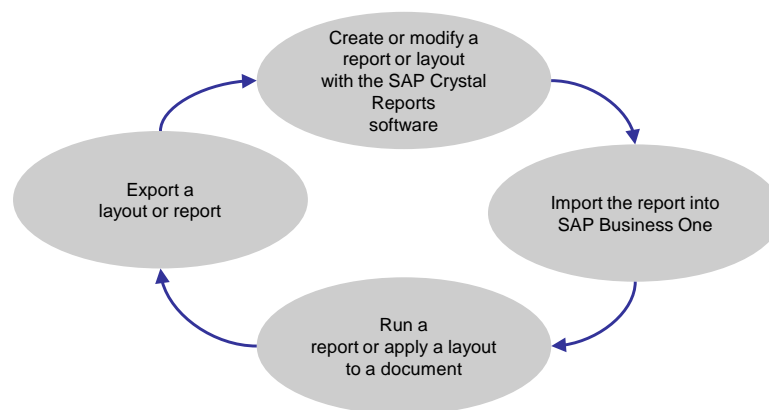


Figure 1: Working with SAP Crystal reports and SAP Crystal Reports layouts

2.2 Creating Reports and Layouts with SAP Crystal Reports for SAP Business One

This section describes the following procedures involved in creating reports and layouts with SAP Crystal Reports for SAP Business One:

1. *Connecting to a Data Source*
2. *Creating Selection Criteria Windows*

3. Saving SAP Crystal Reports .rpt Files

Prerequisites

You must connect to at least one data source before you can begin creating a new report in the SAP Crystal Reports software. SAP Business One supports the following data sources in the SAP Crystal Reports software:

- SAP Business One
- ODBC
- OLE DB (ADO)

Recommendation

We recommend that you connect to the SAP Business One data source.

For more information, see *Installing SAP Crystal Reports for SAP Business One*.

2.2.1 Connecting to a Data Source

The following procedure describes how to connect to an SAP Business One data source when creating a new report. For more information about data sources, see the SAP Crystal Reports online help.

Procedure

1. On the SAP Crystal Reports start page, choose *Blank report*.

Note

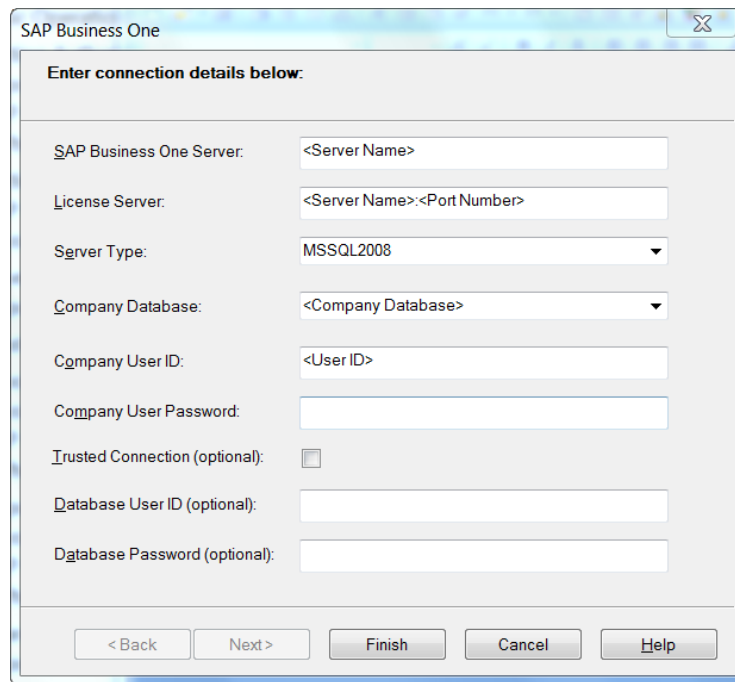
To create a report with a wizard, choose *Report wizard* instead of *Blank report* and enter the required information. For more information about the standard report creation wizard, see the SAP Crystal Reports online help.

2. In the *Database Expert* window, in the *Available Data Sources* pane on the left side of the screen, create a new SAP Business One connection.

Note

In the course of creating or modifying a report, you can open the database expert by choosing *Database* → *Database Expert* in the menu bar.

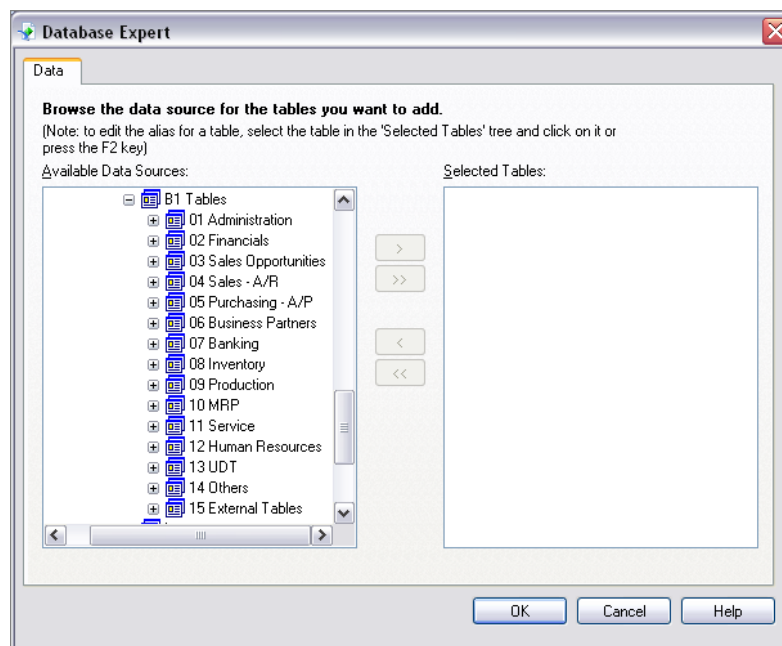
3. In the *SAP Business One* window, enter the required information and choose the *Finish* pushbutton.



4. In the *Database Expert* window, in the *Available Data Sources* pane, under the *B1 Tables* node, select one or more tables and move the selected tables to the *Selected Tables* pane using the *Add (>)* arrow button..

i Note

The *13 UDT* folder stores the tables of SAP add-ons. The *15 External Tables* folder stores the tables of third-party add-ons.



Note

You can view the descriptions of the SAP Business One tables in the data source shown above. For more information, see *Viewing Table Information in SAP Business One Data Source*.

For more information about SAP Business One database tables, see the *SDK_EN.CHM* file on the SAP Business One product DVD or in the download package.

5. Choose the *OK* pushbutton.
6. If you have selected more than one table, the *Links* tab appears and displays the selected tables and their relationships. Choose the *OK* pushbutton to exit the database expert.

Note

If you select more than one table on which to base a new report, a foreign key relationship is automatically created between the tables.

Note

If you have connected to a different data source than an SAP Business One data source, select from all available tables by choosing *<connected database> → dbo → Tables*

Result

A new report appears in *Design* view on a new tab of the work area.

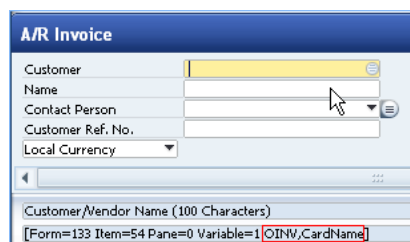
Recommendation

To open the *Preview* tab for a quick view of your report, in the menu bar, choose: *View → Print Preview*. The *Preview* tab appears next to the *Design* tab in the work area.

2.2.1.1 Viewing Table Information in SAP Business One Data Source

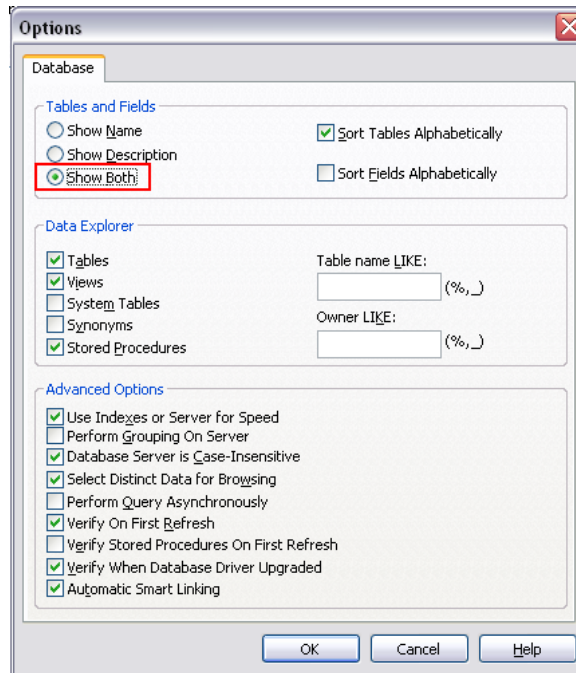
Note

To find out the table information of a specific SAP Business One window, pane, or field, in the SAP Business One menu bar, choose *View → System Information*. Then, by moving your cursor around the window, you can see the window's table information displayed in the SAP Business One status bar at the bottom of the screen. In the example below, the table is *OINV* and the *Name* field that the cursor is pointing to is based on the *CardName* column of the *OINV* table.



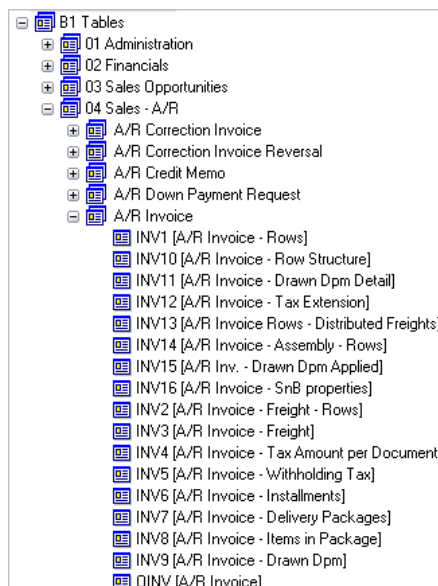
When selecting tables from an SAP Business One data source, you can display the table information as follows:

1. In the *Database Expert* window, in the *Available Data Sources* pane, right-click a connection and choose *Options*.
2. In the *Options* window, in the *Tables and Fields* area, select the *Show Both* radio button.



3. Choose the *OK* pushbutton.

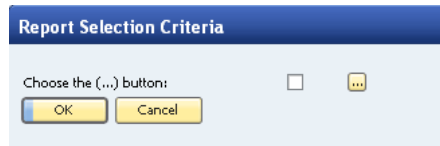
A description is shown for each SAP Business One table in the hierarchy tree as shown below.



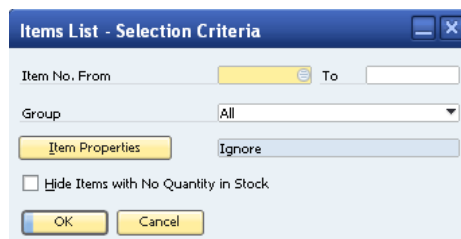
2.2.1.2 Creating Selection Criteria Windows

You can use tokens to create selection criteria windows for data filtering.

Example



In the window above, when you choose the (...) [Browse] button, the *Items List - Selection Criteria* window opens:



For each selection criteria window that you want to create, you create a blank report (.rpt file) and then add several parameters, each containing a different token. For example, you use different tokens to add a title, a separator line, and a dropdown list. You can change the order of these parameters to define how the related UI elements appear in the window.

The procedure below demonstrates how to create the example selection criteria dialog windows shown above. For more information, go to the following sections:

- [Tokens for Creating SAP Business One Controls](#)
- [Creating and Updating Parameters](#)
- [Syntax and Rules for Defining Tokens](#)

Procedure

1. In SAP Crystal Reports, create a blank report and connect to data sources as described in [Connecting to a Data Source](#).
2. In the [Database Expert](#) window, select the OITM (item master data) table and choose the [OK](#) pushbutton.
3. In the [Field Explorer](#) pane on the right, open the [Database Fields](#) node, and then open the OITM node.

Note

The field explorer is displayed by default for a new report. If you have closed it and want to reopen it, choose [View](#) → [Field Explorer](#) in the menu bar.

4. Drag the following fields to the work area on the [Design](#) tab and drop them in the [Details](#) area:
 - [ItemCode](#)
 - [ItemName](#)

The fields appear in the *Details* area with their associated labels in the *Page Header* area. You can edit the label text. For more information, see the SAP Crystal Reports online help.

➔ Recommendation

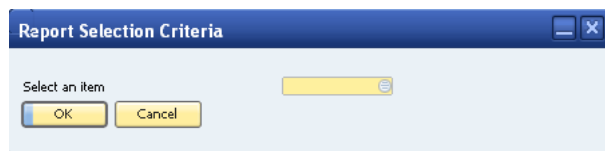
If a table contains many fields and you find it hard to locate the field you are looking for, right-click the table and choose *Sort Fields Alphabetically*.

5. In the *Field Explorer* pane, right-click *Parameter Fields* and choose *New*.
For more information about parameters, see *Creating and Updating Parameters*.
6. In the *Create New Parameter* window, in the *Name* field, enter the following token:
MyParameter@SELECT * FROM OITM
7. In the *Value Options* list at the bottom of the window, set the values in one of the following two configurations: choose from a list of items or create a browse button.
 - o *Choose from List* field

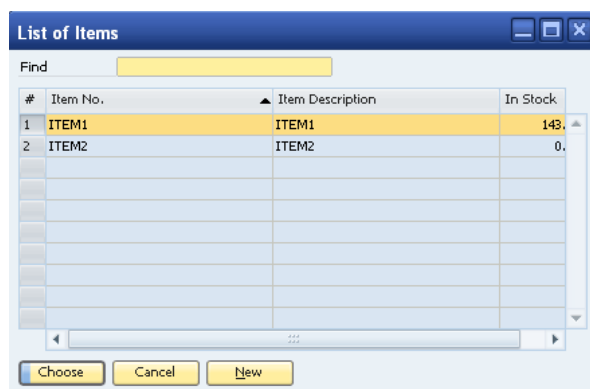
To create a choose-from-list field for single-choice selection, set the values according to the table below.

Value Option	Setting
<i>Prompt Text</i>	Select an item
<i>Allow multiple values</i>	False
<i>Allow discrete values</i>	True
<i>Allow range values</i>	False

As a result of setting values according to the table above, a user can make a single choice:



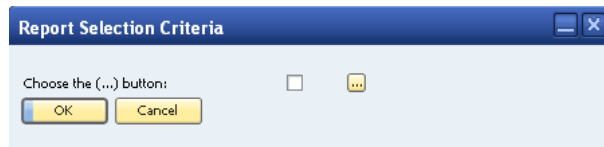
When you choose the *Choose from List* icon in the selection criteria window, a *List of Items* window appears.



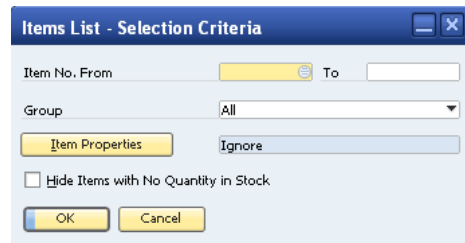
- o (...) [Browse] button
To create a (...) [Browse] button for multiple-choice selection, set the values according to the table below.

Value Option	Setting
<i>Prompt Text</i>	Choose the (...) button
<i>Allow multiple values</i>	<i>True</i>
<i>Allow discrete values</i>	<i>True</i>
<i>Allow range values</i>	<i>False</i>

As a result of setting values according to the table, a user can make multiple selections.



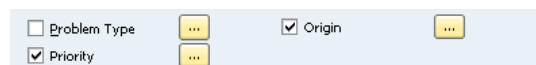
When you choose the (...) [Browse] button, the following *Items List - Selection Criteria* window appears.



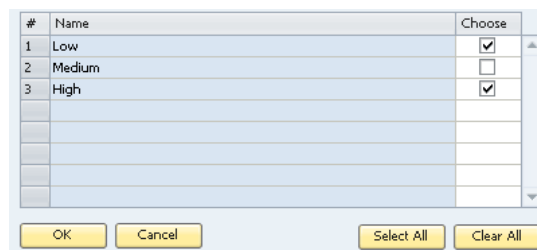
- In the *Create New Parameter* window, choose the *OK* pushbutton.

2.2.1.3 Multiple Selection Grid

Each of the (...) [Browse] buttons in the following window opens the similar grid control for selecting multiple values. Each (...) [Browse] button has a checkbox for indicating if any value has been selected.



To create a multiple selection grid like the one below, proceed as follows:

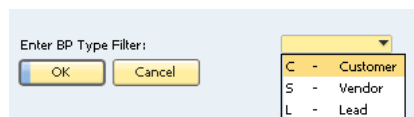


- In the *Create Parameter* or *Edit Parameter* window, in the *Value* list, enter a list of valid values:

- o Low
 - o Medium
 - o High
2. In the *Value Options* area, set the *Allow multiple values option* to *True*.

i Note

If you set the *Allow multiple values* option to *False*, a dropdown list appears, such as the business-partner type control shown below, instead of the (...) [Browse] buttons and checkboxes above.

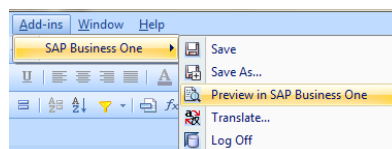


2.2.1.4 Viewing and Running Selection Criteria Window in SAP Business One

After you have created selection criteria windows as described in the example above, you can view them in SAP Business One as described in the following procedure.

Procedure

1. In the SAP Crystal Reports window, in the menu bar, choose *Add-ins* → *SAP Business One* → *Preview in SAP Business One*.



The *Report Selection Criteria* window opens in SAP Business One.

2. Choose the *Choose from List* icon or (...) [Browse] button, depending on which type of selection criteria you set.
3. In the selection window that opens, select the required criteria and choose the *OK* button.
4. In the *Report Selection Criteria* window, choose the *OK* button.

The report opens in the SAP Crystal Reports viewer. For more information, see *SAP Crystal Reports Viewer*.

Result

You can save your new report and run it in SAP Business One. For more information, see the following:

- *Saving SAP Crystal Reports .rpt Files As Reports or Layouts*
- *Working with SAP Crystal Reports Layouts and Reports in SAP Business One*

2.2.2 Working with Selection Criteria Tokens

You can create controls that align with standard SAP Business One UI elements.

This section provides explanations for and examples of SAP Business One tokens as shown in the list below:

- *Tokens for Creating SAP Business One Controls*
- *Creating and Updating Parameters*
- *Syntax and Rules for Defining Tokens*

Prerequisites

- You are familiar with the guidelines of working with the SAP Business One user interface.

Note

For more information about working with the SAP Business One user interface, see *User Interface Standards and Guidelines* at <http://service.sap.com/smb/sbocustomer/documentation>. This document provides the best practices for designing the SAP Business One interface. It describes the structure and appearance of the interface and the rules for performing actions that affect the s.

By following these guidelines, you can improve the quality and consistency of the application. The document offers the latest GUI design rules and recommendations. It also includes relevant GUI information, including a glossary, case studies, reusable components, and international support standards.

- You are familiar with SQL syntax, which is required for creating the tokens described in the following sections.
- You are familiar with the syntax and rules for defining tokens (see *Syntax and Rules for Defining Tokens*).

2.2.2.1 Tokens for Creating SAP Business One Controls

SAP Business One provides tokens that can be used to create standard SAP Business One controls. Most of these tokens contain SQL statements that you can use to dynamically select data from tables and fields in SAP Business One. You can use other tokens to create UI elements such as titles and horizontal separator lines.

For more information about SAP Business One databases, tables, and fields, see the SDK online help file, *SDK_EN.CHM*, on the SAP Business One product DVD or in the download package.

Use the following basic structure to create SQL tokens in reports that you want to run in SAP Business One:

```
<parameter_name>@<SQL_Expression>
```

Example

An example of `<SQL_Expression>` might be:

```
SELECT * FROM OITM WHERE OnHand > 100.
```

In this case, the condition in the WHERE subclause specifies the query scope.

2.2.2.1.1 Titles

You can assign a title token to group selection criteria, such as checkboxes. In the example below, *Business Partner Type* is the title.



Business Partner Type	
Customer	<input type="checkbox"/>
Vendor	<input type="checkbox"/>

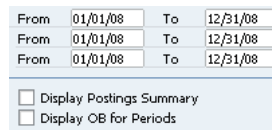
To create a title, use the following token:

`<parameter_name>@title`

To define the text that you want to appear as the title, in the *Value Options* list, in the *Prompt Text* field, enter the required text. In the example above, the user entered **Business Partner Type** in the *Prompt Text* field.

2.2.2.1.2 Separators

Separators are horizontal lines that span the width of a window. You can use separators to separate selection criteria groups as in the example below:



From	01/01/08	To	12/31/08
From	01/01/08	To	12/31/08
From	01/01/08	To	12/31/08

Display Postings Summary
 Display OB for Periods

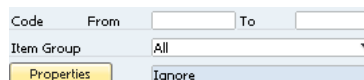
To create a separator, use the following token:

`<parameter_name>@separator`

No other specific values are required for this token.

2.2.2.1.3 Item Selection Criteria Groups

This token groups different selection criteria types together. In the example below, the selection criteria relate to item data. If you define a token to select fields from the OITM table (relating to item data), and the parameter is defined as the multi-value type, you can create a selection criteria control such as the one below:



Code	From		To	
Item Group	All			
Properties	Ignore			

To create a group of item selection criteria such as the one shown above, use the following token:

`<parameter_name>@SELECT * FROM OITM`

Note

For specific instructions about creating this token, see *Creating Selection Criteria Windows*.

If the parameter allows multiple values, a (...) [Browse] button appears in the selection criteria window when you run the report.

If the parameter does not allow multiple values, a field with a *Choose from List* icon appears in the selection criteria window when you run the report.

2.2.2.1.4 Business Partner Selection Criteria

You can define a token that selects business partner data from the OCRD table as in the example shown below.

Code	From	<input type="text"/>	To	<input type="text"/>
Customer Group		All		
Vendor Group		All		
Properties		Ignore		

To create selection criteria controls related to business partners, use the following example tokens.

- To include all types of business partners:
`<parameter_name>@FROM OCRD`
- To include only customer-type business partners:
`<parameter_name>@FROM OCRD WHERE cardType='c'`
- To include only vendor-type business partners:
`<parameter_name>@FROM OCRD WHERE cardType='s'`

2.2.2.1.5 Data Format Selection Criteria

You can define date selection criteria using one of the following types of date controls:

- *Date Selector* calendar window – Allows the user to enter any date by choosing the *Calendar* icon in a field, as shown below:

Date	From	01/01/08	To	12/31/08
------	------	----------	----	----------

To create this control, in SAP Crystal Reports, define the parameter type as *Date* and set the Allow range values value option to *True*.

- *Choose from List* control – Allows the user to choose only specific periods by choosing the *Choose from List* icon as shown below:

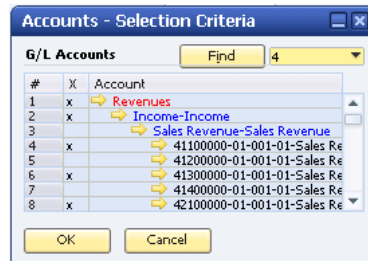
Date	From	01.01.2008	To	31.12.2008
------	------	------------	----	------------

To create this control, use the following token, which draws data from the OFPR table:

```
<parameter_name>@SELECT * FROM OFPR
```

2.2.2.1.6 Account Tree

The *Account Tree* object in SAP Business One allows the user to view different levels of account and multiple selection options of the nodes.

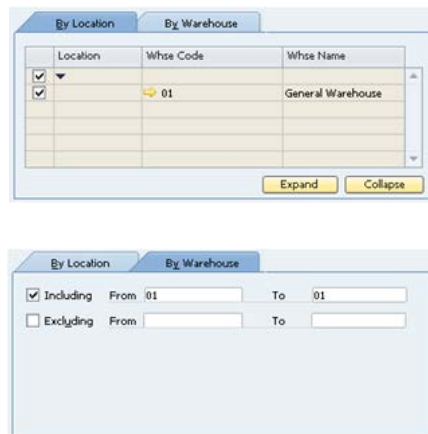


To create an account tree, use the following token, which allows you to define multiple values. Set the *Allow multiple values* value option to *True*.

```
<parameter_name>@FROM OACT
```

2.2.2.1.7 By Location and By Warehouse

Location and warehouse information is usually grouped together as tabs, as in the examples below:



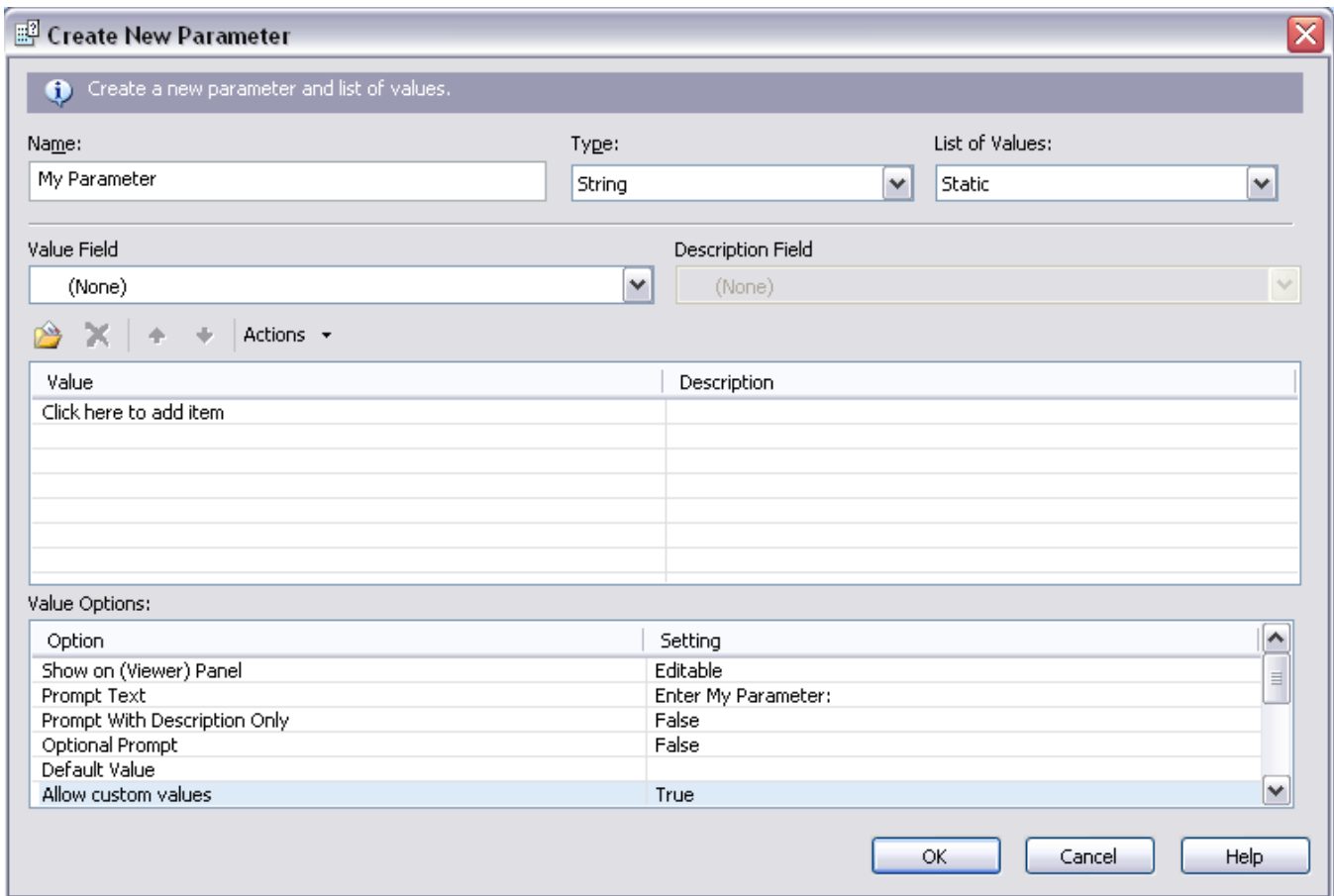
To create this control, use the following token, which selects data from the OWHS table. Set the *Allow multiple values* value option to *True*.

```
<parameter_name>@SELECT * FROM OWHS
```

2.2.2.2 Creating and Updating Parameters

To create or update a parameter, in the SAP Crystal Reports window, in the *Field Explorer* pane on the right, right-click *Parameter Fields* and select *New*.

The *Create New Parameter* window appears.



In this window, you can define the name, type, and values of the parameter.


i Note

After you have added a parameter, you cannot change its name; however, you can edit its type and values. For more information, see *Creating Selection Criteria Windows* and *Working with Selection Criteria Tokens*.

2.2.2.2.1 Parameter Type

The following table provides a list of parameter types (the Type dropdown list) and their related control types in SAP Business One:

Parameter Type	Control Type	Values
Boolean	Checkbox	Fixed values: <ul style="list-style-type: none"> • <i>True</i> • <i>False</i>

Parameter Type	Control Type	Values
Currency	Edit box with a calculator	N/A
Date	Calendar-type date picker; that is, an edit box with a calendar	N/A
Date Time	Calendar-type date picker; that is, an edit box with a calendar	 Note Because SAP Business One does not have a time control, this parameter provides a default time of 00:00.
Number	Edit box with a calculator	N/A
String	Edit box	N/A
Time	Not supported	N/A

2.2.2.2.2 List of Values

The type of the list of values can be defined as either static or dynamic.

- Static

Note

If *Allow multiple values* is set to *False*, the static type provides a field with a *Choose from List* button. If you set this value to *True*, the static type provides a (...) [Browse] button that opens a window with multiple selection options.

This is the recommended option. A static prompt is one that always contains the same values. For example, if a parameter prompts a country value, you could create a static prompt because the country list contains a set of values that does not change often. If the token syntax is applied to the parameter name, the option values are dynamically populated for this parameter.

It provides the following options:

- Simple parameters (display options)
- Hard-coded lists of values such as customer, vendor, and lead
- Complex dynamic values

Note

For complex dynamic values, if you include a token in the parameter name, SAP Business One fetches the data list from the database dynamically.

When you set the *List of Values* type to **static**, either you can enter or import fixed values in the Value area or SAP Crystal Reports reads data from the database using the SQL code in the parameter name.

- Dynamic

This option is not recommended. The values of a dynamic prompt are retrieved dynamically and directly from the data source and are not stored within the report. For example, if you are prompting for customer name,

you could create a dynamic prompt because the names in your customer database probably change frequently.

When you set the *List of Values* type to **Dynamic**, the value area is not available, and you can retrieve data only by using the SQL code in the parameter name. Furthermore, the static type with token and SQL statement provides a better way of getting the option list because the user can filter by adding a `WHERE` clause in the SQL part of the parameter name.


2.2.2.2.3 Value Area

The values that you enter or import in the *Value* fields appear for selection in SAP Business One selection criteria windows.

For more information about the *Value* and *Description* fields, see the SAP Crystal Reports online help.

Value Options and Settings

In the *Create New Parameter* or *Edit Parameter* window, you can define settings for value options as shown in the table below. For more information about these value options and settings, see the SAP Crystal Reports online help.

Value Option	SAP Business One Control Type	Setting Descriptions
<i>Show on (Viewer) Panel</i>	n/a	<ul style="list-style-type: none"> Determines the <i>Parameter Panel</i> options in SAP Crystal Reports viewer: <ul style="list-style-type: none"> <i>Do not show</i> <i>Editable</i> (default) <i>Read only</i>
<i>Prompt Text</i>	n/a	Appears in the SAP Business One control as a UI string providing an instruction to the user, such as "Enter a value."
<i>Prompt With Description Only</i>	n/a	Fixed values: <ul style="list-style-type: none"> <i>True</i> – Prompts the user with only a description <i>False</i> (default) – Prompts the user with a value and its description
<i>Optional Prompt</i>	n/a	Set this to <i>True</i> if you want to allow the user to bypass entering a value for this parameter.
<i>Default Value</i>	n/a	Add a value to this field if you want a default to appear when the program prompts the user to select a value. If the user does not change it, the default value is applied.  Note This option is available only for parameters

Value Option	SAP Business One Control Type	Setting Descriptions
		with static prompts.
<i>Allow custom values</i>	Not supported	N/A
<i>Allow multiple values</i>	(...) [Browse] button that can pop up a new window to allow the user to select multiple values	Fixed values: <ul style="list-style-type: none"> • <i>True</i> • <i>False</i>
<i>Allow discrete values</i>	Dropdown list	A user can select only one singular value. If you have <i>Allow multiple values</i> set to <i>True</i> , a user is able to select more than one discrete value for the parameter field, though these values will continue to function singularly as opposed to a range value. You can choose discrete values for this parameter field after you choose the <i>Refresh Report Data</i> command. Fixed values: <ul style="list-style-type: none"> • <i>True</i> • <i>False</i>
<i>Allow range values</i>	From/to fields	Fixed values: <ul style="list-style-type: none"> • <i>True</i> – Provides <i>From</i> and <i>To</i> dropdown lists • <i>False</i> – Provides a <i>Choose from List</i> icon
<i>Min length</i>	n/a	Restricts values, depending on the type. For example, if the type is <i>String</i> , this value is <i>Min Length</i> . If the type is <i>Date</i> , <i>Date time</i> or <i>Time</i> , the value is <i>Start</i> . If the type is <i>Number</i> or <i>Currency</i> , the value is <i>Min value</i> .
<i>Max length</i>	n/a	Restricts values, depending on the type. For example, if the type is <i>String</i> , this value is <i>Max Length</i> . If the type is <i>Date</i> , <i>Date time</i> or <i>Time</i> , the value is <i>End</i> . If the type is <i>Number</i> or <i>Currency</i> , the value is <i>Max value</i> .
<i>Edit mask</i>	n/a	Applicable only for the <i>String</i> parameter type. For more information, see the SAP Crystal Reports online help.

2.2.2.3 Syntax and Rules for Defining Tokens

When defining tokens for use in SAP Business One, you must follow the following rules:

- A parameter name must start with an alphanumeric character or an underscore (_). For more information about creating parameters, see *Creating and Updating Parameters*.
- The special character @ (“at” sign) is reserved for SAP Business One tokens and must follow the parameter name with no space between them.

For example, "My Parameter@" means that this parameter is specific to SAP Business One.

- An SQL statement usually follows @ with no space after @.
- The general syntax for creating SAP Business One tokens is:

```
<Parameter Name>@SELECT ... FROM ... WHERE ...
```

When you are creating tokens, the `SELECT` command is not always mandatory for SAP Business One tables. For example, `SELECT` is not mandatory for the `OCRD` (business partners) and `OACT` (G/L accounts) tables. For an example where `SELECT` is not used, see *Business Partner Selection Criteria*.

- A parameter name may include another parameter name, which means that a parameter may depend on another parameter. The dependent parameter must specify the parameter it depends on by including the name of the other parameter with @.

Example

```
Country@SELECT distinct Country FROM OCST
```

```
State@SELECT code, name FROM OCST WHERE (Country = '@Country')
```

A state parameter depends on a country parameter. If you choose *United States* from the country list, the states of the United States appear in the *State* dropdown list. If you do not choose a country, the state dropdown list has no data.

The first statement lists all countries, while the second parameter (state parameter) calls the country parameter. For the second parameter to work, you must have a parameter called **Country**.

- The **DocKey@** token is mandatory in an SAP Crystal Reports `.rpt` file that you want to use as a layout. The **DocKey@** token is used to identify the current active document. SAP Business One populates its value when you preview or print a layout.

When you apply the **DocKey@** token, in the *Select Expert* window, you need to specify a filter condition, such as:

```
{OINV.DocEntry}={?DocKey@}
```

If the **DocKey@** token does not exist, create a new parameter with the following settings:

- In the *Name* field, enter **DocKey@**.
- In the Type dropdown list, select *Number*.
- In all other fields, leave the default settings.

Note

For more information about the *Select Expert* window, see the SAP Crystal Reports online help.

- The **ObjectId@** token provides specific document-type information. We recommend you use this token for SAP Crystal Reports layouts that you want to assign to multiple document types as master layouts. For example, you can apply the **ObjectId@** token if you want to include dynamic titles that change according to different document types or if you want certain functions suppressed for particular document types. However, this token is optional in an SAP Crystal Reports `.rpt` file that you want to use as a layout for only one document type:

If the **ObjectId@** token does not exist, create a new parameter with the following settings:

- In the *Name* field, enter **ObjectId@**
- In the *Type* dropdown list, select *Number*
- In all other fields, leave the default settings

➔ Recommendation

We recommend that you do NOT use the **ONLY** keyword in SAP Crystal Reports layouts that you want to set as master layouts for multiple document types.

For more information about SAP Crystal Reports master layouts, see *Master Layouts*.

- If a parameter references another parameter, they are related. For a group of interrelated parameters, only the referenced parameter at the lowest level can allow multiple values. In addition, you must use the **IN** clause to reference a parameter that allows multiple values.

Example

Parameter B: `Customer@select cardcode from OCRD where cardtype = 'C'`

- If parameter B does not allow multiple values,

Parameter A: `Invoice@select docnum, docdate from OINV where (cardcode = '@Customer')`

- If parameter B allows multiple values,

Parameter A: `Invoice@select docnum, docdate from OINV where cardcode in (@Customer)`

- The **UserCode@** parameter is an optional token that is recommended only in SAP Crystal Reports layouts where you want to display the code of the user currently logged on to SAP Business One. The parameter type is *String*. This token is only for layouts; you cannot use it in reports.
- The **FolioPref@** and **FolioNum@** parameters are valid only for Mexico, Chile, Costa Rica, and Guatemala. They are optional tokens that are recommended only in SAP Crystal Reports layouts in which you want to display a folio prefix and a folio number. SAP Business One populates them with the folio prefix and folio number you assign to the document for the first printing. For the first printing of some legal documents, SAP Business One prompts users to enter the folio prefix and folio number. The values are taken for the subsequent printing.

2.2.2.3.1 Dropdown Lists and Choose from List Icons

If the SQL query part of a parameter name (token) does not specify which column to select from the database, such as `aaa@SELECT * from OITM`, SAP Business One provides a field with a standard *Choose from List* icon that opens a window with a list, in this case a list of existing items.

If the token specifies columns, such as `as bbb@SELECT code, name FROM OCST`, SAP Business One provides a dropdown list control.

If two **SELECT** columns are specified, the first column is used as the dropdown list's key, and the second column is used as descriptions for the dropdown list.

2.2.2.3.2 SQL Token Codes Examples

The table below provides SAP Business One SQL token examples and descriptions.

SAP Business One SQL Token	Description
<parameter_name>@SELECT * FROM OPRJ WHERE PrjName LIKE 'World%'	This expression returns all projects whose name starts with "World"
<parameter_name>@SELECT CurrCode FROM OCRN WHERE ISOCurrCod <> 'CAD'	This expression returns all currency codes defined in SAP Business One except for the Canadian dollar.
<parameter_name>@SELECT * FROM ODSC WHERE CountryCod = 'US'	This expression returns all U.S. banks defined in SAP Business One.

2.2.3 Adding Drilldown Functionality with Link Arrows

To add the drilldown functionality to a report, create link arrows for specific objects in the report. When you preview the report in SAP Business One and click the arrow icon, related details about the object are displayed.

A/R Invoice		
Customer Code A1		
Document Date 20-April-2009		
Document Num 1		
Company	Samsung	
Item	Description	Quantity
⇒ I0001	Item 1	10.00
⇒ I0002	Item 2	20.00

The drilldown functionality supports the following windows:

- Documents:
 - *A/P Invoice*
 - *A/R Credit Memo*
 - *A/R Invoice*
 - *Delivery*
 - *Goods Receipt*
 - *Inventory Transfer*
 - *Journal Entry*
 - *Purchase Order*
 - *Sales Order*
 - *Sales Quotation*
- Master data:
 - *Business Master Data*

- o *Item Master Data*
- User-defined objects (UDOs)

i Note

The formulas you use to define link arrows for master data are different from those for documents and UDOs, that is, you must use the "CStr" function for documents and UDTs. For examples, see the note of step 5 of the procedure below.

i Note

If you reference a database field in a user-defined table (UDT), you must replace the "at" sign (@) prefix of the UDT name with an underscore (_). For an example, see step 5 of the procedure below.

The following example demonstrates how to create a link arrow to drill down to item details in the *Item Master Data* window. The hyperlink refers to the OITM table (see step 5).

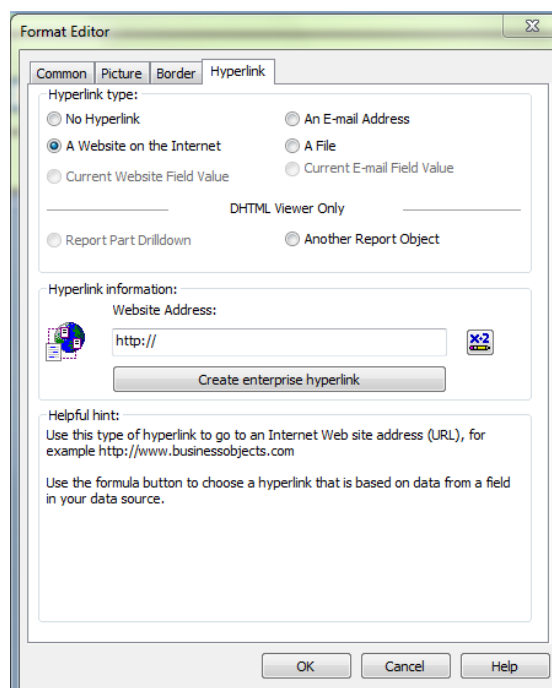
Prerequisites


In the *Database Expert* window, you have added the OITM table from an SAP Business One database. For more information, see *Connecting to a Data Source*.

Procedure

1. In the SAP Crystal Reports window, on the *Design* tab, insert the *Link Arrow* icon graphic.
2. Right-click the graphic and choose *Format Graphic*.

The *Format Editor* window opens.



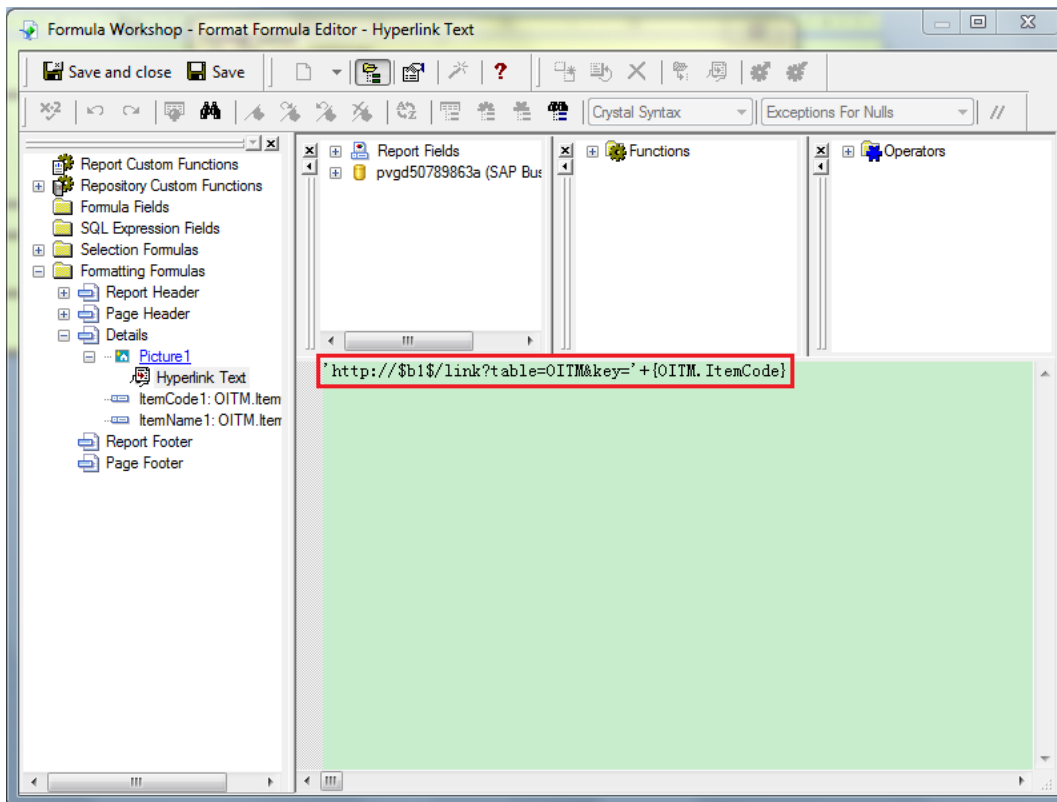
3. On the *Hyperlink* tab, in the *Hyperlink type* area, select the *A Website on the Internet* radio button.
4. In the *Hyperlink information* area, choose the *Formula* button  to the right of the *the Website Address* field. The *Formula Workshop - Format Formula Editor - Hyperlink Text* window opens.

i Note

The *Formula* button changes color when a hyperlink formula has been added. For more information about the *Formula* button, see the SAP Crystal Reports online help.

5. In the work area, enter the following formula:

```
'http://$b1$/link?table=OITM&key='+{OITM.ItemCode}
```



i Note

If you are creating a link arrow to drill down to deliveries, you must define the formula as below, using the "CStr" function:

```
'http://$b1$/link?table=ODLN&key='+CStr ({ODLN.DocEntry}, 0)
```

If you are creating a link arrow to drill down to a UDO linked to a UDT named @TEST, you must define the formula as below:

```
'http://$b1$/link?table=@TEST&key='+CStr ({_TEST.DocEntry}, 0)
```

6. In the toolbar, choose the *Save and close* button.
7. In the *Format Editor* window, choose the *OK* button.

2.2.4 Saving SAP Crystal Reports .rpt Files as Reports or Layouts

To define an SAP Crystal Reports .rpt file as a report or a layout and save it to the SAP Business One database, in the *Add-ins* menu, choose the *Save* or *Save As* option.

i Note

Before you save an .rpt file, you can preview it in SAP Business One. In the SAP Crystal Reports software toolbar, choose *Add-ins* → *SAP Business One* → *Preview in SAP Business One*.


i Note

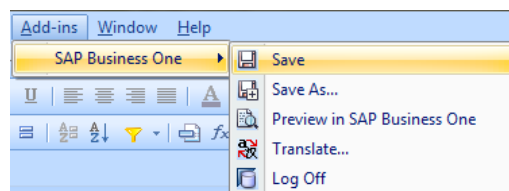
To save an SAP Crystal Reports .rpt file to your local hard drive, in the SAP Crystal Reports window, choose *File* → *Save or File* → *Save As*. If you decide later that you want to save the .rpt file to SAP Business One, you can import it using the report and layout import wizard. For more information, see *Importing SAP Crystal Reports .rpt Files*.

Prerequisites

You are designated as a superuser in SAP Business One.

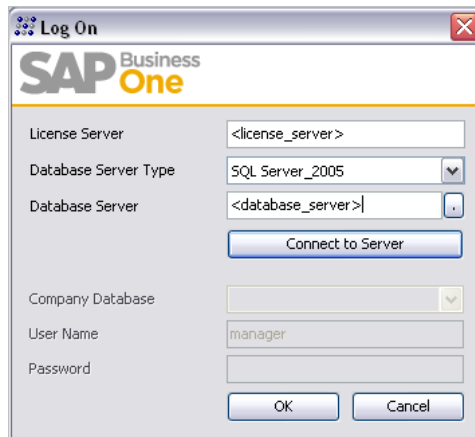
Procedure

1. In the toolbar of the SAP Crystal Reports software, choose *Add-ins* → *SAP Business One* → *Save* or *Save As*. Alternatively, in the *External Command* toolbar, choose .

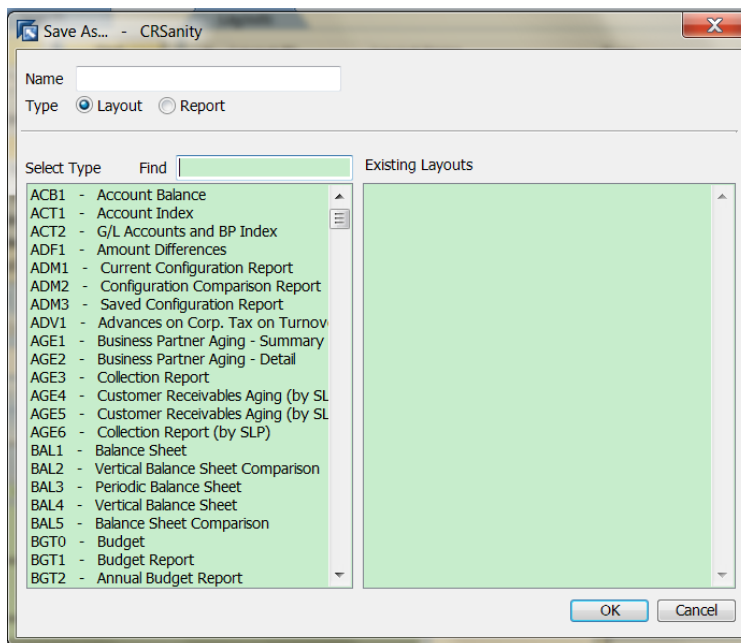


i Note

If you are not logged on to SAP Business One, the *Log On* window appears. Specify the necessary information and choose the *OK* button. This logs you on to SAP Business One, and you can proceed.



2. In the *Save As* window:
 1. In the *Name* field, specify a name for the .rpt file.
 2. For document type, select either the *Layout* or the *Report* radio button and choose the *OK* button:
 - o *Layout*

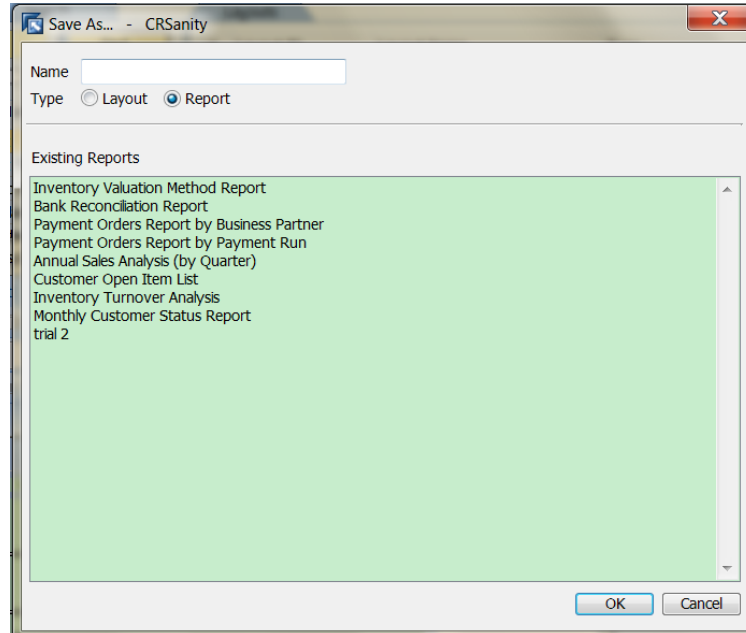


i Note

It is important to note that an SAP Crystal Reports .rpt file that you want to define as a layout in SAP Business One must contain a parameter with the DocKey@ token. Check this in the SAP Crystal Reports software before you save the .rpt file as a layout. For more information about this token, see *Syntax and Rules for Defining Tokens* .

- o *Report*

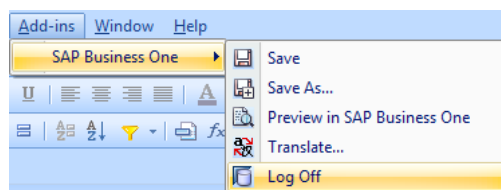
The report is saved to the *Lost Reports* folder in the *Report and Layout Manager* window. For more information, see *Lost Reports Folder* and *Creating New Report Folders*.



2.2.5 Logging Off from a Data Source

If you want to connect to a different data source, you must first log off from the data source to which you are currently logged on.

In the SAP Crystal Reports menu bar, choose *Add-ins* → *SAP Business One* → *Log Off*.



2.3 Working with SAP Crystal Reports Layouts and Reports in SAP Business One

You can run, edit, or delete layouts and reports created with the SAP Crystal Reports software in SAP Business One.

For more information, see *Report and Layout Manager Window* and *SAP Crystal Reports Viewer*.

2.3.1 Running Layouts

To run a layout created with the SAP Crystal Reports software in SAP Business One, proceed as follows:

1. In SAP Business One, open a document whose layout you want to view.
2. Choose one of the following menu paths:
 - o *File → Preview*
Choose this option if the SAP Crystal Reports layout you want to view is defined as the default layout of the document type.
 - o *File → Preview Layouts*
Choose this option if you want to view a non-default layout created with the SAP Crystal Reports software.

The document appears in the SAP Crystal Reports viewer.

Note

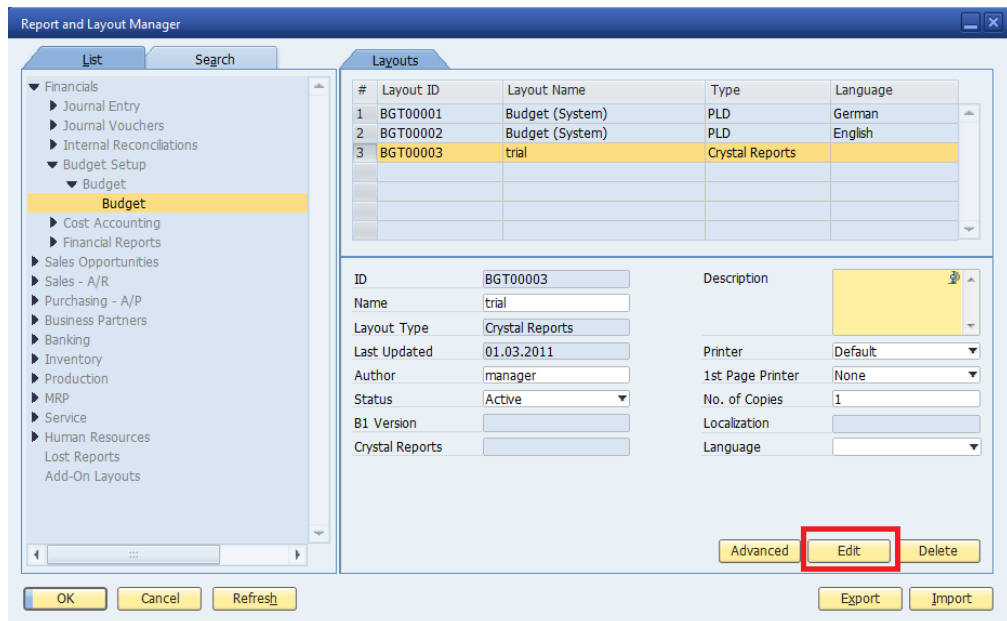
You can create a layout for one document type and apply this layout to another document type. When you view the latter document type in this layout, SAP Business One automatically redirects you to the tables relevant to this document type and displays the correct data despite the fact that the layout itself contains table information relevant to the former document type. For more information, see *Master Layouts*.

2.3.2 Editing Layouts

To edit an SAP Crystal Reports layout, proceed as follows:

1. To open an SAP Crystal Reports layout for editing, do one of the following:
 - o Open the layout in the *Report and Layout Manager* window:
 1. From the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.
 2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the document type of the layout you want to edit.

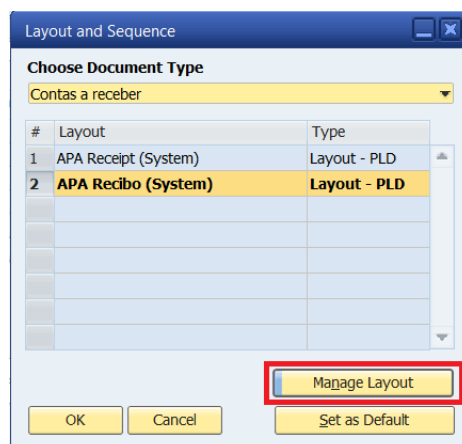
- In the work area on the right, select the SAP Crystal Reports layout you want to edit and choose the *Edit* button.



i Note

If you want to edit a PLD-type layout, select it and choose the *Edit* button. The Print Layout Designer opens. For more information, see the Print Layout Designer documentation at <http://service.sap.com/smb/sbocustomer/documentation>.

- Open the layout in the relevant window:
 - From the SAP Business One *Main Menu*, navigate to a document whose layout you want to edit and open it.
 - In the tool bar, choose (*Layout and Sequence*).
 - In the *Layout and Sequence* window, select the SAP Crystal Reports layout that you want to edit and choose the *Manage Layout* button.





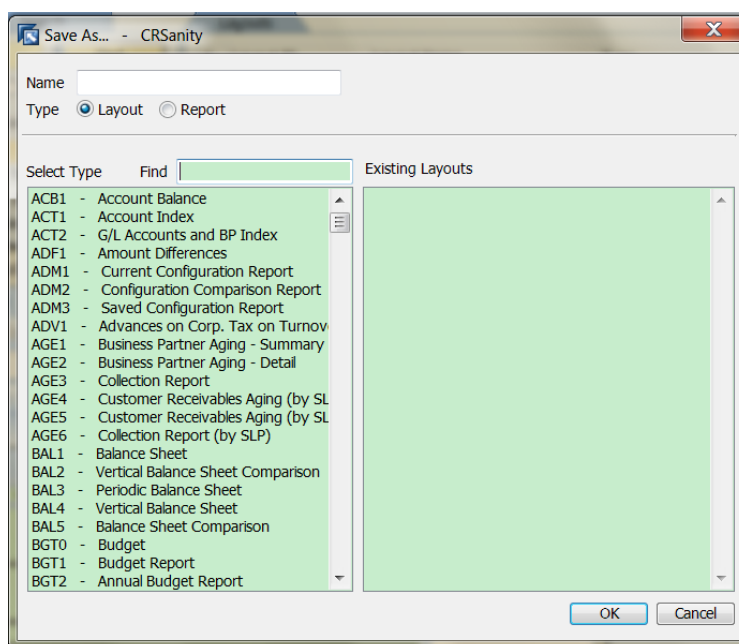
- In the *Report and Layout Manager* window, choose the *Edit* button.

- The SAP Crystal Reports software opens the layout you have selected, and you can make any required changes.

Note

Before adding any new tables, make sure that the option of *Automatic Smart Linking* is not selected under *File → Options → Database*.

- In the menu bar, do one of the following:
 - To save the updated layout in the SAP Business One database, choose *Add-ins → SAP Business One → Save*. Alternatively, in the *External Command* toolbar, choose .
 - To save the updated layout as a new layout with a different name or to apply it to another document type in the SAP Business One database, choose *Add-ins → SAP Business One → Save As*. Alternatively, in the *External Command* toolbar, choose .



Caution

In the window that opens, make sure the *Layout* radio button is selected; otherwise the updated layout is saved as a report.

- To save the updated layout as an *.rpt* file on your local hard drive, choose *File → Save*.
 - To save the updated layout as a new *.rpt* file with a different name or in a different location on your local hard drive, choose *File → Save As*.
- Choose the *OK* button.

2.3.3 Deleting Layouts

Prerequisite

You are designated as a superuser in SAP Business One.

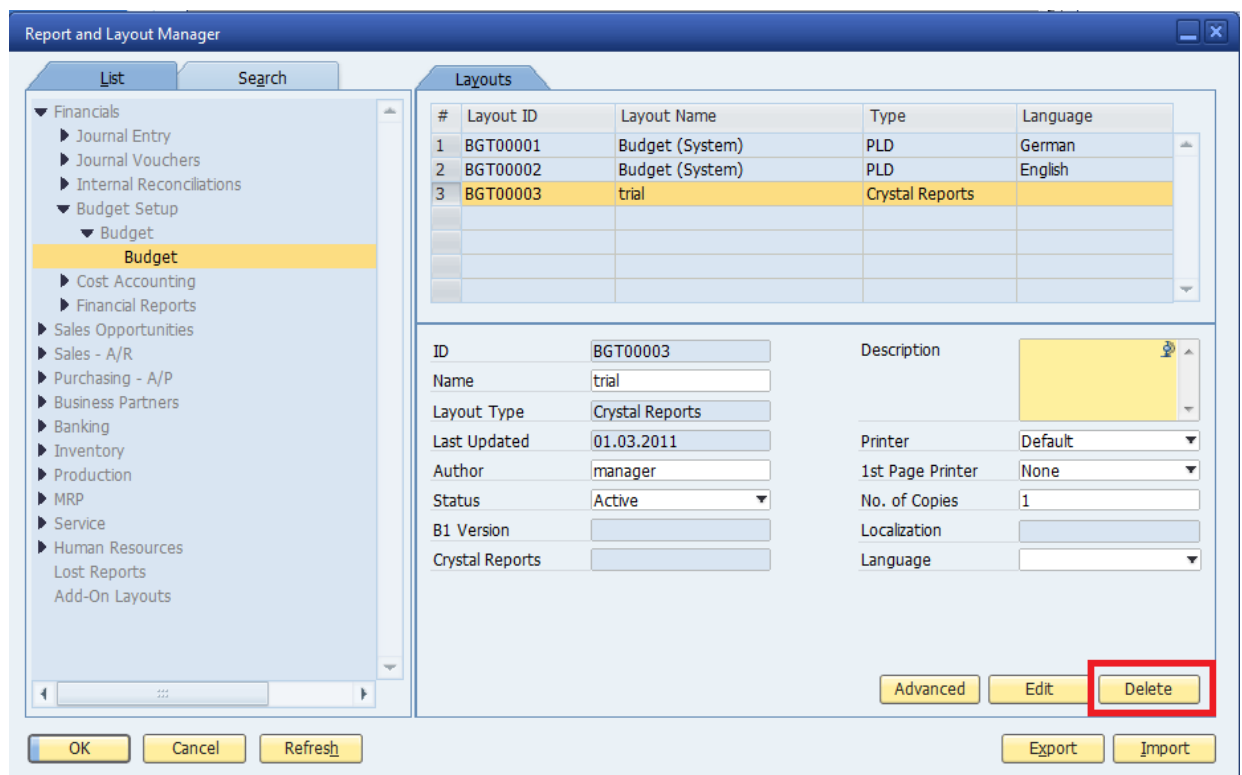
Procedure

Note

You cannot delete a layout that is provided in the SAP Business One core product.

To delete an SAP Crystal Reports layout, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the document type of the layout you want to delete and select it.



3. In the work area on the right, select the layout that you want to delete and then choose the *Delete* button.
4. To confirm that you want to delete the layout, choose the *Yes* button.

2.3.4 Running Reports

You can run a report created with the SAP Crystal Reports software in SAP Business One from the *Report and Layout Manager* window or from the SAP Business One *Main Menu*.

Run the report from the Report and Layout Manager window

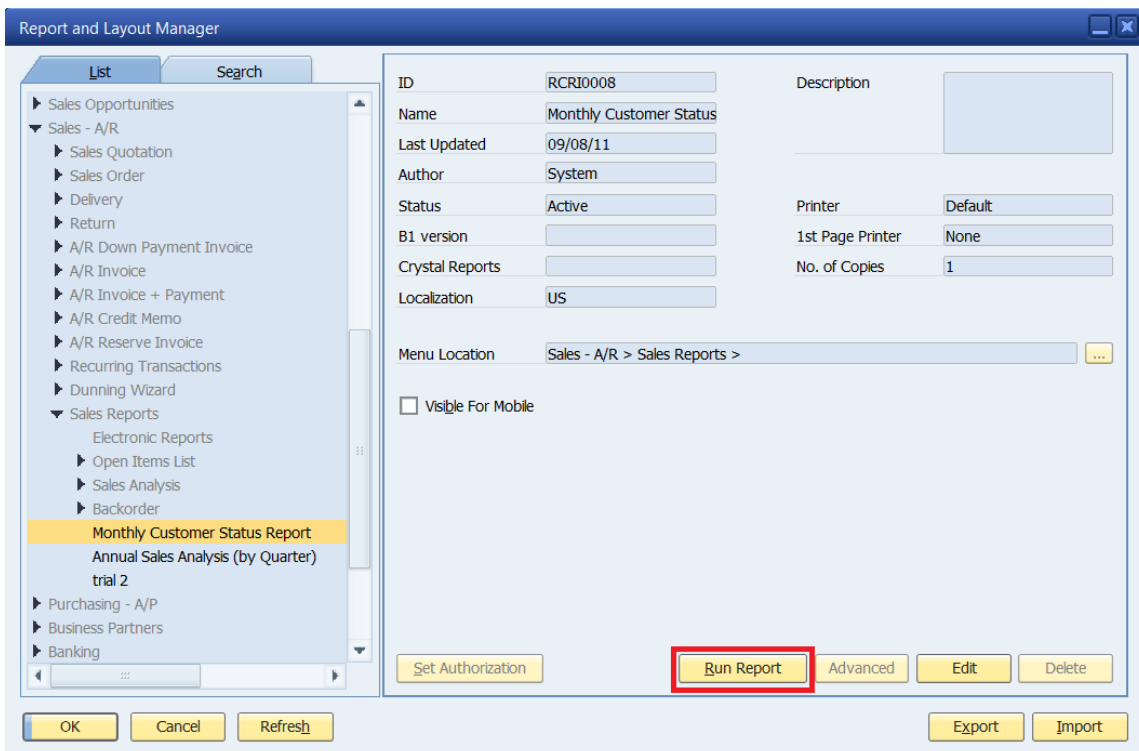
Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to run and select it.

Note

After you have saved an .rpt file as a report into SAP Business One, the report appears only in the *Lost Reports* folder in the *Report and Layout Manager* window. To make it appear in the SAP Business One *Main Menu*, assign it to a folder of a specific module. For more information about assigning the report to a module in SAP Business One, see *Saving SAP Crystal Reports .rpt Files As Reports or Layouts*.

3. In the work area on the right, choose the *Run Report* button.




4. If the report contains multiple data source connections that are not all covered in the license server or the license file, the *Log On to Data Source* window opens. Specify the user code and password for each data source and choose the *OK* button.

- If a selection criteria window appears, enter the required information and choose the *OK* button.
The report appears in SAP Crystal Reports viewer.

Run the report from the SAP Business One Main Menu

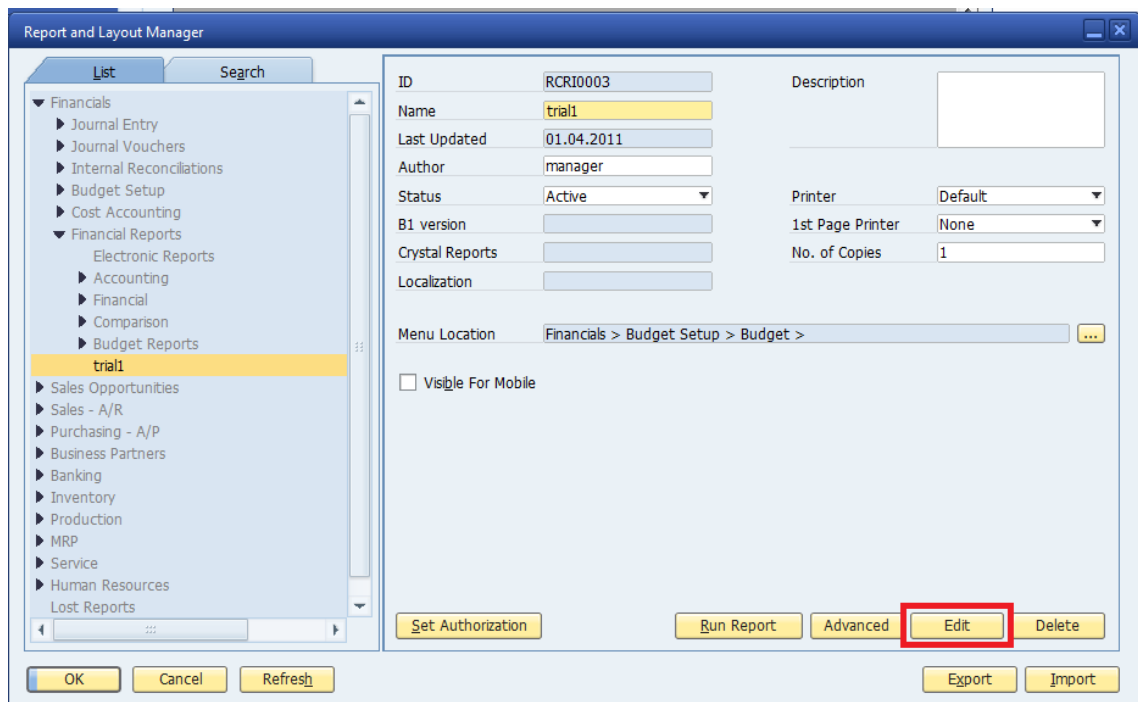
Procedure

- In the SAP Business One *Main Menu*, locate the report you want to run and select it.
If the report is created with the SAP Crystal Reports software, an SAP Crystal Reports  icon appears to the left of the report name.
- If a selection criteria window appears, enter required information and choose the *OK* button.
The report appears in SAP Crystal Reports viewer.

2.3.5 Editing Reports

To edit a report created with the SAP Crystal Reports software, proceed as follows:



- From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
- In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to edit and select it.
- In the work area on the right, choose the *Edit* button.

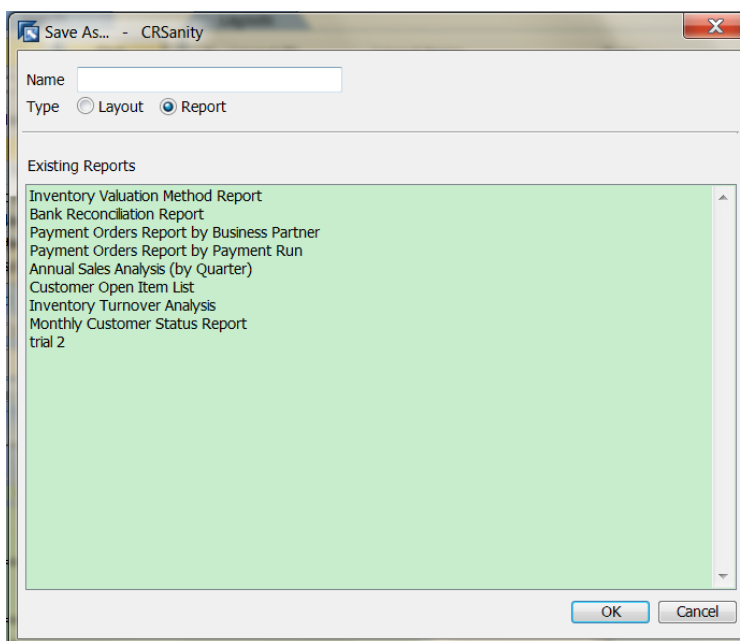


The report opens in the SAP Crystal Reports software and you can make any desired changes.

Note

To avoid creating unwanted links or disrupting existing links in the report, before you add any new tables, make sure that the *Automatic Smart Linking* checkbox is not selected under *File → Options → Database*.

4. In the menu bar, do one of the following:
 - o To save the updated report in the SAP Business One database, choose *Add-ins → SAP Business One → Save*. Alternatively, in the *External Command* toolbar, choose  .
 - o To save the updated report as a new report with a different name in the SAP Business One database, choose *Add-ins → SAP Business One → Save As*. Alternatively, in the *External Command* toolbar, choose .



Caution

In the window that opens, make sure the Report radio button is selected; otherwise the updated report is saved as a layout.

- o To save the updated report as an *.rpt* file on your local hard drive, choose *File → Save*.
 - o To save the updated report as a new *.rpt* file with a different name or in a different location on your local hard drive, choose *File → Save As*.
5. Choose the *OK* button.

2.3.6 Deleting Reports

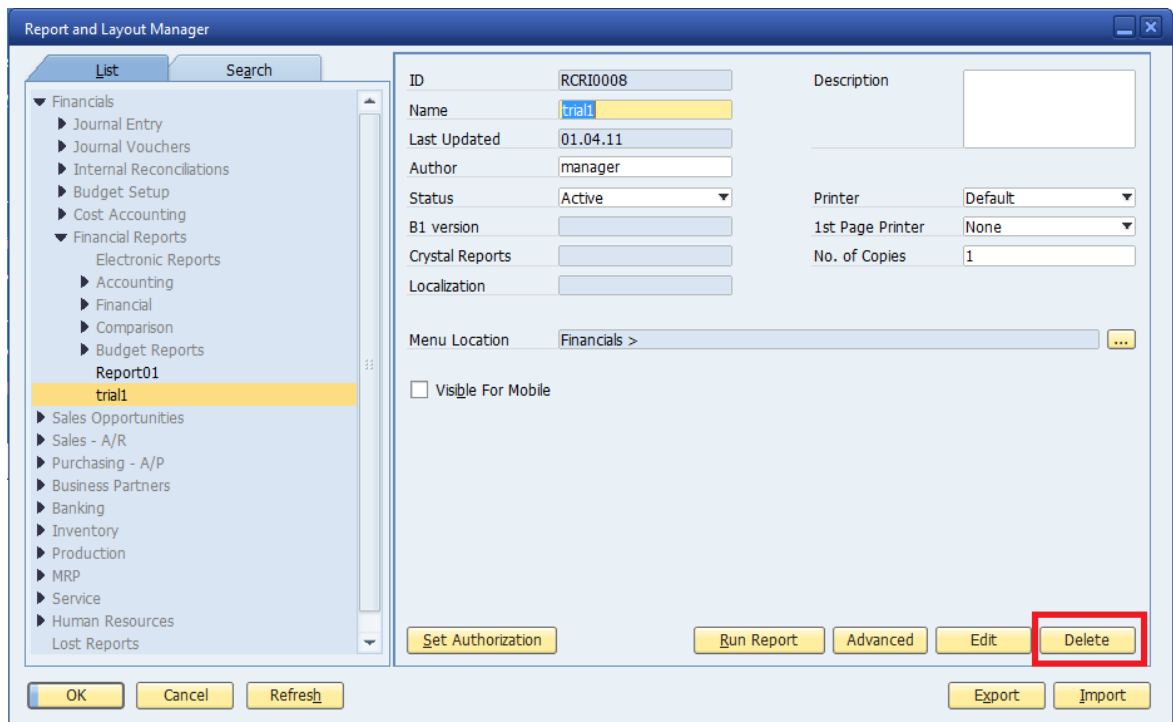
Prerequisite

You are designated as a superuser in SAP Business One.

Procedure

To delete an SAP Crystal report, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to delete.
3. In the work area on the right, choose the *Delete* button.



4. To confirm that you want to delete the report, choose the *Yes* button.

3 Setting Authorizations for Reports Created with the SAP Crystal Reports Software

Prerequisite

You are designated as a superuser in SAP Business One.

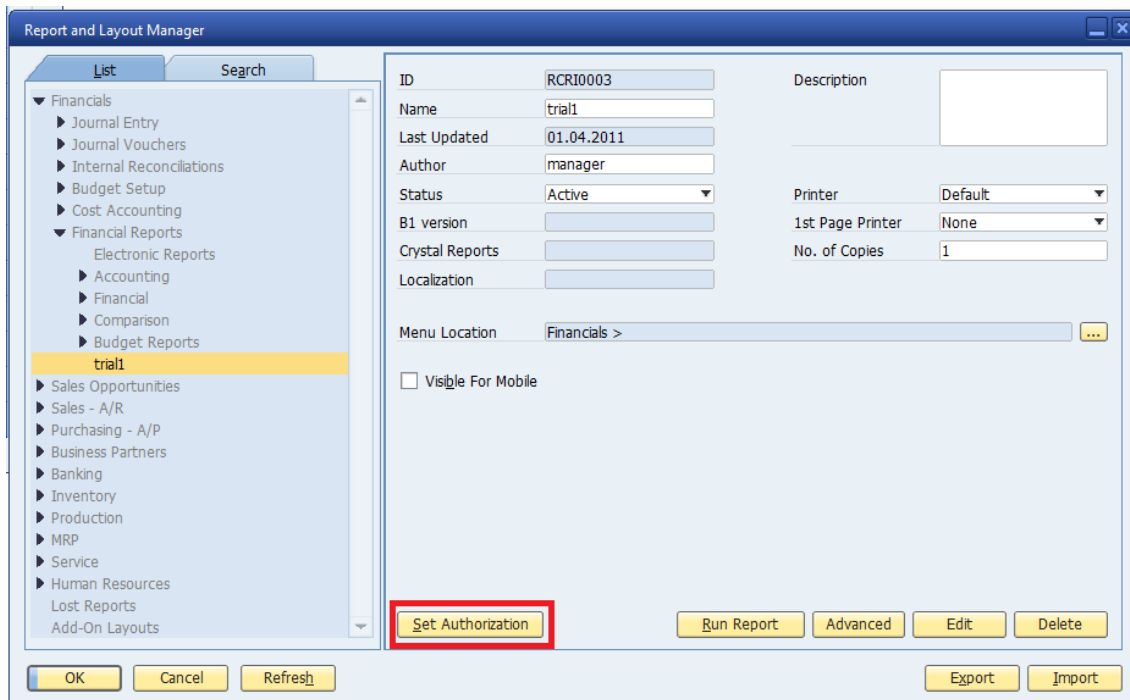
Procedure

i Note

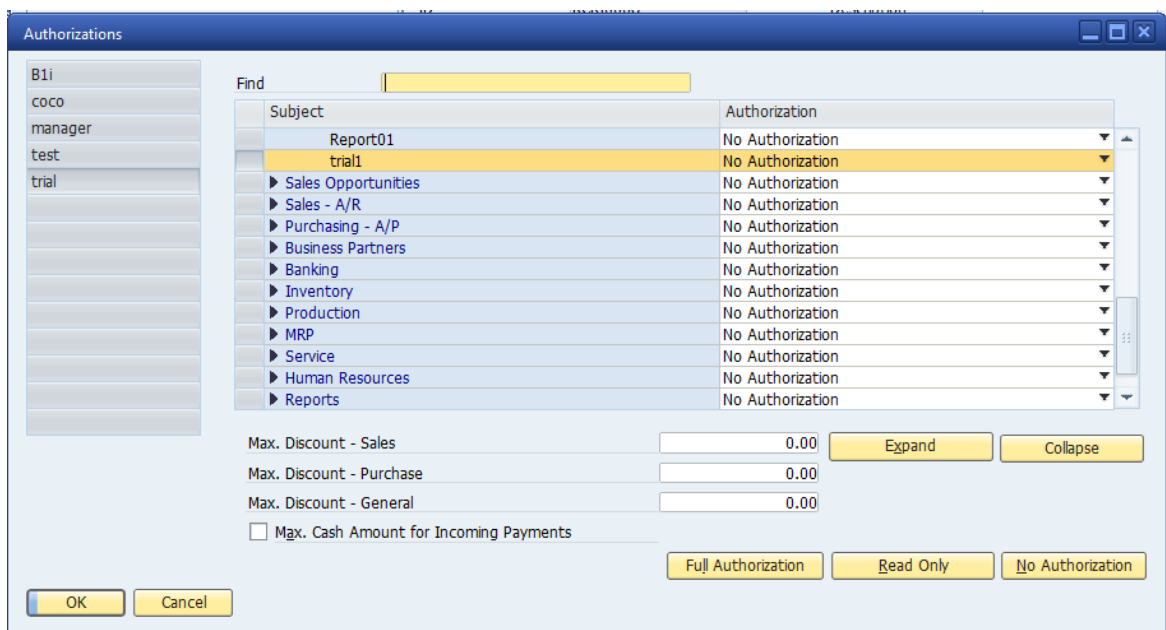
You can apply only *Full Authorization* or *No Authorization* to reports created with the SAP Crystal Reports software. A user cannot have read-only access to these reports.

To set authorizations for a report, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the pane on the left, navigate to the report for which you want to set authorizations, select the report, and choose *the Set Authorization* button.



- In the *Authorizations* window, in the pane on the left, select the user that you want to authorize for the report.



- In the *Authorization* column, in the dropdown list, select one of the following:
 - Full Authorization*
 - No Authorization*
- Choose the *Update* button and then choose the *OK* button.

For more information about setting authorizations in SAP Business One, see the SAP Business One online help.

4 Setting Data Sources for SAP Crystal Reports Layouts and Reports

A report or layout created with the SAP Crystal Reports software can have more than one data sources. For example, your company runs a weekly report that includes sales from all your retail outlets in a single report. In SAP Business One you maintain one company database for each of the retail outlets. In this case, you need to be able to retrieve data from multiple sources (databases).

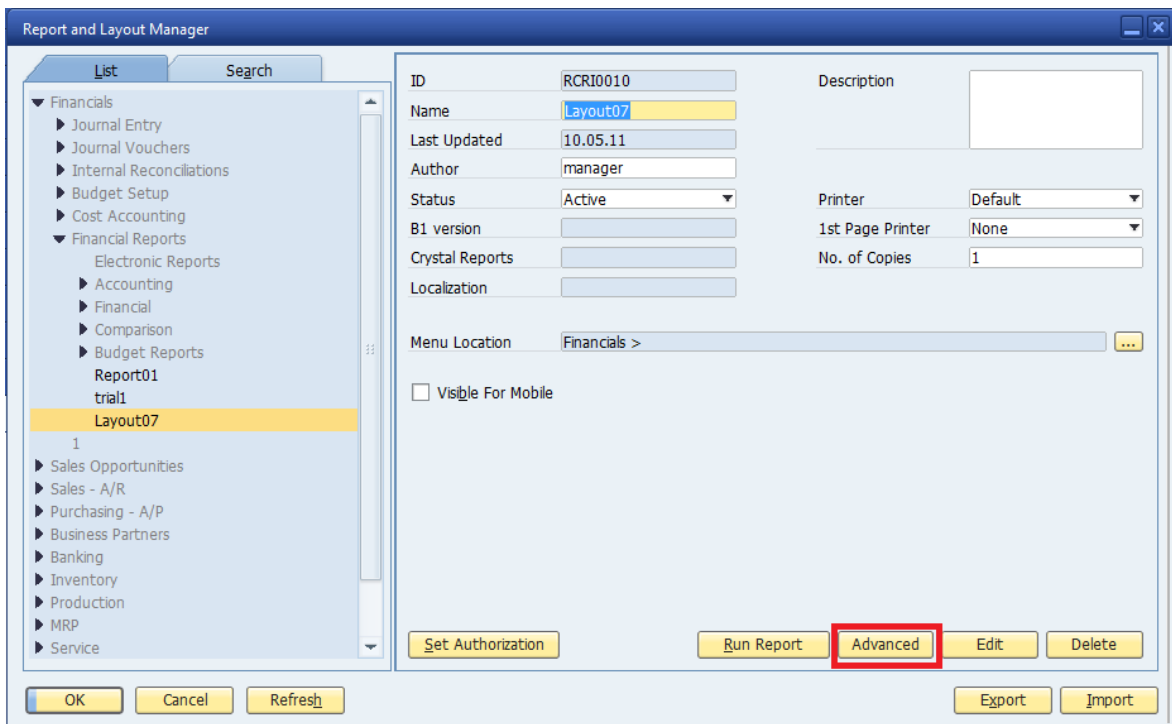
➔ Recommendation

When creating a report or layout using multiple data sources, you should adhere to the following rules:

- If you need to retrieve data from multiple data sources for the *Header* or *Footer* sections, add the data sources to the main report.
- If you need to retrieve data from multiple data sources for the *Details* section, create sub reports in the appropriate *Header* section of the main report and add database fields to the *Details* section of the sub report. For each sub report, use only one data source.

To set the data sources for an imported report or layout in SAP Business One, proceed as follows:

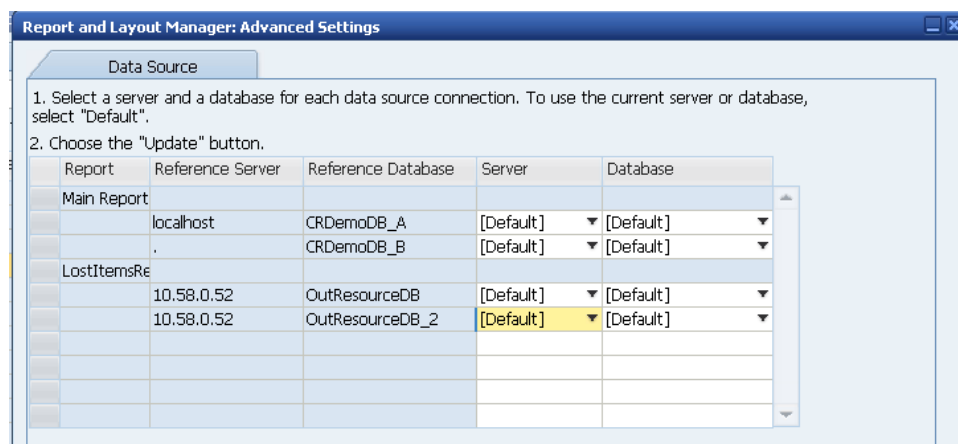
1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the pane on the left, navigate to the report or layout for which you want to set data sources, select it, and choose the *Advanced* button.



3. In the *Report and Layout Manager: Advanced Settings* window, do the following:
 1. Select the *Data* Source tab.
 2. Specify the server and the database for each data source connection in the report or layout.
 3. To use the current company database, select *[Default]* for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.

i Note

The reference server and database is the data source used to create the report or layout. It is not necessarily the current company database and is displayed only for your information.



4. To save the changes, choose the *Update* button.
5. If you specified a server or database (did not choose *[Default]*), the *Site User* window opens. Specify the site password and choose the *OK* button.
6. Choose the *OK* button.

5 Developing Add-Ons to Import .rpt Files

The SAP Business One data interface (DI) API enables you to create add-ons that import SAP Crystal Reports .rpt files as either reports or layouts. The *ReportsLayoutService* object lets you do the following:

- Import an .rpt file as a layout and assign it to one or more document types. For more information, see *Master Layouts*.
- Import an .rpt file as a report and assign a menu entry to the report.

For more information about SAP Business One APIs, see the SDK Help Center.

To access the SDK Help Center:

1. Go to <https://www.sdn.sap.com/irj/sdn/businessone>.
2. Under *BUSINESS ONE KNOWLEDGE CENTER*, click the link of the relevant SAP Business One release.
3. Click the SDK Help Center link.

6 Master Layouts

Using the SAP Crystal Reports software, you can create master layouts for certain document types in SAP Business One.

➔ Recommendation

For a layout that you want to define as a master layout, we strongly recommend that you include the `ObjectId@SQL` token in the layout. For more information about working with the `ObjectId@SQL` token, see *Syntax and Rules for Defining Tokens*.

You define and apply master layouts when importing `.b1p` or `.b1px` package files that contain layouts. For more information, see *Importing SAP Business One .b1p and .b1px Package Files*.

i Note

You cannot define a single imported `.rpt` file as a master layout.

Document types to which you can apply master layouts fall into four categories: sales documents, purchasing documents, inventory documents, and production documents. These categories, related document types, and their source tables are listed below:

Category	Document Type	Table Name
Sales	A/R invoice	OINV
	A/R credit memo	ORIN
	A/R correction invoice	OCIN
	Sales quotation	OQUT
	Sales order	ORDR
	Return	ORDN
	A/R down payment invoice	ODPI
	Delivery note	ODLN
Purchasing	A/P invoice	OPCH
	A/P credit memo	ORPC
	A/P correction invoice	OCPI
	Purchase quotation	OPQT
	Purchase order	OPOR
	Goods return	ORPD
	A/P down payment invoice	ODPO
	Goods receipt PO	OPDN

Category	Document Type	Table Name
Inventory	Goods issue	OIGE
	Goods receipt	OIGN
	Inventory transfer	OWTR
	Inventory transfer request	OWTQ
Production	Receipt from production	OIGN
	Issue for production	OIGE
Sales, purchasing, and Inventory	Draft	ODRF

For a complete listing of document types, document type codes, and corresponding source tables, see Appendix.

You can create a layout for one document type and apply this layout to another document type. When you view the latter document type in this layout, SAP Business One automatically redirects you to the tables relevant to this document type and displays the correct data in spite of the fact that the layout itself contains table information relevant to the former document type.



Example

You create a layout with the tables OINV, INV1, and so on, which are relevant to the A/R invoice, and you apply the layout to the sales order. When you view sales orders in this layout, SAP Business One redirects you to the tables ORDR, RDR1, and so on, which are relevant to sales orders.



Note

To avoid the automatic redirection and to prevent the layout from being used as a master layout, proceed as follows:

1. Open the layout.
2. In the Database Expert window, rename the tables by adding “_ONLY” at the end of each table.
3. Save the layout.

7 Exporting Reports and Layouts Created with the SAP Crystal Reports Software

You can export SAP Crystal Reports layouts and reports from SAP Business One 8.82 as .b1px package files using the report and layout export wizard. The .b1px package files are applicable only for SAP Business One 8.82 and any subsequent releases. As a new feature, .b1px package files can contain both SAP Crystal Reports layouts and reports in the same package file, unlike .b1p package files exported from SAP Business One 8.81, which contain only layouts or only reports, but not both.

Note

You can export only user-defined reports and layouts created with the SAP Crystal Reports software; you cannot export reports or layouts delivered with SAP Business One.

Caution

Do not manually change the extension of a file to .b1px. It could have unpredictable results.

Data source connections of a report or layout are exported along with it. In addition, when exporting a report, SAP Business One exports all its existing language versions. For more information, see *Working with Multilanguage Reports*.

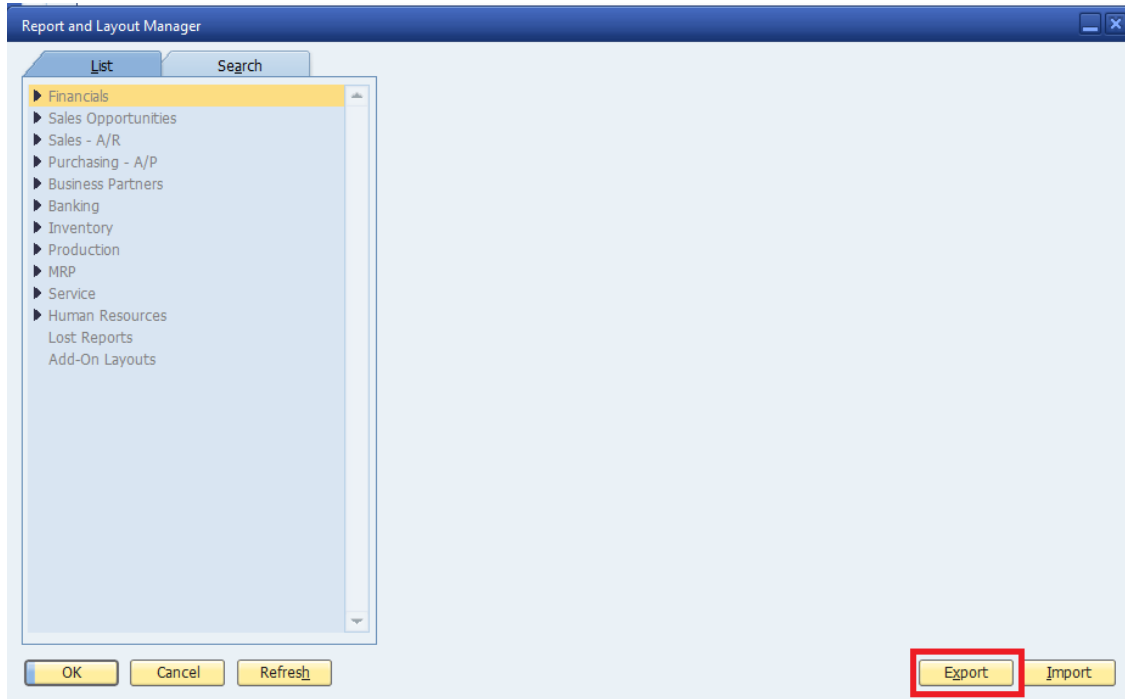
Prerequisites

- You have installed the following:
 - SAP Business One 8.82
 - SAP Crystal Reports, version for the SAP Business One application
- You are designated as a superuser in SAP Business One.
- You have created one or more SAP Crystal Reports layouts or reports that are ready to be exported.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

- In the *Report and Layout Manager* window, in the work area on the right, choose the *Export* button. The report and layout export wizard starts.



- In the *Report and Layout Export Wizard* window, choose the *Next* button.
- In the *Report and Layout Selection* window, to view the layouts or reports you want to export, in the *Name* column, click the arrows to the left of the nodes. The add-on layouts appear in the *Add-On Layouts* folder. To open or close all the nodes at once, choose the *Expand* or *Collapse* button respectively. In the top right corner of the window, from the *Display* dropdown list, select to display layouts, reports, or both.
- Select the checkbox to the left of each layout or report you want to export.
- Choose the *Next* button.
- In the *Package Details* window, enter the following information:
 - Package name
 - Description – Description of the package is optional. The description that you enter here is visible to a user when importing the package file into SAP Business One.
 - Folder location – Specify a location where you want to save the .b1px package file.
- To complete the export, choose the *Finish* button. An SAP Business One .b1px package file is created. The *Export Complete* window appears, displaying the export details.
- To exit the wizard, choose the *Close* button.

8 Importing Reports and Layouts Created with the SAP Crystal Reports Software

You can import SAP Crystal Reports layouts, reports, and .rpt files into SAP Business One using the report and layout import wizard. As of SAP Business One 8.82, SAP Business One imports three types of files:

- .rpt files
- .b1p package files
- .b1px package files

When importing either an .rpt file with multiple data source connections or a .b1p or .b1px package file that contains reports or layouts with multiple data source connections, you can change the data sources for the imported reports or layouts.

When importing an .rpt file as a report, you can create a folder for the report in the SAP Business One [Main Menu](#). For more information, see [Creating New Report Folders](#).

When importing a .b1p or .b1px package file that contains reports, you can define authorizations for the reports.

When importing a .b1p or .b1px package file that contains layouts that can be applied to multiple document types, you can define these layouts as master layouts. For more information about master layouts, see [Master Layouts](#).

When importing a .b1p or .b1px package file, SAP Business One automatically detects whether the contents are layouts or reports, the document types of the layouts, and the menu paths of the reports.

When importing a .b1px package file that contains reports, SAP Business One imports all existing language versions of the reports. For more information, see [Working with Multilanguage Reports](#).

8.1 Importing SAP Crystal Reports .rpt Files

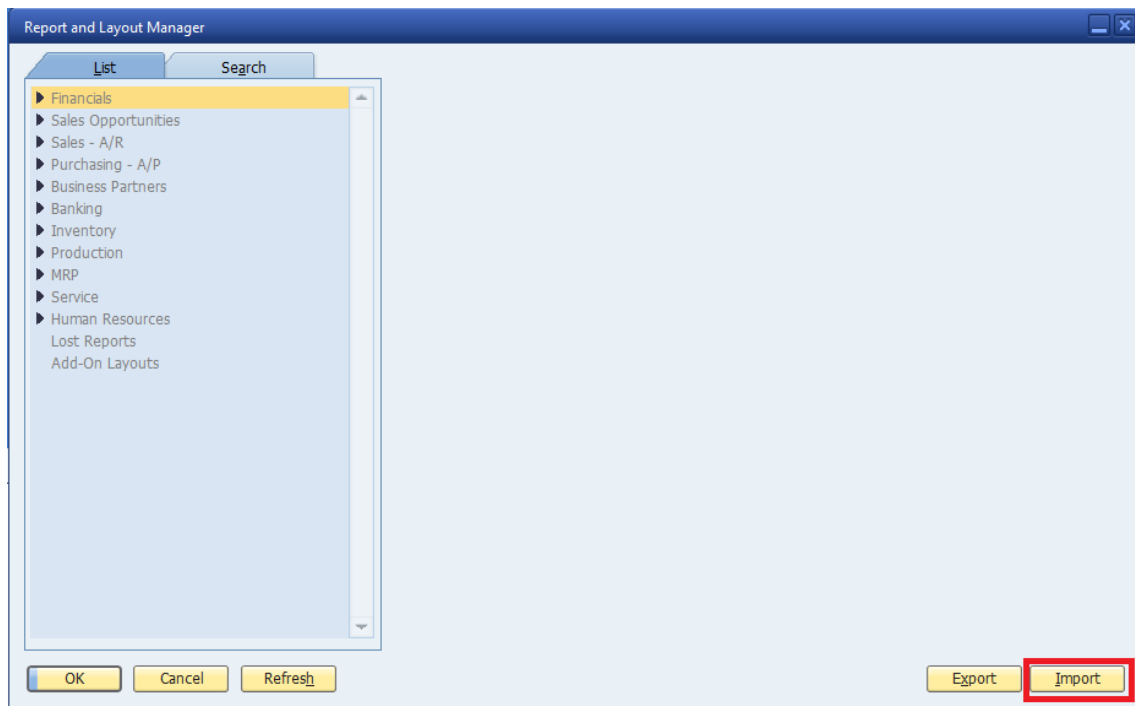
To import SAP Crystal Reports .rpt files into SAP Business One, you use the report and layout import wizard.

Recommendation

Before importing an .rpt file, verify with the provider whether the file is intended as a layout or report.

Procedure

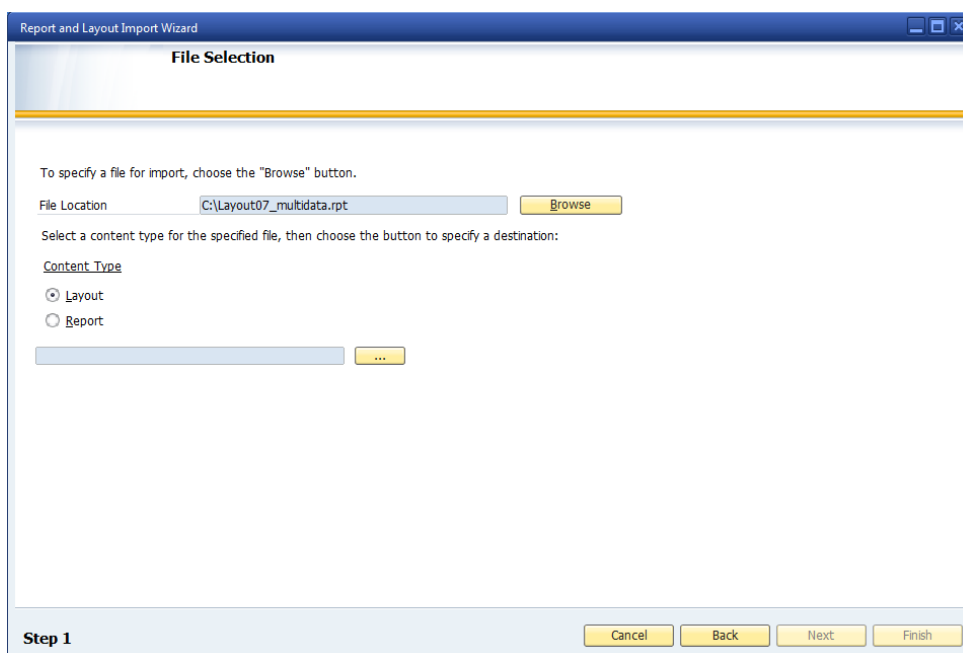
1. From the SAP Business One [Main Menu](#), choose [Administration](#) → [Setup](#) → [General](#) → [Report and Layout Manager](#).
2. In the [Report and Layout Manager](#) window, in the work area on the right, choose the [Import](#) button.
The report and layout import wizard starts.



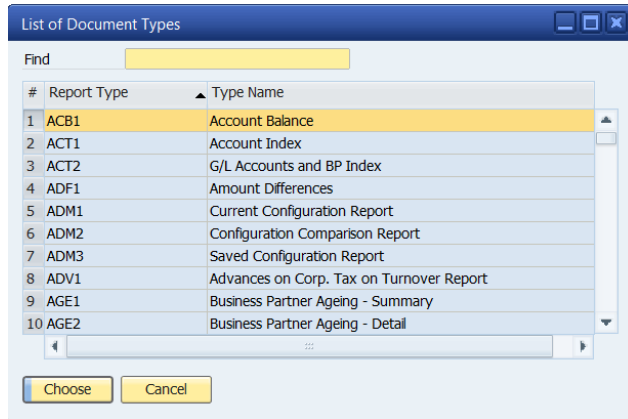
3. In the *Report and Layout Import Wizard* window, choose the *Next* button.
4. In the *File Selection* window, choose the *Browse* button.
5. In the *Open* window, navigate to the *.rpt* file you want to import and choose the *Open* button.
6. Select the appropriate content type.

i Note

If you are not sure whether the *.rpt* file is intended as a report or a layout, verify this with the provider of the file.



7. Choose the ellipsis button.
 - o If you selected the layout content type, the *List of Document Types* window opens.

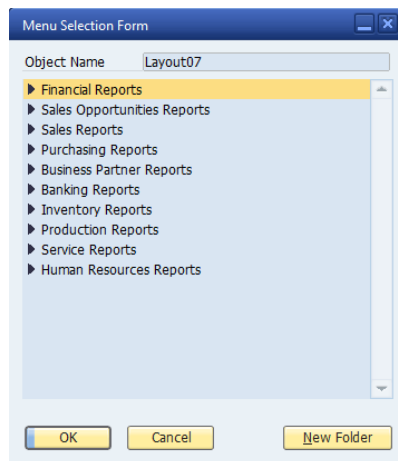


Select a document type and choose the *Choose* button.

i Note

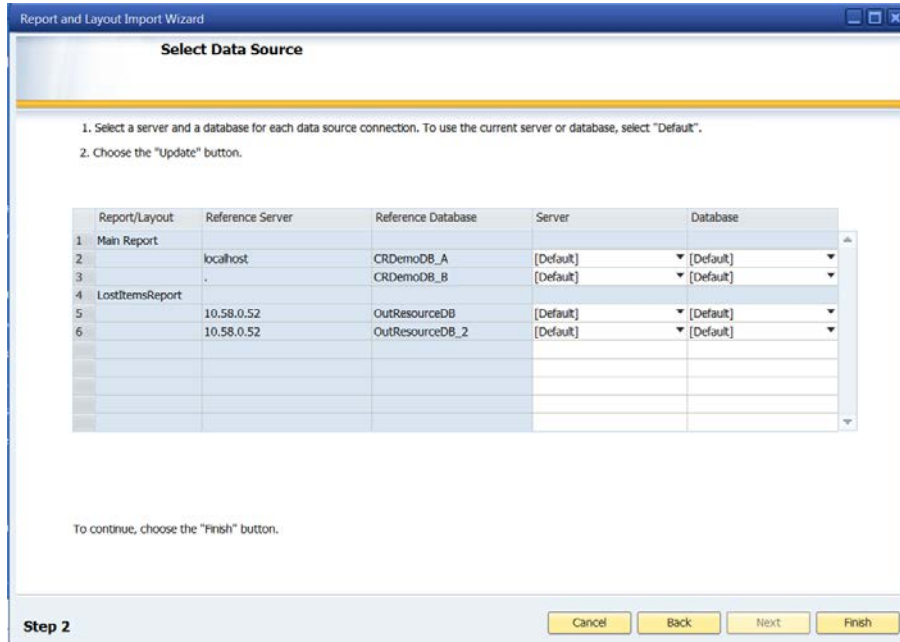
In the *List of Document Types* window, the list of document types is similar to the document list in the Print Layout Designer (PLD). There is an entry for each specific document type, such as *A/R invoice* (items).

- o If you selected the report content type, the *Menu Selection Form* window opens. Select a report folder and choose the *OK* button. Alternatively, to create a new folder, select *the New Folder* button. For more information, see *Creating New Report Folders*.



8. If the .rpt file contains multiple data source connections, in the *File Selection* window, choose the *Next* button. Otherwise, continue to the next step.

The *Select Data Source* window opens.



For each data source connection select a server and database.

To use the current company database, select *[Default]* for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.

Note

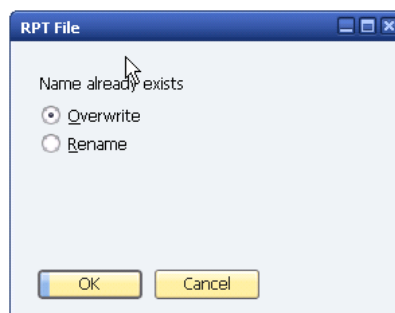
If an .rpt file with only one data source connection is imported as a report or a layout, you can change its data source later in the *Report and Layout Manager* window. For more information, see *Setting Data Sources for SAP Crystal Reports Layouts and Reports*.

9. In the *File Selection* window or the *Select Data Source* window, choose the *Finish* button.

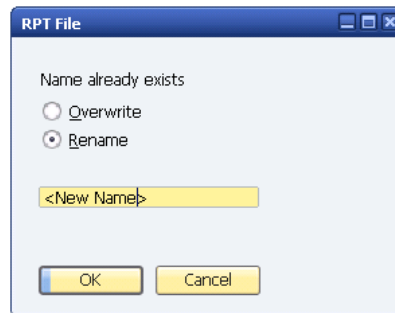
If you specified a server or database other than *[Default]*, the *Site User* window opens. Specify the site password and choose the *OK* button.

If the name of the .rpt file already exists in SAP Business One as a report or for a specific document type as a layout, the *RPT File* window opens. Do one of the following:

- o To replace the existing layout or report, select the *Overwrite* radio button and choose the *OK* button.



- o To keep the existing layout or report, select the *Rename* radio button, enter a new name, and choose the *OK* button.



10. In the *Import Summary* window, a summary of the import results appears. To exit the wizard, choose the *Close* button.

8.1.1 Creating New Report Folders

You can create new report folders in the SAP Business One *Main Menu* when using the wizard to import an *.rpt* file as a report into SAP Business One.

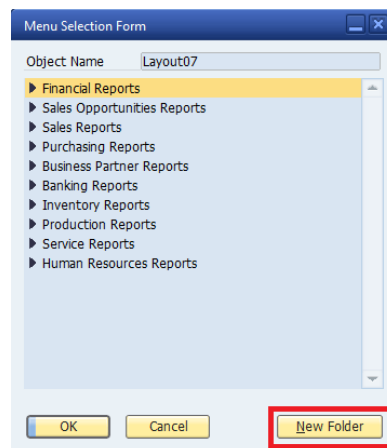
Note

You can create new report folders directly by choosing *Administration* → *System Initialization* → *Menu Structure*. For more information, see the SAP Business One online help.

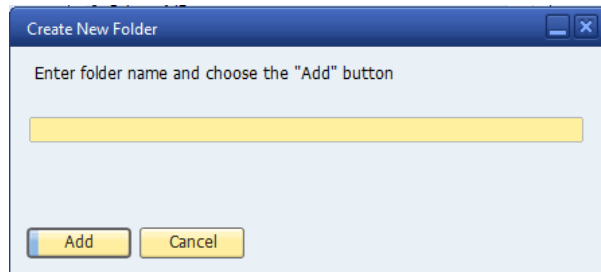
Procedure

1. In the *Menu Selection Form* window (see step 7 in *Importing SAP Crystal Reports .rpt Files*), select a module or folder in which you want to create a new folder.

Alternatively, in the *Report and Layout Manager* window, you can open the *Menu Selection Form* window by selecting a report and choosing the ellipsis button in the *Menu Location* area.



2. Choose the *New Folder* button.
3. In the *Create New Folder* window, enter a name for the new folder.



4. Choose the *Add* button.

i Note

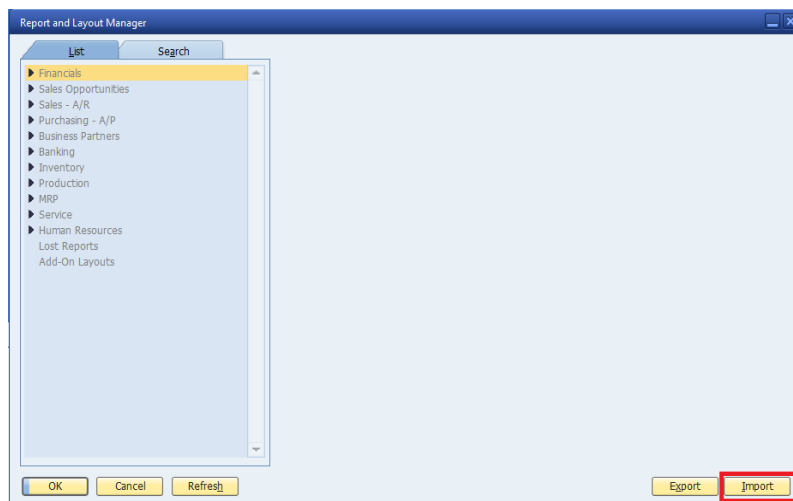
The new folder won't appear in the SAP Business One *Main Menu* until a report is successfully imported into it.

8.2 Importing SAP Business One .b1p and .b1px Package Files

To import .b1p and .b1px package files into SAP Business One, you use the report and layout import wizard. When importing a .b1p or .b1px package file, SAP Business One automatically detects whether the contents are layouts or reports, the document types of the layouts, and the menu paths of the reports. After the import, reports appear in the detected menu paths; layouts are displayed when you choose corresponding document types; and add-on layouts also appear in the *Add-On Layouts* folder.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.



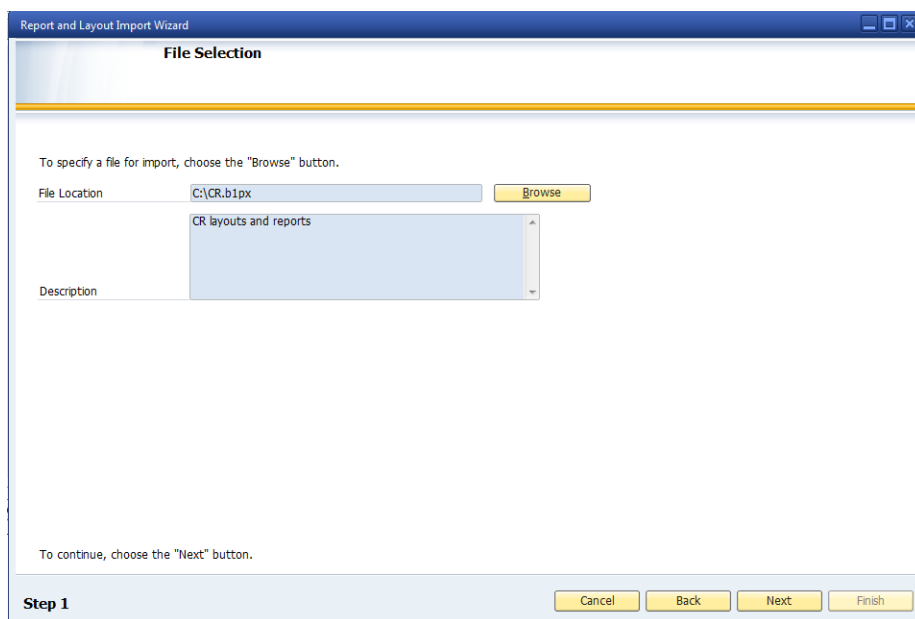
2. In the *Report and Layout Manager* window, in the work area on the right, choose the *Import* button.
The report and layout wizard starts.
3. In the *Report and Layout Import Wizard* window, choose the *Next* button.
4. In the *File Selection* window, choose the *Browse* button.
5. In the *Open* window, navigate to the SAP Business One .b1p or .b1px package file you want to import and choose the *Open* button.

i Note

SAP Business One automatically distinguishes between layouts and reports in the .b1p and .b1px package file as well as their corresponding document types or menu paths. After the import wizard completes successfully, you can change the menu paths of the imported reports using the *Report and Layout Manager* window.

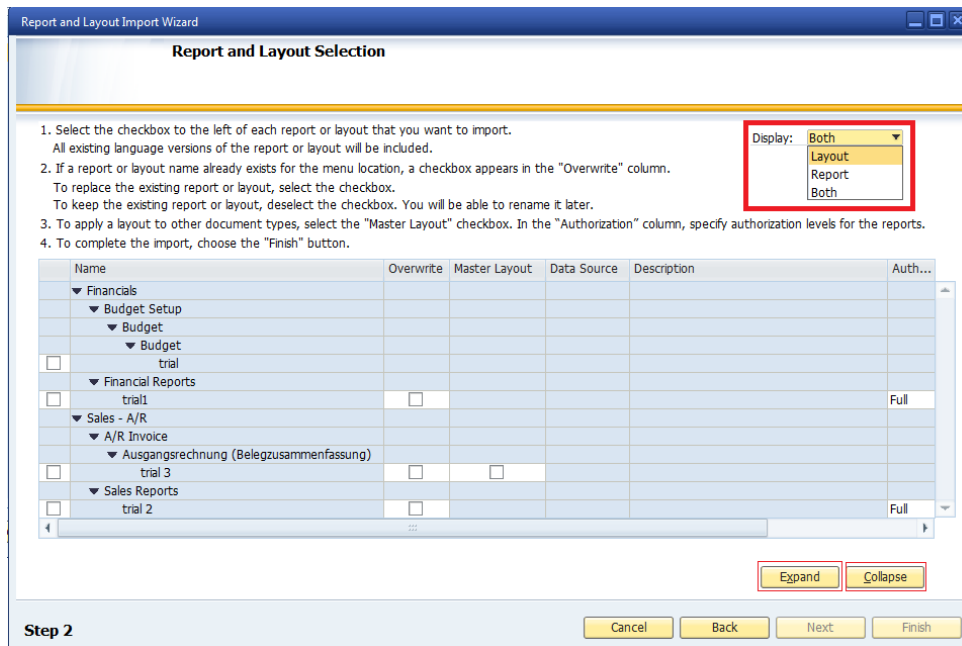
A description appears in the *Description* text box if a description was added during the export process of the .b1p or .b1px package file.

For more information about the export process, see *Exporting Reports and Layouts Created with the SAP Crystal Reports Software*.



6. Choose the *Next* button.
7. In the *Report and Layout Selection* window, to view the layouts or reports you want to import, in the *Name* column, click the arrows to the left of the nodes.
To open or close all the nodes at once, choose the *Expand* or *Collapse* button respectively.

In the top right corner of the window, from the *Display* dropdown list, select to display layouts, reports, or both.



8. Select the checkbox to the left of each report or layout that you want to import.
9. If a report or a layout for a certain document type and the same name already exists in SAP Business One, select the *Overwrite* checkbox to replace the existing report or layout.

Note

If you do not select the *Overwrite* checkbox, you will be prompted to rename the imported report or layout later.

10. If the .b1p or .b1px package file contains layouts that can be applied to multiple document types, you can choose to define them as master layouts.

Caution

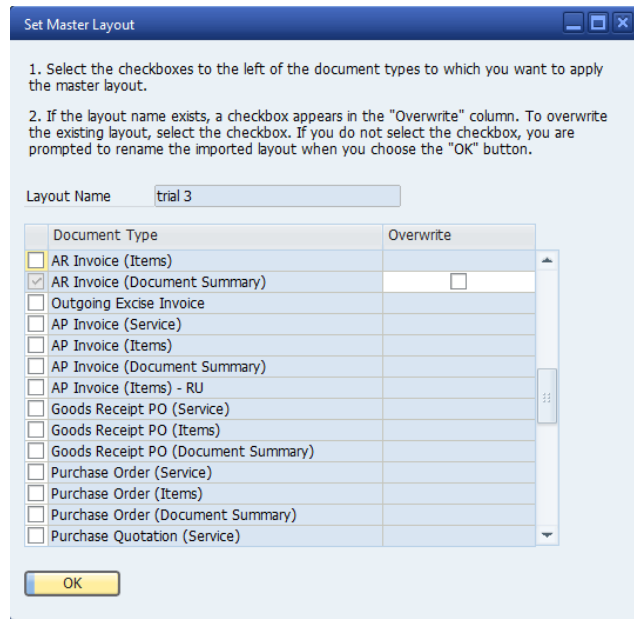
You define a layout as a master layout only during this process. For more information, see *Master Layouts*.

Recommendation

For a layout that you want to define as a master layout, we strongly recommended that you include the **ObjectId@** SQL token in the layout. For more information about working with the **ObjectId@** SQL token, see *Syntax and Rules for Defining Tokens*.

To define a layout as a master layout, proceed as follows:

1. In the Report and Layout Selection window, select the Master Layout checkbox.
2. In the Set Master Layout window, select the document types to which you want to assign the layout.



- If a document type that you selected already has a layout with the same name, select the Overwrite checkbox to replace the existing layout.

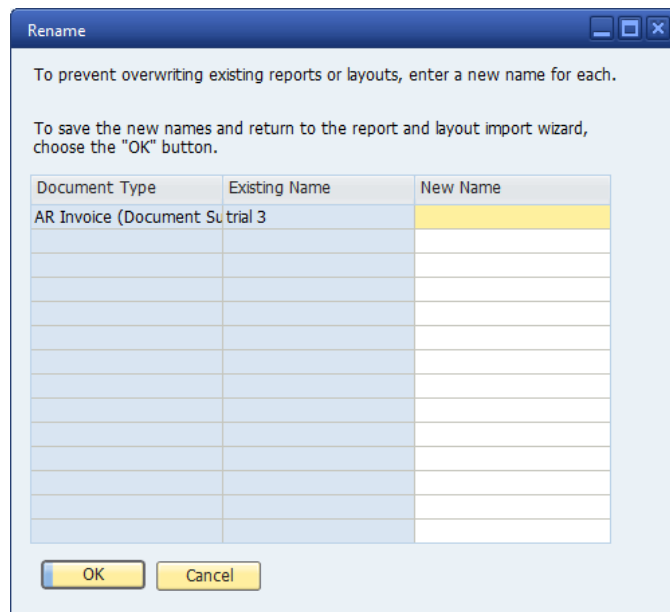
i Note

If you do not select the *Overwrite* checkbox, you will be prompted to rename the imported layout in the next step.

- Choose the OK button.

If there are no naming conflicts, you return to the *Report and Layout Selection* window.

Otherwise, the *Rename* window opens. Enter a new name for each duplicate layout listed and choose the *OK* button.



➔ Recommendation

After the import wizard completes successfully and before you start using a master layout, make sure it appears with all the document types to which it has been applied. If not, make the required corrections to the layout. For more information, see *Searching for Layouts*.

11. If the package file contains reports or layouts with multiple data source connections, to specify data source connections for a report or layout, proceed as follows:
 1. In the Data Source column, click the Default link.
 2. In the Select Data Source window, select a server and database for each data source connection.
 3. To use the current company database, select [Default] for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.
 4. To save the changes, in the Select Data Source window, choose the Update button.
 5. If you specified a server or database other than [Default], in the Site User window that opens, specify the site password.
 6. In the Select Data Source window, choose the OK button.

If you changed the default settings of servers and databases, in the *Report and Layout Selection* window, the value in the *Data Source* column changes to *Assigned*.

i Note

If an .xpt file with only one data source connection is imported as a report or a layout, you can change its data source later in the *Report and Layout Manager* window. For more information, see *Setting Data Sources for SAP Crystal Reports Layouts and Reports*.

12. In the *Authorization* column, select one of the following permission levels for each report you are importing:
 - o Full – All users have full authorization for the report.
 - o None – Only superusers have full authorization for the report.

For more information about setting authorizations in SAP Business One, see *Setting Authorizations for Reports Created with the SAP Crystal Reports Software* and SAP Business One online help.

13. Choose the *Finish* button.

If you did not select *Overwrite* checkboxes in step 8, the *Rename* window opens. Enter a new name for each report or layout, and choose the *OK* button.

Document Type	Existing Name	New Name
Crystal-Bericht	trial1	
Budget	trial	

-
- The *Import Summary* window appears with a summary of the import results.
14. To exit the wizard, choose the *Close* button.

9 Searching for Layouts and Reports

To search for SAP Crystal Reports layouts and reports, use the *Report and Layout Manager* window.

9.1 Searching for Layouts

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. Select the *Search* tab.
3. Select the *Document Type* radio button.
4. Enter key words and choose the *Find* button.

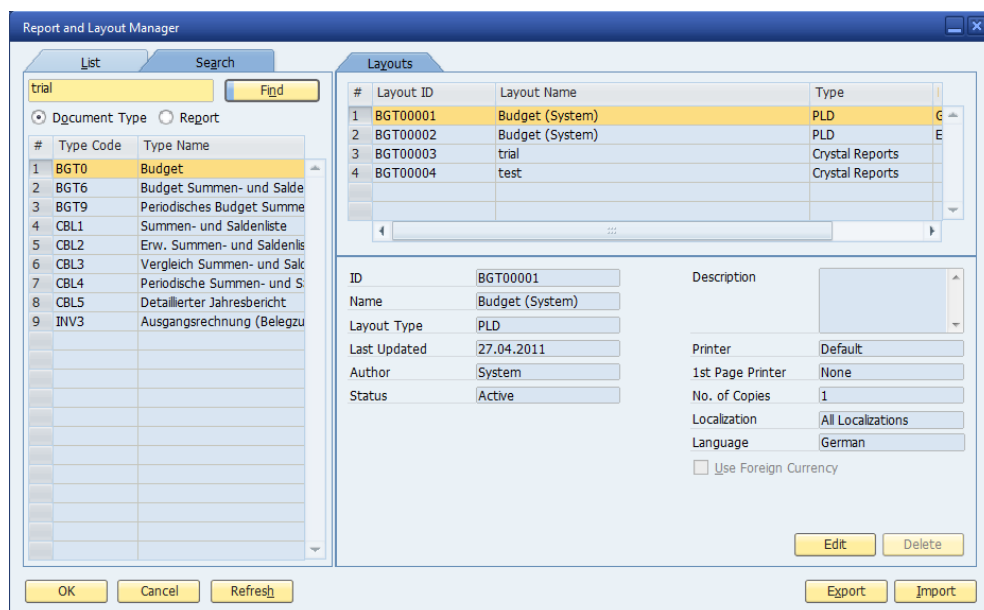
A list of document types that match the key words is displayed.

i Note

You can search either by the code or name of the corresponding document type, or by the name of the layout itself.

5. Select the document type to which the layout you are searching for is applied.

The layout is displayed in the list of layouts on the *Layouts* tab.



6. To view the details of the layout, select it.

Details are displayed in the work area on the *Layouts* tab.

7. To locate the layout in the main menu, select the *List* tab.

9.2 Searching for Reports

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. Select the *Search* tab.
3. Select the *Report* radio button.
4. Enter key words and choose the *Find* button.

A list of reports that match the key words is displayed.

5. To view the details of a report, select it.

Details are displayed in the work area on the right.

The screenshot shows the 'Report and Layout Manager' window. On the left, the 'Search' tab is active, with 'trial' entered in the search field and the 'Find' button clicked. Below the search field, the 'Report' radio button is selected. A list of reports is displayed with 'trial1' selected. On the right, the details for report 'trial1' (ID: RCRI0003) are shown. The 'Menu Location' is 'Financials > Budget Setup > Budget >' and the 'Visible For Mobile' checkbox is unchecked. At the bottom, there are buttons for 'Set Authorization', 'Run Report', 'Advanced', 'Edit', 'Delete', 'Export', and 'Import'.

6. To locate the report in the main menu, select the *List* tab.

i Note

To change the location of the report, choose the ellipsis button in the *Menu Location* area. For information about creating a new folder for a report, see *Creating New Report Folders*.

10 Working with Multilanguage Reports

You can deliver reports created with the SAP Crystal Reports software in multiple languages. You can maintain translated content in multiple languages in one report.

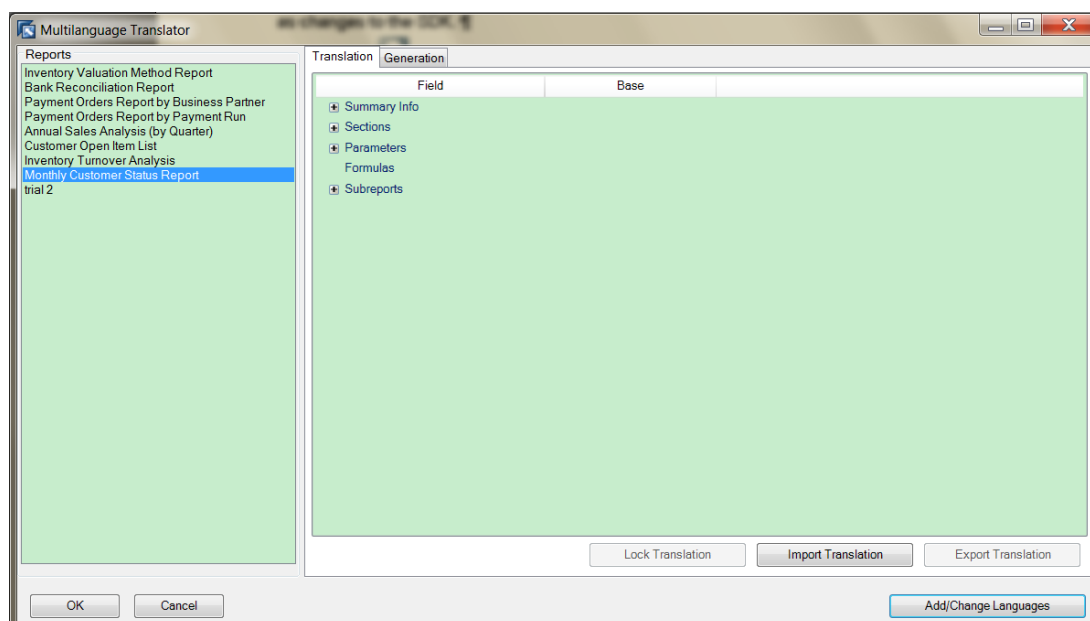
The multilanguage translator tool in SAP Crystal Reports, version for SAP Business One, enables you to translate your reports in all the languages supported in SAP Business One.

To access the multilanguage translator in SAP Crystal Reports, do one of the following:

- Choose *Add-ins* → *SAP Business One* → *Translate...*
- Click  (Translate).

If you have not logged on to a company database, the SAP Business One *Log On* window appears. Enter the required information.

The *Multilanguage Translator* window opens. All reports created with the SAP Crystal Reports software in the company database are listed in the *Reports* pane.



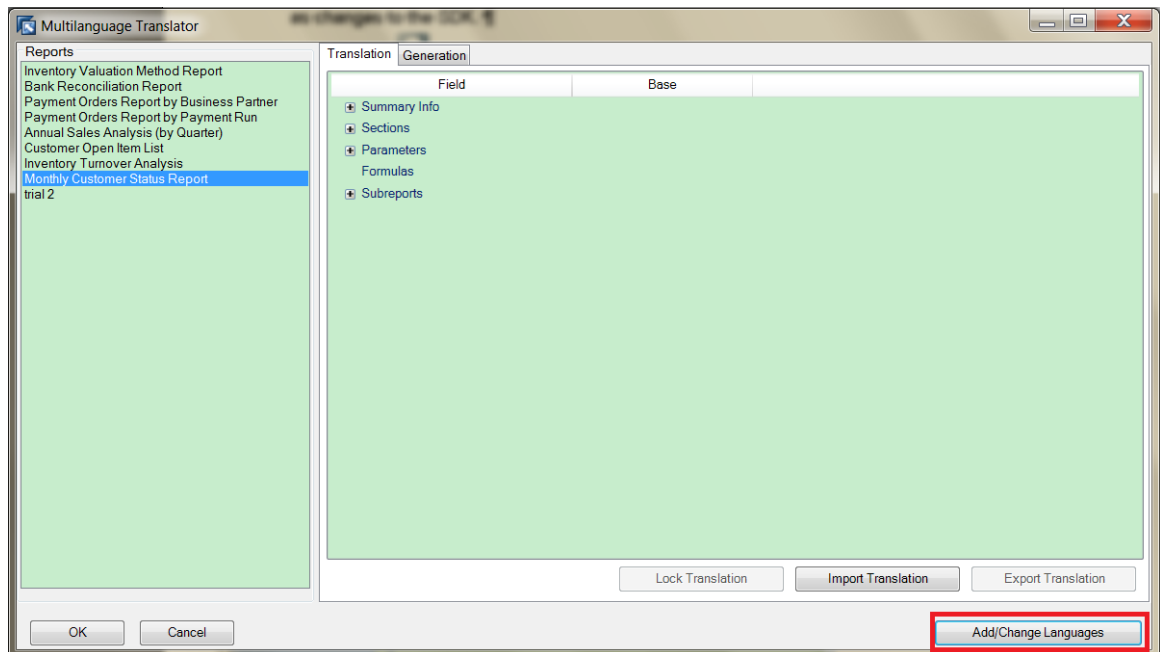
10.1 Translating Reports

Procedure

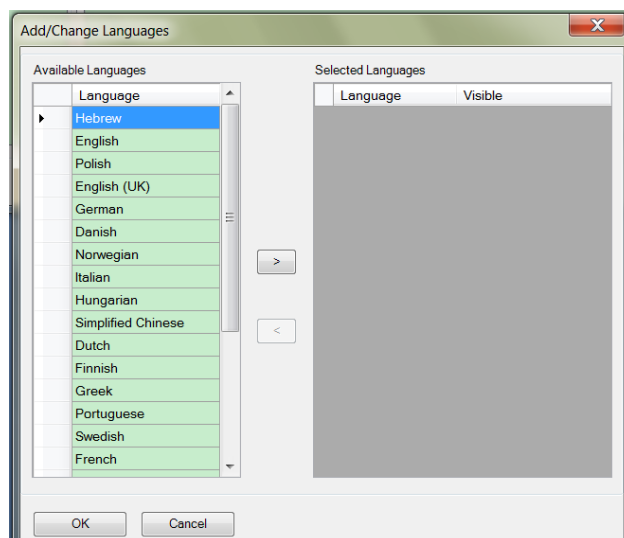
1. In the *Multilanguage Translator* window, from the *Reports* list, select the report you want to translate into other languages.

The details of the report appear on the *Translation* tab.

- To add or change target languages into which the report can be translated, choose the *Add/Change Languages* button.



- In the *Add/Change Languages* window, from the *Available Languages* list, select the languages into which you want to translate the report. To move the selected languages to the *Selected Languages* list, choose the button.



- In the *Selected Language(s)* list, to display the selected language(s) in the *Multilanguage Translator* window, select the *Visible* checkbox for each.

i Note

If you do not select the *Visible* checkbox for a language, the translation in this language will not be displayed in the *Multilanguage Translator* window.

- In the *Add/Change Languages* window, choose the *OK* button.
- In the *Multilanguage Translator* window, on the *Translation* tab, select the field whose content you want to translate and enter translations.

i Note

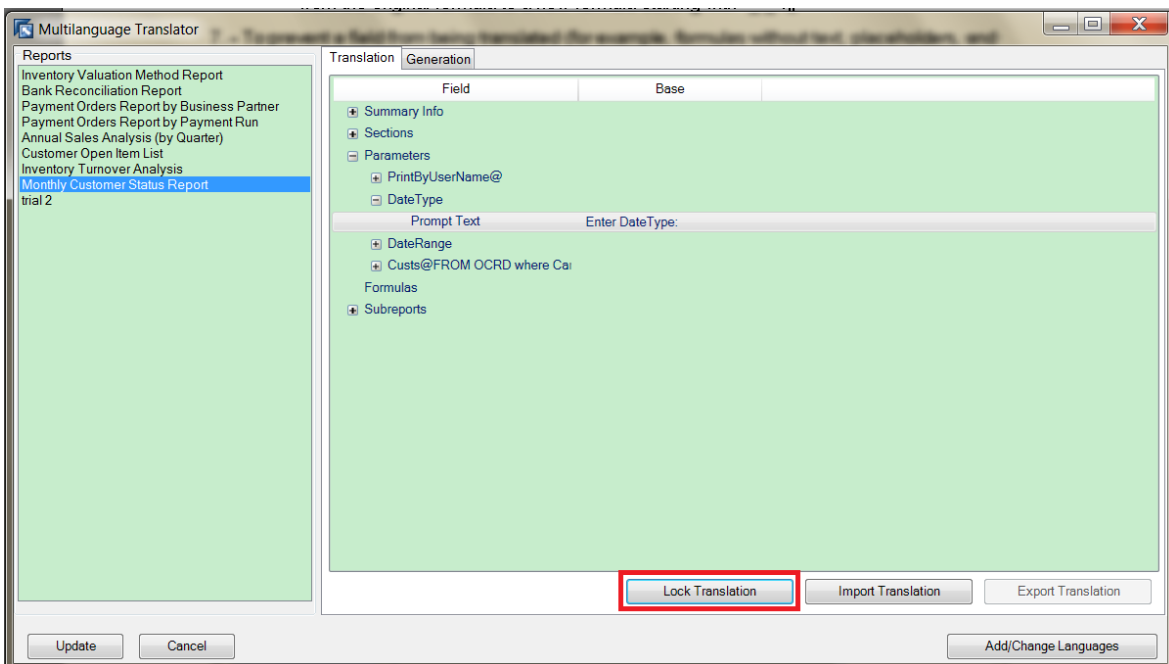
You can also translate a formula with a name starting with “__” into multiple languages. For a formula that contains both texts that need translation and other content that does not need translation such as functions, data fields, and so on, you can extract the texts from the original formula to a new formula starting with “__”.

- To prevent a field from being translated (for example, formulas without text, placeholders, and separators), select the field and choose the *Lock Translation* button.

After a field is locked, the name of its button becomes “Unlock Translation”.

! Caution

All translations of a field are removed when it is locked. Its content cannot be translated until you unlock the field by choosing the *Unlock Translation* button.



- To save new and updated translations into the database, choose the *Update* button.

Result

After creating a translation, you must activate it in SAP Business One by generating a corresponding multilanguage report. For more information, see *Generating Multilanguage Reports*.

10.2 Generating Multilanguage Reports

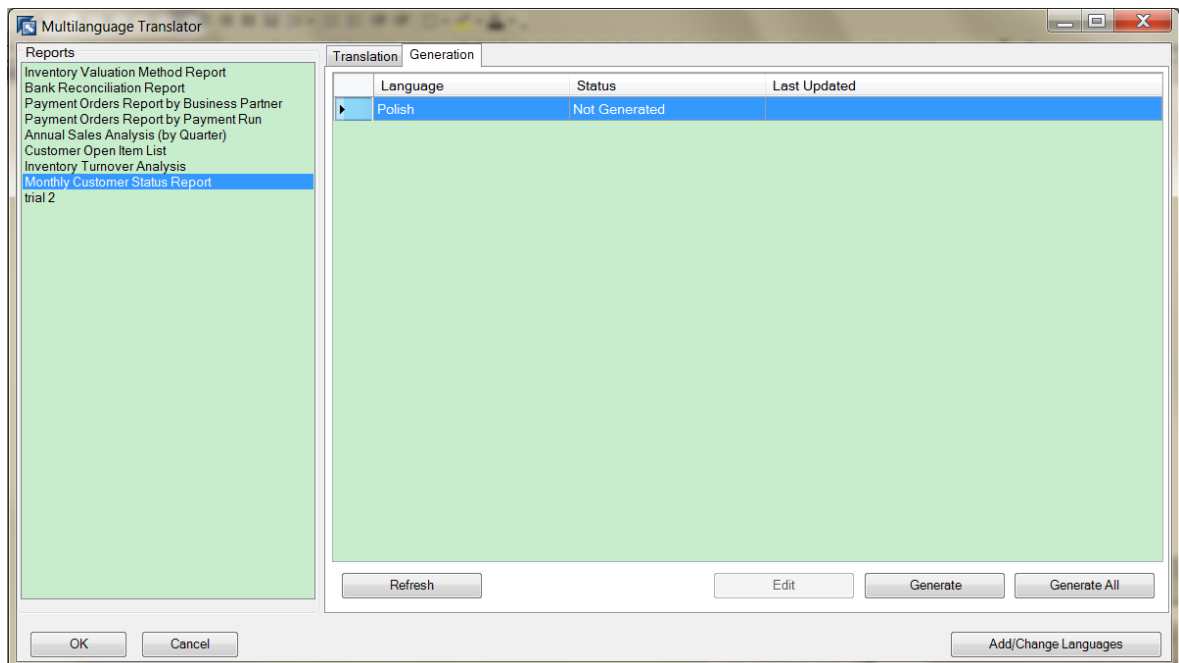
To activate a translation of a report in SAP Business One, you must generate a corresponding multilanguage report after either creating or importing a translation.

Caution

Before you generate the language version, make sure the translations meet your requirements. If you determine that a language version is not correct after it has been generated, you have to delete the incorrect version and create a new language version of the report. For more information, see *Deleting Translations*.

Procedure

1. In the *Multilanguage Translator* window, select the report whose translations you want to activate.
2. Select the *Generation* tab and do one of the following:
 - o To activate one or more individual translations, select each language that you want to activate and choose the *Generate* button.
 - o To activate all languages, choose the *Generate All* button.



When you activate a language, the value in the Status column changes to Generated. The generated report is saved in the database. When you change the display language in SAP Business One to the language in which you have generated a report, the generated report is displayed instead of the source report.

For more information about viewing a translated version of a report in SAP Business One, see *Viewing Translated Reports in SAP Business One*.

10.3 Viewing Translated Reports in SAP Business One

To view a report in SAP Business One that has been translated and activated (see *Generating Multilanguage Reports*) into one or more languages, proceed as follows:


1. In SAP Business One, change the display language into the language in which you want to view the report.
2. Run the report from one of the following locations:
 - o *Report and Layout Manager* window
 - o SAP Business One *Main Menu*

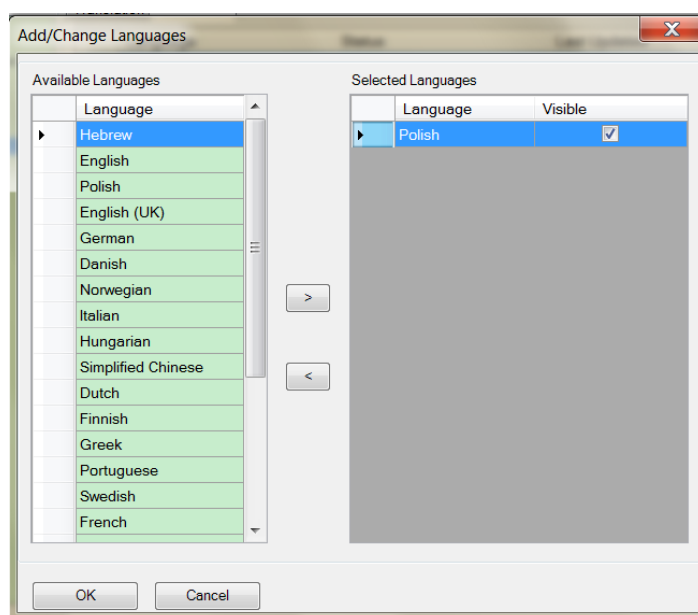
For more information, see *Running Reports*.

10.4 Deleting Translations

You can delete unwanted or incorrect translations of a report even after it has been activated (see *Generating Multilanguage Reports*).

Procedure

1. In the *Multilanguage Translator* window, from the *Reports* list, select the report whose translations you want to delete.
2. Choose the *Add/Change Languages* button.
3. In the *Add/Change Languages* window, from the *Selected Languages* list, select the language you want to remove and choose the  button.



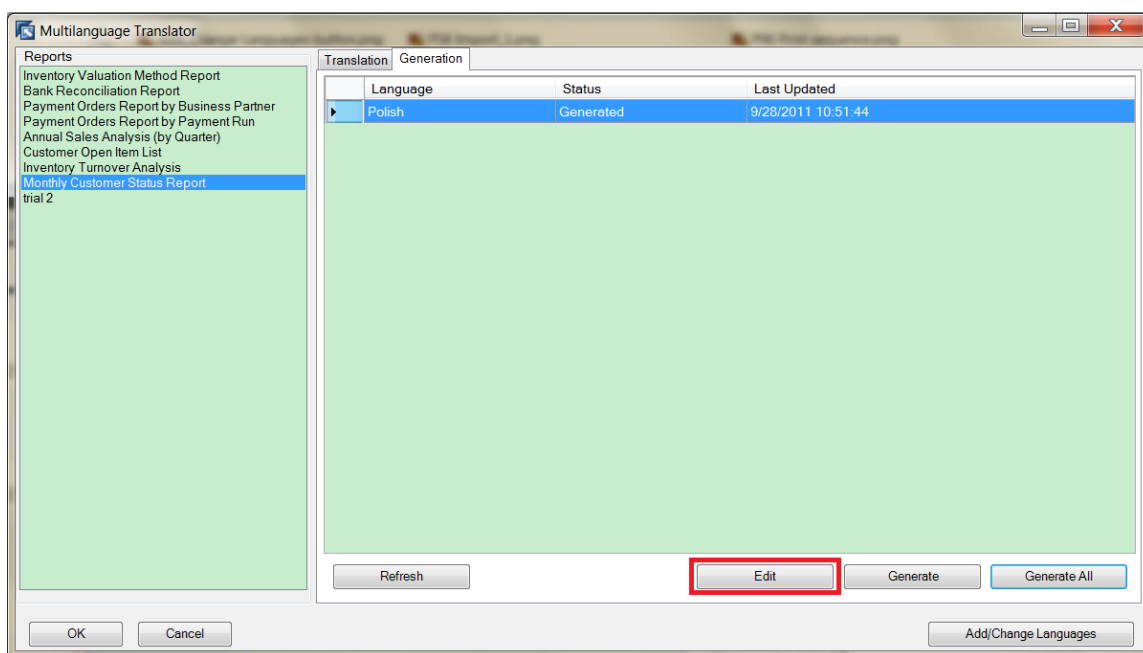
4. In the dialog window that asks for your confirmation, choose *Yes*.
The translation in this language is removed.

10.5 Creating New Reports from a Generated Multilanguage Report

After you activate a translation for a multilanguage report (see *Generating Multilanguage Reports*), you can create a new report (.rpt file) using the activated translation. The new report, however, is not saved to the database; you save the report (.rpt file) to a directory on your local hard drive. You can import the .rpt file into SAP Business One later as a new report. For more information, see *Importing SAP Crystal Reports .rpt Files*.

Procedure

1. In the *Multilanguage Translator* window, select the report with the translation on which you want to base your new report.
2. Select the *Generation* tab.
3. Select the language version on which you want to base your new report and choose the *Edit* button.



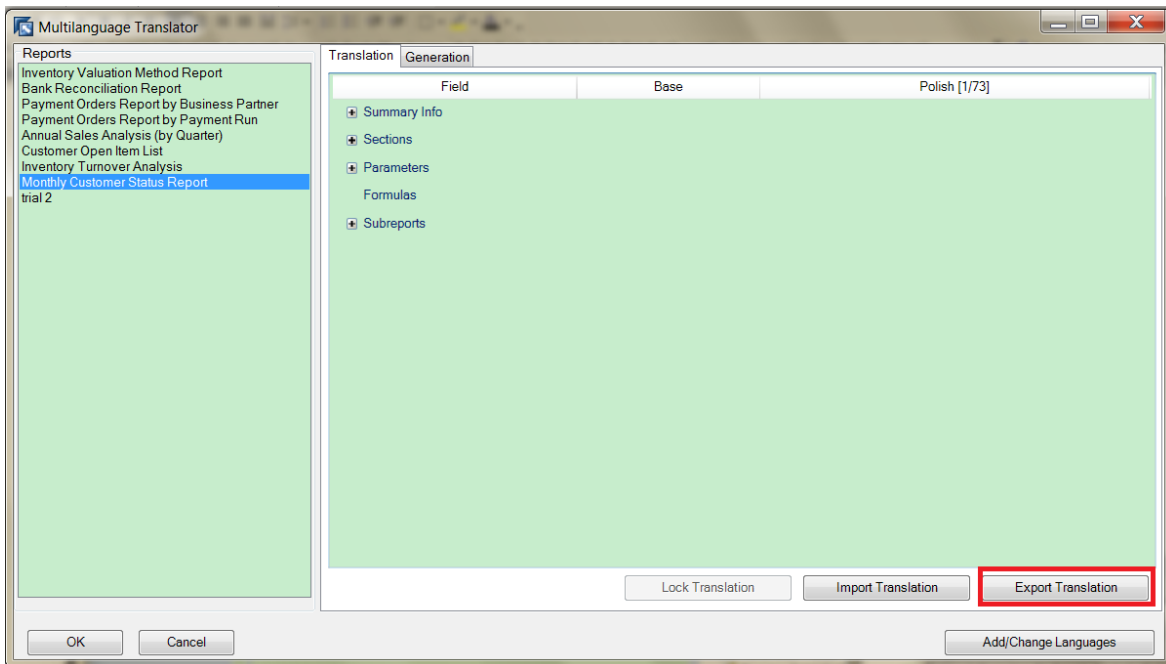
4. In the SAP Crystal Reports window, edit the report.
To save the edited report (.rpt file), choose *File → Save As*.

10.6 Exporting Translations

You can export translations of a multilanguage report and then import the translations into another report whose resource format is the same as the original report.

Procedure

1. In the *Multilanguage Translator* window, on the *Translation* tab, select the report whose translations you want to export.
2. To exclude translations you do not want to export, choose the *Add/Change Languages* button.
3. In the *Add/Change Languages* window, deselect the *Visible* checkbox for corresponding languages. Then choose *Update* and *OK*.
4. Choose the *Export Translation* button.



5. In the *Export Translation* window, specify a name and location for the *.xm1* file of the exported translations and choose the *Save* button.

10.7 Importing Translations

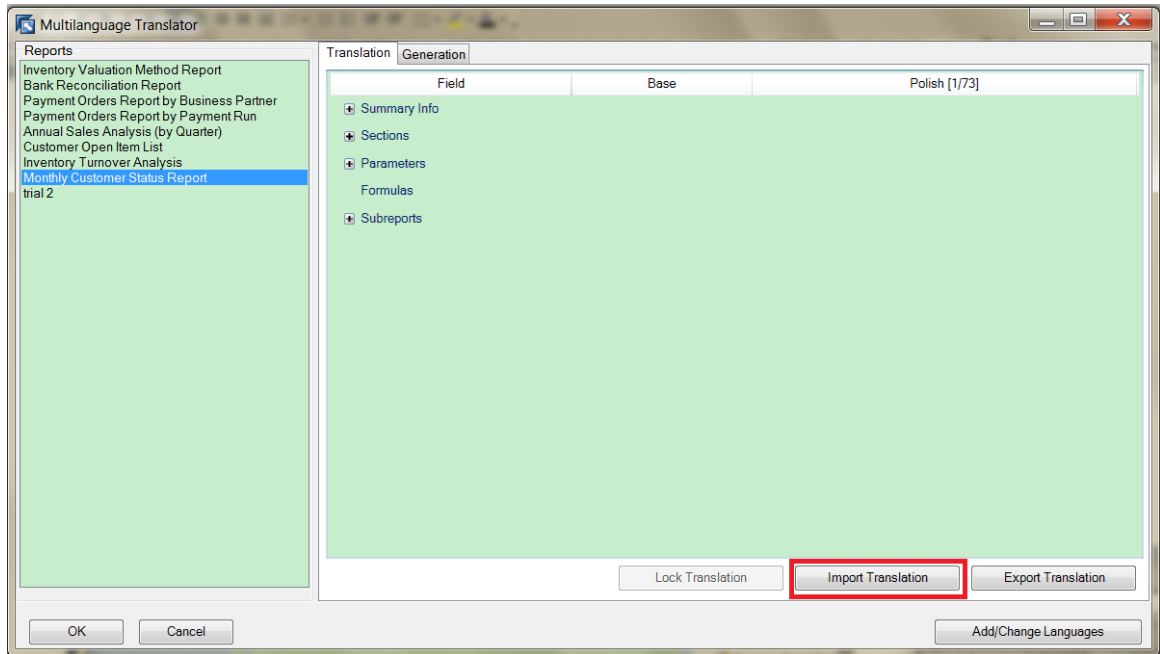
You can import translations of a multilanguage report into the existing report. This is useful, for example, when you want to correct some of the translations in a report that has already been generated, and you do not want to delete the translation and create a new one.

Prerequisite

You can import only *.xm1* translation files. In addition, the files must have the same format as the resource format of the report that you are editing.

Procedure

1. In the *Multilanguage Translator* window, on the *Translation* tab, select the report for which you want to import translations.
2. Choose the *Import Translation* button.



3. In the *Import Translation* window, select the .xmi file containing the translations and choose the *Open* button. Translations are imported. If the translation file contains translations in languages that already exist for the report, you can choose whether or not to replace the existing translations with the imported translations.

Result

After importing a translation file, you must activate the translations in SAP Business One by generating a corresponding multilanguage report. For more information, see *Generating Multilanguage Reports*.

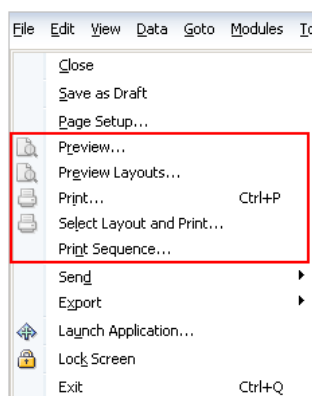
11 Previewing and Printing Reports and Layouts in SAP Business One



In SAP Business One you can preview and print SAP Crystal Reports layouts and reports:

- To preview and print layouts and reports that are saved in SAP Business One, use the *File* menu.
- To preview SAP Crystal Reports .rpt files that are not saved in SAP Business One (external files) but reside on your computer, use the *Tools* menu.

11.1 Previewing and Printing Reports and Layouts Saved in SAP Business One

In the SAP Business One menu bar, in the *File* menu, you can use any of the following preview and printing options:



- *Preview*
Provides a preview window displaying a printing preview of the open document or report based on the default layout. If the document or report has a default SAP Crystal Reports layout, the print preview opens in SAP Crystal Reports viewer. Alternatively, you can click the  icon in the toolbar. For more information about SAP Crystal Reports viewer, see *SAP Crystal Reports Viewer*.
- *Preview Layouts*
Opens the *Choose Layout* window, displaying both SAP Crystal Reports layouts and PLD-type layouts. You can select a layout other than the default layout to view the open document or report. If you select an SAP Crystal Reports layout, the document or report is displayed in SAP Crystal Reports viewer.
- *Print*
Opens the standard Microsoft Windows *Print* window. Alternatively, you can click the  icon in the toolbar to directly print the layout or report according to the default printing settings.
- *Select Layout and Print*

Opens the *Choose Layout* window, displaying both SAP Crystal Reports layouts and PLD-type layouts. You can select any layout to print the open document or report. When you choose the OK button, the standard Microsoft Windows *Print* window opens.

- *Print Sequence*

Opens the *Print Sequence* window. Select a print sequence that you want to apply to an open document, and choose the *Print* button. For more information about printing sequences, see *Working with Printing Sequences*.

i Note

When you choose *File → Print Sequence*, the *Print Sequence* window opens, but there are no items listed if no printing sequence has been created for the specific document type.

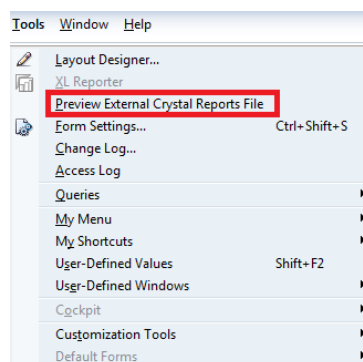
For more information about printing in SAP Business One, see *Printing in SAP Business One* in the online help for SAP Business One.

11.2 Previewing SAP Crystal Reports .rpt Files Saved on Your Computer

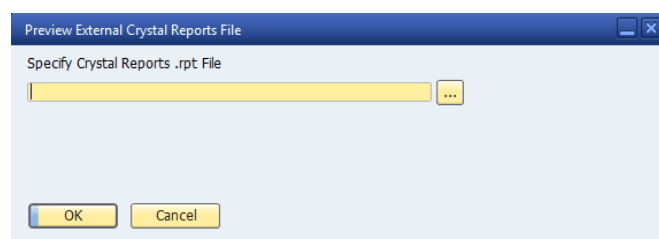
You can preview SAP Crystal Reports .rpt files that are saved on your computer but not saved or imported into SAP Business One as reports or layouts.

Procedure

1. In the SAP Business One menu bar, in the *Tools* menu, select *Preview External SAP Crystal Reports File*.



2. In the *Preview External SAP Crystal Reports File* window, choose the (...) [Browse] button.



-
3. In the *Select SAP Crystal Reports .rpt File* window, specify a file on your computer that you want to preview in SAP Business One.
 4. Choose the *Open* button.
 5. In the *Preview External SAP Crystal Reports File* window, choose the *OK* button.
- The external file appears in SAP Crystal Reports viewer.

 Note

You may need to specify selection criteria as you would when you run a report created with the SAP Crystal Reports software. For more information, see [Running Reports](#).

12 Working with Printing Sequences

You can create printing sequences for certain document types in SAP Business One. You can apply printing sequences to the following:

- Standard SAP Business One layouts (PLD-type)
- Layouts that you have created or edited using Print Layout Designer (PLD)
- SAP Crystal Reports layouts

Prerequisite

Only users who have been designated as superusers in SAP Business One can perform the following actions regarding printing sequences:

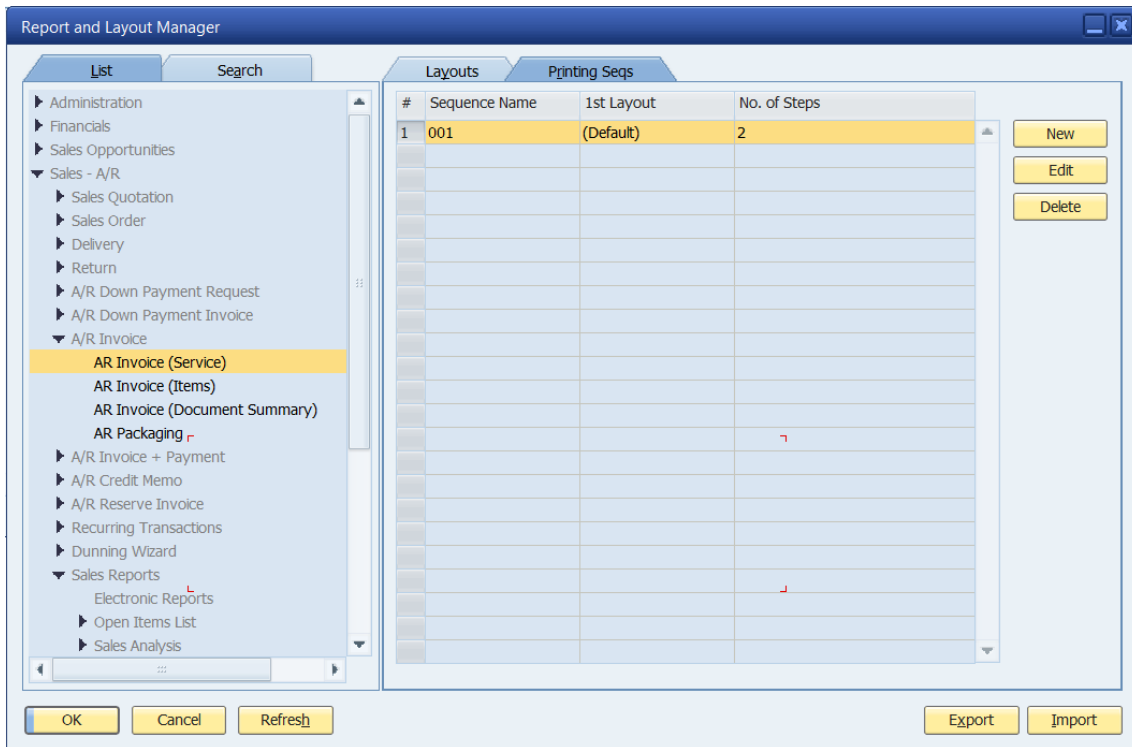
- Create a printing sequence
- Modify a printing sequence
- Delete a printing sequence

12.1 Creating Printing Sequences

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type for which you want to create a new printing sequence, such as *A/R Invoice* (Items).

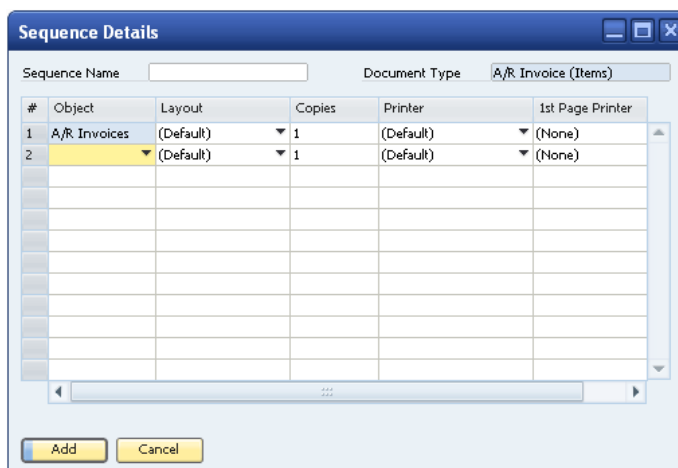
- In the work area on the right side of the window, select the *Printing Seqs* tab.



- On the *Printing Seqs* tab, choose the *New* button. The *Sequence Details* window opens.

Note

The document type for the new sequence is indicated in the *Document Type* field at the top right of the window. You cannot edit this field. If you want to create a printing sequence for a different document type, close the *Sequence Details* window. In the navigation pane on the left of the *Report and Layout Manager* window, select a different document type.



- In the *Sequence Details* window, do the following:

1. In the *Sequence Name* field at the top of the window, enter a name for the printing sequence.
2. In the *Object* column, in the dropdown list, select a category of document types, for example, *A/R Invoices*.
3. In the *Layout* column, select a layout.

 **Note**

You cannot delete a layout that is added to a printing sequence.

4. In the *Copies* column, enter the number of copies that you want to be printed each time this sequence is used.
5. In the *Printer* column, select a printer that you want to use each time this printing sequence is used.
6. In the *1st Page Printer* column, select a printer for printing the first page of the printing sequence.

 **Note**

This field is optional. If you do not select a first-page printer, the printer you select in the *Printer* column prints the entire sequence including the first page.

6. Choose the *Add* button.
The new printing sequence appears in the table on the *Printing Seqs* tab.

12.2 Modifying Printing Sequences

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.
The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type whose printing sequence you want to modify.
3. In the work area on the right side of the window, select the *Printing Seqs* tab.
4. On the *Printing Seqs* tab, select the row of the printing sequence you want to modify and choose the *Edit* button.
The *Sequence Details* window opens.
5. In the *Sequence Details* window, make required changes.
6. Choose the *Update* button, and then choose the *OK* button.

12.3 Deleting Printing Sequences

 **Caution**

Deleting a printing sequence is irreversible.

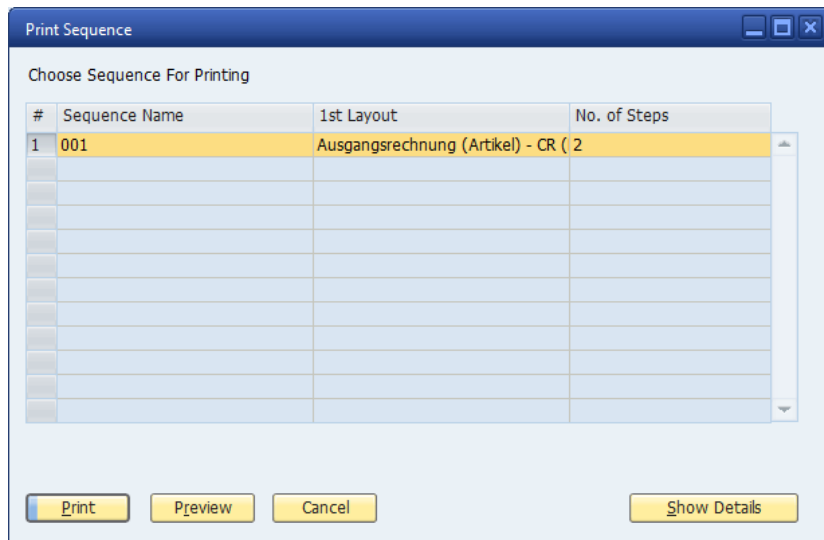
Procedure

1. From the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.
The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type whose printing sequence you want to delete.
3. In the work area on the right side of the window, select the *Printing Seqs* tab.
4. On the *Printing Seqs* tab, select the row of the printing sequence you want to delete and choose the *Delete* button.
The printing sequence is permanently deleted from SAP Business One.

12.4 Previewing and Running Printing Sequences

Procedure


1. Open a document to which a printing sequence has been applied.
2. In the SAP Business One menu bar, choose *File → Print Sequence*.
3. In the *Print Sequence* window, select a sequence and choose the *Preview* or *Print* button.



The document and all documents defined in the printing sequence are previewed or printed in the order of the printing sequence.

12.5 Defining Printing Sequence As Default Printing Option

Procedure

1. Open a document whose default printing option you want to define, for example, the A/R invoice.
2. Select the specific document type whose printing sequence you want to define as its default printing option, for example, the A/R invoice (items).
3. In the SAP Business One tool bar, choose the  (*Layout and Sequence*) button.
4. In the *Layout and Sequence* window, select a printing sequence of the document type and choose the *Set as Default* button.

13 SAP Crystal Reports Viewer

You can view an SAP Crystal Reports layout or report in SAP Business One by using SAP Crystal Reports viewer to run the layout or report. For more information about running layouts and reports created with the SAP Crystal Reports software in SAP Business One, see [Running Layouts](#) and [Running Reports](#).

SAP Crystal Reports viewer is fully integrated in the SAP Business One core product and provides the following functionality for both layouts and reports:

- *Exporting Documents and Reports*
- *Navigating to Different Pages*
- *Searching for Text*
- *Changing the Zoom Factor*

You can perform the following functions on reports only:

- *Modifying Parameters in SAP Crystal Reports Viewer*
- *Displaying the Group Tree*

Note

When an SAP Business One language is not supported in SAP Crystal Reports viewer, English is displayed. The following languages are supported in SAP Crystal Reports viewer:

- Chinese-Simplified
- Chinese-Traditional
- German
- Dutch
- English
- Spanish
- French
- Italian
- Japanese
- Korean
- Brazilian Portuguese
- Swedish


13.1 Exporting Documents and Reports

You can export a document or report via SAP Crystal Reports viewer to your computer as any of the following file types:

- SAP Crystal Reports (.rpt)
- PDF (.pdf)


- Microsoft Excel [97-2003] (.xls)
- Microsoft Excel [97-2003] Data-Only (.xls)
- Microsoft Word [97-2003] (.doc)
- Microsoft Word [97-2003] - Editable (.rtf)
- Rich Text Format (RTF) (.rtf)
- XML (.xml)

To export a document or report, proceed as follows:

1. In SAP Crystal Reports viewer, in the toolbar, click the *Export Report*  icon.
2. In the *Export Report* window, navigate to the folder on your computer where you want to save the file.
3. In the File name field, enter a name for the file you are exporting.
4. In the *Save as type* dropdown list, select a file type.
5. Choose the *Save* button.

13.2 Modifying Parameters in SAP Crystal Reports Viewer

In the SAP Crystal Reports viewer *Parameter* panel, you can directly modify the parameters of a report to create different report results.

Make sure the *Parameter* panel is displayed. To display or hide the *Parameter* panel, in the toolbar, click the *Toggle Parameter Panel*  icon.


Note

You cannot modify the parameters of every report type in the SAP Crystal Reports viewer. Some report types may not have different parameters available for different views. In these cases, you need to rerun the report and make selections in the selection criteria window.

The report parameters in the list of parameter values in the *Parameter* panel may include the following types:

- Dropdown list: Select an option.
- Field: Enter a valid value.


To change parameter values, do one of the following:

- To work with the values in the list in the *Parameter* panel:
 1. For each parameter you want to modify, select an option or enter a valid value.
 2. At the top of the *Parameter* panel, choose the *Apply* button .

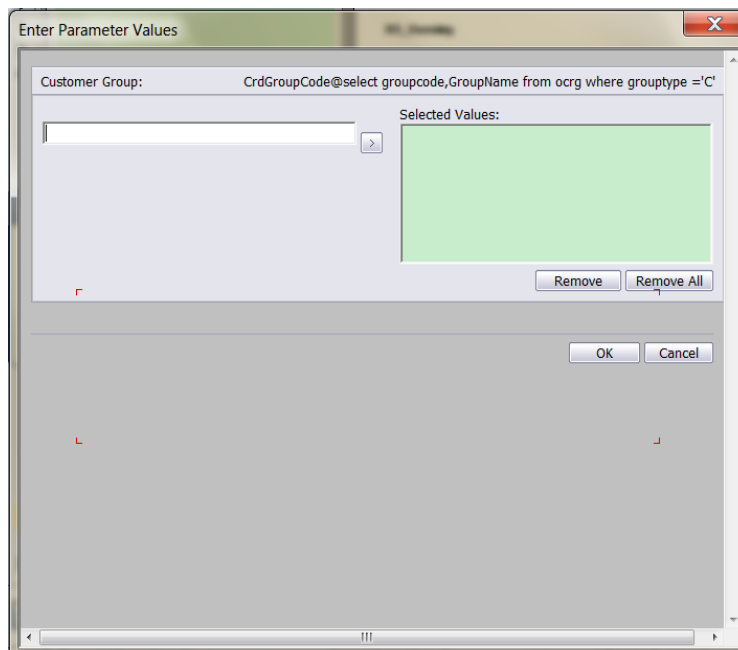
The new report results appear in the work area on the right.


Note

If a parameter is not defined as mandatory, you can delete it in the *Parameter* panel by selecting it and then choosing the *Delete* button at the top of the *Parameter* panel.

- To work with values in a more advanced manner, do the following for each parameter in the list in the *Parameter* panel:
 1. In the *Parameter* panel, click the field or dropdown list of a parameter.
A button  appears to the right of the field or dropdown list.
 2. Click the button.


The *Enter Parameter Values* window appears.



3. Do one of the following:
 - o If parameter values appear in a dropdown list, select a value.
 - o If a parameter field appears, enter a valid value.
4. Choose the *OK* button.
5. At the top of the *Parameter* panel, click the *Apply* button .

13.3 Displaying the Group Tree




To show or hide the *Group Tree* panel (for reports only), proceed as follows:

1. In the toolbar, click the *Toggle Group Tree*  icon.
2. In the Group Tree panel, select a group.

A red box appears in the report to highlight relevant data.

13.4 Navigating to Different Pages


To navigate to different pages of a document or report, do one of the following:

- In the toolbar, click any of the following icons:
 - o  (*Go to First Page*)
 - o  (*Go to Previous Page*)
 - o  (*Go to Next Page*)

-  (Go to Last Page)
- In the toolbar, in the page number field , /2 enter a page number.


13.5 Searching for Text

To search for text in the document or report, proceed as follows:

1. In the toolbar, click the *Find Text*  icon.
2. In the *Find Text* window, in the *Find what* field, enter the text you want to find.
3. Choose the *Find Next* button. To find multiple instances of the text, choose the *Find Next* button as many times as you require.

13.6 Changing the Zoom Factor

To change the zoom factor of a report, proceed as follows:

1. In the toolbar, click the *Zoom*  icon.
2. In the list, select an option.

To define a zoom factor that does not appear in the list, proceed as follows:...

1. In the *Zoom* list, select *Customize*.
The *Zooming* window appears.
2. In the field, enter a value from 25 to 400.
3. Choose the *OK* button.

14 Report and Layout Manager Window

To open the *Report and Layout Manager* window, from the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

You use *Report and Layout Manager* window to perform the following functions:

- View and change the details of:
 - Reports and layouts created with the SAP Crystal Reports, version for SAP Business One
 - Standard SAP Business One layouts (PLD type) that have been customized
- Access the export wizard for exporting SAP Crystal Reports layouts and reports
- Access the import wizard for importing SAP Crystal Reports layouts and reports
- Access the SAP Crystal Reports software to edit or create SAP Crystal Reports layouts and reports
- Set authorizations for reports created with the SAP Crystal Reports software
- Set data sources for SAP Crystal Reports layouts and reports
- Run reports created with the SAP Crystal Reports software
- Work with printing sequences for certain document types

Prerequisite

- For the following actions, you have to be designated as a superuser in SAP Business One:
 - Exporting, importing, and deleting SAP Crystal Reports layouts and reports
 - Setting authorizations for reports created with the SAP Crystal Reports software
 - Setting data sources for SAP Crystal Reports layouts and reports



Note

The *Import*, *Export*, *Advanced* (for setting data sources), *Set Authorization*, and *Delete* buttons are inactive for users who are not superusers.

14.1 Opening Screen

The table below provides descriptions of the user-interface elements on the opening screen of the *Report and Layout Manager* window.

UI Element	Description
List tab	Displays a list of reports and document types in various SAP Business One modules. The reports include all standard SAP Business One reports and reports created with SAP Crystal Reports. Reports created with the SAP Crystal Reports software that have not been assigned to specific folders are listed under <i>Lost Reports</i> . For more information, see <i>Lost Reports Folder</i> .

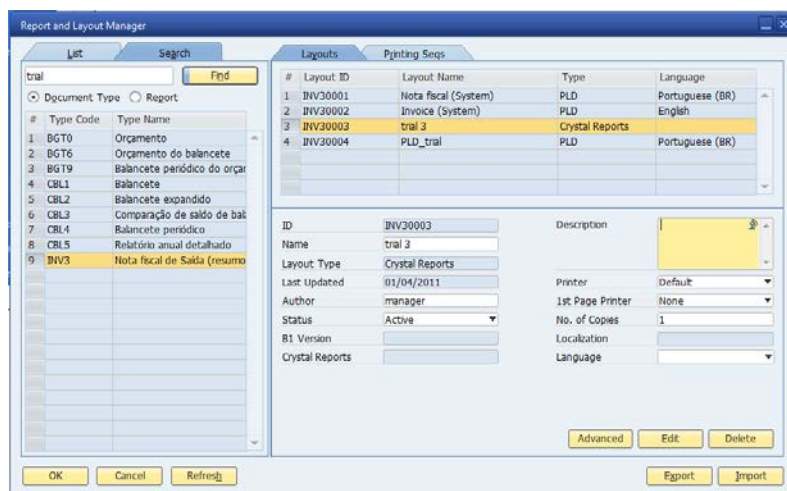
UI Element	Description
	<p>By choosing each document type, all layouts (PLD type and SAP Crystal Reports layouts) assigned to it are displayed.</p> <p>Add-on layouts created with the SAP Crystal Reports software are listed under Add-On Layouts. For more information, see Add-On Layouts Folder.</p>
Search tab	<p>Allows key word searching for reports and layouts.</p> <p>To search for layouts, select the Document Type radio button. For more information, see Searching for Layouts.</p> <p>To search for reports, select the Report radio button. For more information, see Searching for Reports.</p>
Refresh button	<p>Refreshes the list of reports and document types displayed on the List tab</p>
Export button	<p>Exports reports and layouts created with the SAP Crystal Reports software. For more information, see Exporting Reports and Layouts Created with the SAP Crystal Reports Software.</p> <p> Note</p> <p>This button is active only superusers.</p>
Import button	<p>Imports reports and layouts created with the SAP Crystal Reports software. For more information, see Importing Reports and Layouts Created with the SAP Crystal Reports Software.</p> <p> Note</p> <p>This button is active only for superusers.</p>

14.2 Layout and Printing Sequence Details

To view the details of a certain layout or printing sequence, locate and select the document type to which the layout or printing sequence is applied (see below).


14.2.1 Layouts Tab

After you have located and selected the document type, the *Layouts* tab appears in the work area on the right.



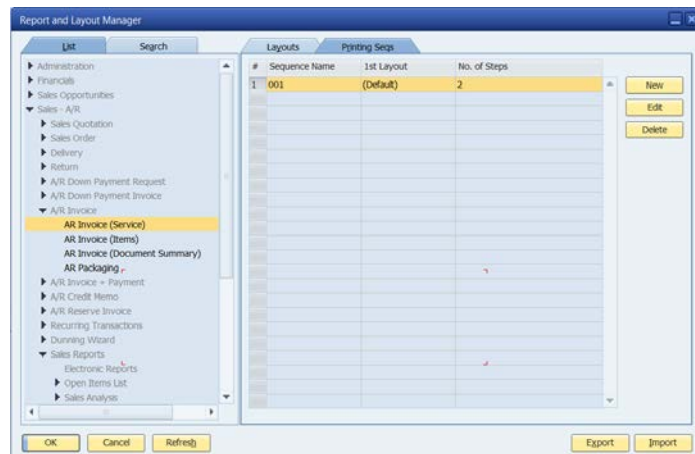
The following table provides descriptions of the UI elements on the Layouts tab shown above.

UI Element	Description
<i>Layout ID</i>	ID code of the layout. The naming convention is " <code><document_type_abbreviation><sequence_number></code> ".
<i>Layout Name</i>	Name of the layout
<i>Type</i>	Type of the layout
<i>Language</i>	Assigned language
<i>ID</i>	Same ID code as shown in the <i>Layout ID</i> column above
<i>Name</i>	Layout name as shown in the <i>Layout Name</i> column above
<i>Layout Type</i>	Layout type as shown in the <i>Type</i> column above
<i>Last Updated</i>	Date when the layout was last updated
<i>Author</i>	Name of the author who created the layout. If the author name is <code>system</code> , the layout is a system layout and cannot be changed. A system layout may be PLD type or SAP Crystal Reports type.
<i>Status</i>	Displays <i>Active</i> or <i>Inactive</i> . For system layouts, you cannot change the status.
<i>B1 Version</i>	SAP Business One release number

UI Element	Description
<i>SAP Crystal Reports</i>	SAP Crystal Reports release number
<i>Description</i>	Layout description
<i>Printer</i>	Printer assigned to the layout
<i>1st Page Printer</i>	Printer for the first page of the layout
<i>No. of Copies</i>	Default number of copies of the layout to be printed
<i>Localization</i>	Localization assigned to the layout
<i>Language</i>	Assigned language as shown in the <i>Language</i> column above. You can change the language for non-system layouts.
<i>Use Foreign Currency radio button</i>	Indicates whether to apply foreign currency. This setting is available only for PLD-type layouts.
<i>Advanced button</i>	Choose this button to set data sources of the layout. For more information, see <i>Setting Data Sources for SAP Crystal Reports Layouts and Reports</i> .
<i>Edit button</i>	Choose this button to change the layout details. If the layout is SAP Crystal Reports type, the SAP Crystal Reports software opens. If the layout is PLD-type, Print Layout Designer (PLD) opens.
<i>Delete button</i>	Choose this button to delete a layout that is not a system layout. <div style="text-align: center;">  Note This button is active only for superusers. </div>

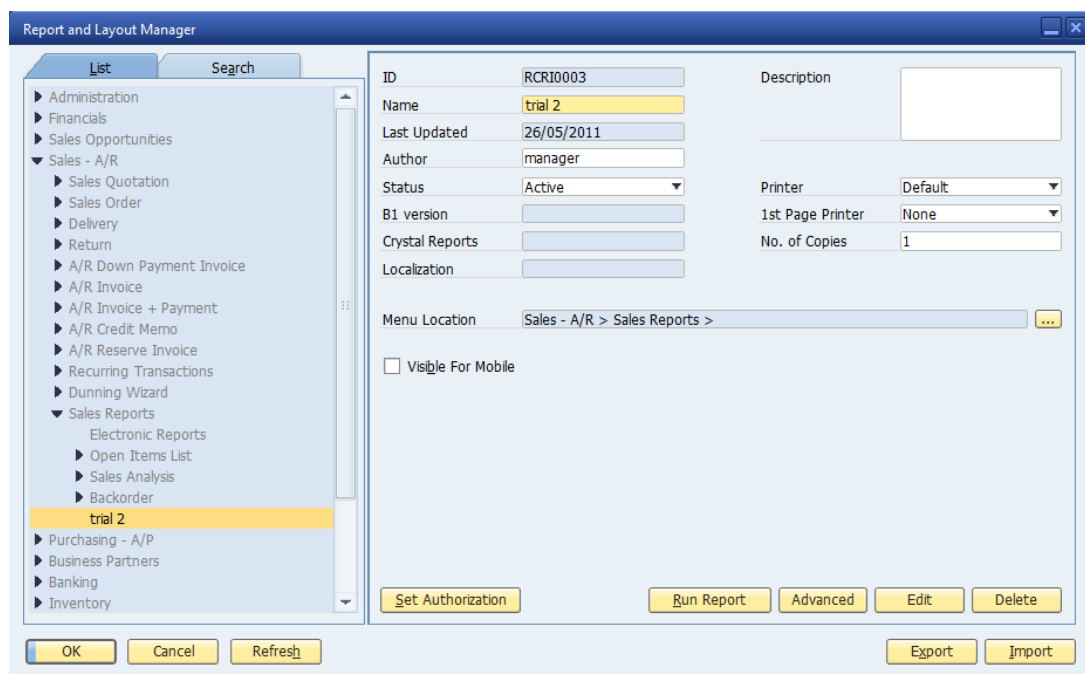
14.2.2 Printing Seqs Tab

In the work area on the right, select the *Printing Seqs* tab. For detailed information about creating, modifying, and deleting printing sequences for layouts, see *Working with Printing Sequences*.



14.3 Report Details

To view the details of a specific report, on the *List* tab, navigate to and select the report.



For a non-system report, you can change the information in the following fields:

- *Name*
- *Author*
- *Status*
- *Printer*
- *1st Page Printer*
- *No. of Copies*
- *Menu Location*

To make a report created with the SAP Crystal Reports software visible within the mobile application for SAP Business One, select the *Visible For Mobile* checkbox.

14.4 Lost Reports Folder

The *Lost Reports* folder appears in the *Report and Layout Manager* window, on the *List* tab, at the bottom of the report and layout list. This folder contains reports created with the SAP Crystal Reports software that have not been assigned to a folder.

When you have saved an `.rpt` file as a report into SAP Business One, the report appears in the *Lost Reports* folder. You can assign the report to a folder that can be displayed in the SAP Business One *Main Menu*. In addition, you can create a new report folder and assign it to the new folder. For more information, see *Creating New Report Folders*.

14.5 Add-On Layouts Folder

The Add-On Layouts folder appears in the *Report and Layout Manager* window, on the *List* tab, at the bottom of the report and layout list. This folder contains the layouts for SAP Business One add-ons. Each add-on layout is located in both the *Add-On Layouts* folder and the folder of the SAP Business One module.

For example, the SAP Crystal Reports layout for the fixed assets history sheet is located in the following folders:

- *Add-On Layouts* → *Fixed Assets*
- *Financials* → *Fixed Assets* → *Asset History Sheet*

Appendix: Document Types and Source Tables

The following table lists all document types and corresponding source tables available in SAP Business One.

Document Type Code	Table Name	Document Type
1	ACT	Accounts
2	CRD	Cards
3	DSC	Discount codes
4	ITM	Items
5	VTG	VAT groups
6	PLN	Price list names
7	SPP	Special prices
8	ITG	Item groups
9	RTM	Rates matching
10	CRG	Card payment groups
11	CPR	Contact persons
12	USR	Users
13	INV	Invoices
14	RIN	Revert invoices
15	DLN	Delivery notes
16	RDN	Revert delivery notes
17	RDR	Orders
18	PCH	Purchases
19	RPC	Revert purchases
20	PDN	Purchase delivery notes
21	RPD	Revert purchase delivery notes
22	POR	Purchase orders
23	QUT	Quotations
24	RCT	Receipts
25	DPS	Deposits
26	MTH	Match history

Document Type Code	Table Name	Document Type
27	CHH	Checks history
28	BTF	Journal batches
29	BTD	Journal batches directory
30	JDT	Journal transactions
31	ITW	Item – warehouse accumulators
32	ADP	Printing administration
33	CLG	Contact log
34	RCR	Recurring transactions
35	NNM	Object's next serial number
36	CRC	Credit cards
37	CRN	Currency codes
38	IDX	Index (Madad)
39	ADM	Administration
40	CTG	Credit terms
41	PRF	Form preferences
42	BNK	Bank pages
43	MRC	Firm groups (Marca)
44	CQG	Card query groups
45	TRC	Transaction codes
46	VPM	Payment to vendor
47	SRL	Serial numbers
48	ALC	Import expenses
49	SHP	Shipment types
50	LGT	Length units
51	WGT	Weight units
52	ITB	Item groups
53	SLP	Sales person
54	FLT	Reports filter
55	TRT	Transaction types
56	ARG	Arancel (custom) groups
57	CHO	Checks paid to vendors (outgoing checks)

Document Type Code	Table Name	Document Type
58	INM	Inventory match
59	IGN	Inventory general entry
60	IGE	Inventory general exit
61	PRC	Profit center
62	OCR	Overhead cost rate
63	PRJ	Project
64	WHS	Warehouses codes and names
65	COG	Commission groups
66	ITT	Item tree links
67	WTR	Warehouses transfers
68	WKO	Work orders
69	IPF	Import file
70	CRP	Credit pay systems
71	CDT	Credit due terms
72	CRH	Credit history
73	SCN	Substitutional catalog number
74	CRV	Credit payments
75	RTT	Index and currency rates
76	DPT	Deposit temporary
77	BGT	Budget
78	BGD	Budget STR system
79	RCN	Retailer chains
80	ALT	Alert templates
81	ALR	Alerts pool
82	AIB	Alerts inbox
83	AOB	Alerts outbox
84	CLS	Contact log subjects
85	SPG	Special prices for groups
86	SPRG	Run externals applications
87	MLS	Mailing lists
88	ENT	Panama – enterada

Document Type Code	Table Name	Document Type
89	SAL	Panama – salida
90	TRA	Panama – traspaso
91	BGS	Budget scenario
92	IRT	Interest rates
93	UDG	User defaults groups
94	SRI	Items serial numbers
95	FRT	Finance reports template
96	FRC	Finance reports categories
97	OPR	Sales opportunities
98	OIN	Interest
99	OIR	Interest level
100	OSR	Information source
101	OST	Sales stage
102	OFR	Defect cause
103	CLT	Contact log types
104	CLO	Contact log locations
105	ISR	Internet service request
106	IBT	Item batch numbers
107	ALI	Alternative items
108	PRT	Partners
109	CMT	Competitors
110	UVV	User valid values
111	FPR	Finance period
112	DRF	Document draft
113	SRD	Internal manage of SRI and IBT
114	UDC	User display categories
115	PVL	Pelec card vendors list
116	DDT	Deduction at source – terraces
117	DDG	Deduction at source – groups
118	UBR	Users – branch
119	UDP	Users – departments

Document Type Code	Table Name	Document Type
120	WST	Workflow steps
121	WTM	Workflow templates
122	WDD	Workflow documents
123	CHD	Check out drafts
124	CINF	Company info
125	EXD	Expenses definition
126	STA	Sales tax authorities
127	STT	Sales tax authorities type
128	STC	Sales tax code
129	CRY	Countries
130	CST	States
131	ADF	Address format
132	CIN	Correction invoice
133	CDC	Cash discount
134	QCN	User query category names
135	IND	VAT indicator EC
136	DMW	Data migrate wizard packages
137	CSTN	Station ID
138	IDC	Indicator
139	GSP	Goods shipment
140	PDF	Payment draft
141	QWZ	Query wizard
142	ASG	Account segmentation
143	ASC	Account segmentation categories
144	LCT	Location
145	TNN	1099
146	CYC	Cycle
147	PYM	Payment method
148	TOB	1099 beginning balances
149	RIT	Dunning interest rate
150	BPP	BP priorities

Document Type Code	Table Name	Document Type
151	DUN	Dunning letter
152	UFD	User fields – description
153	UTB	User tables
154	CUMI	User menu
155	PYD	Payment run
156	PKL	Pick list
157	PWZ	Payment wizard
158	PEX	Payment results table
159	PYB	Payment block
160	UQR	Queries
161	CBI	Central bank indicator

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