SAFR - Scalable Architecture for Financial Reporting
PDF from SAFR Information Center 4.15.00

Screen help topics SAFR Workbench 4.15.000

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Note

Before using this information and the product it supports, read the information in "Appendix: Notices" on page 301.

Fourth Edition

This edition applies to version 4, release 15, modification 000 of SAFR Workbench (part of SAFR product number 6949-17P) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. Screens

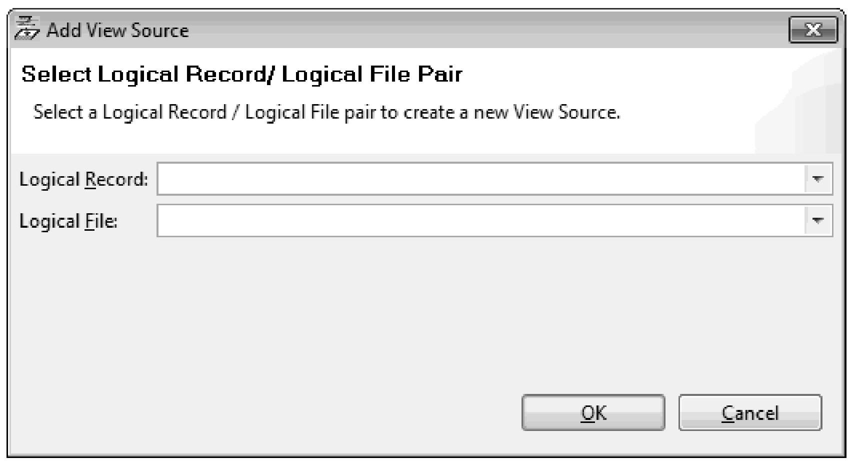
Add View Source screen help

01 Summary of this topic

The sections in this topic are as follows:

- "02 Screen function and rights"
- "05 Errors"
- "10 Action on this screen"
- "50 Fields" on page 2
- "99 Keyboard Shortcuts" on page 2

02 Screen function and rights



Use the Add View Source screen to specify a source logical record and logical file for a view.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Add View Source errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

1. **Click in the field Logical Record** and select from the drop down list. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
2. **Click in the field Logical File** and select from the drop down list. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

3. Repeat the above two actions until the required combination meets your requirements.
4. Click **OK** to save. If the logical record and logical file are not set or the combination is not allowed, an error message displays and you can change the values or cancel.

Once you have clicked OK, a light blue cell appears under **View Sources** in the View Editor.

50 Fields

Field	Definition
Logical Record	Select one from the list of logical records defined for this environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Logical File	Select one from the list of logical files that match the logical record given above. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

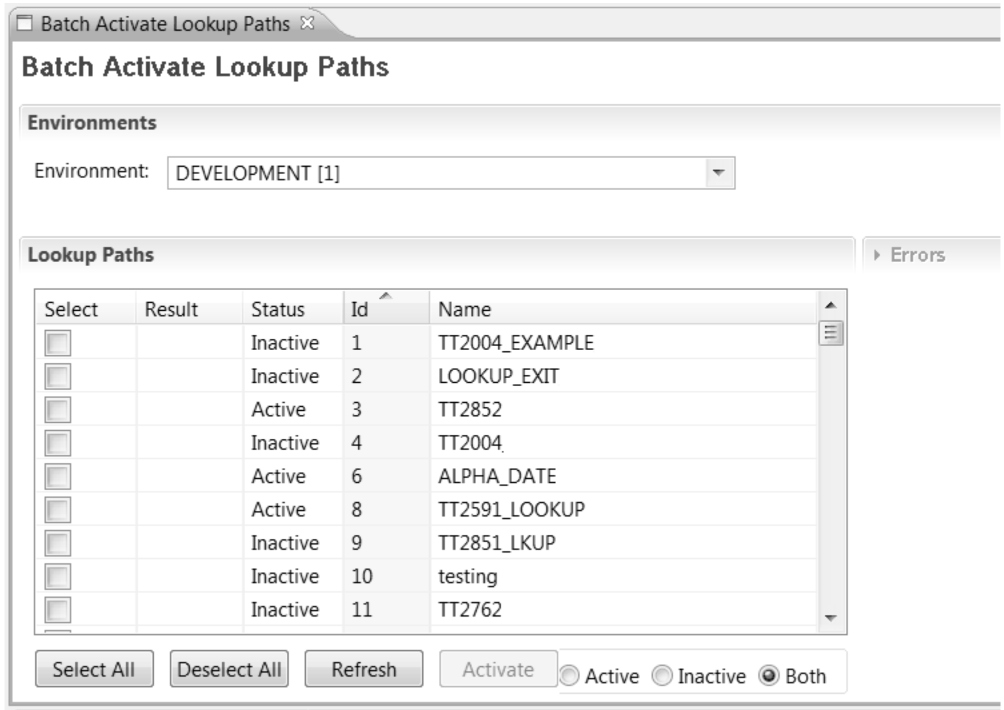
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Batch Activate Lookup Paths screen help

01 Summary of this topic

The sections below are as follows:

02 Screen function and rights



Use the Batch Activate Lookup Paths screen to activate a group of lookup paths or to find out why individual lookup paths are not active.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Migrate In** run permission in the environment for the relevant lookup paths. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Batch Activate Lookup Paths errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

1. **Select an environment** from the drop down box. System administrators see a list of all environments. Environment administrators see a list of environments where the group selected during login provides administrator access to those environments. General users can see a list of environments where the **group selected during login** has the **Migrate In** run permission for that environment. After a wait, data appears in the **Lookup Paths** section.
2. Refine the list by a choosing a button at bottom right for **Active, Inactive or Both**.
3. Sort this list by any of the following options:
   - Click "**Name**" in the heading to sort the lookup paths into reverse name order. Click repeatedly to switch between ascending and descending sort order.

- Click "**Id**" in the heading to sort the lookup paths into ID number order. Click repeatedly to switch between ascending and descending sort order.
- The same behavior works for columns "**Select**", "**Result**" and "**Status**" if required.

4. If the list is long, you can search the list - see section "**Searching in Lookup Paths**" below.
5. Optionally, **right** click any value already in the field "**Environment**" and select "**Open Editor**". This opens the "**Edit Environment**" screen.

   Optionally, **right** click any value already in the column "**Name**" under "**Lookup Paths**" and select "**Open Editor**". This opens the "**Edit Lookup Path**" screen.
6. **Select lookup paths to activate** by any of the following methods:
   - **Tick (or untick)** individual lookup paths in the Select column.

     To select a large number of lookup paths in sequence, select the first lookup path and then **hold the Shift key down and select the last lookup path**. All other lookup paths will be deselected when this occurs, so this should be the first action for a complex group of selections.
   - Click **Select All** or **Deselect All** as required.
7. At any time during these steps, click the **Refresh** button to reload the data shown in the **Lookup Paths** section. The data can change during your time on this screen, and the **Refresh** button ensures the data displayed is current once more. The Refresh button will remove any ticks present and also remove any results and error messages.
8. When the appropriate lookup paths are ticked, click **Activate** to start the batch activation.
9. The column **Result** displays **Pass** or **Fail** or **Load Error**.
   - **Pass** - means the lookup path is **active** and ready for use.
   - **Fail** - means the lookup path is inactive. Click on the word **Fail** to highlight that row. The Errors section displays the problems with that lookup path.
   - **Load Error** - means one or more logical records are inactive. These logical records must be status active for the lookup path to be active. Click on the word **Load Error** to highlight that row. The Errors section displays the inactive logical records causing the problem.

   For errors or messages on this screen, see topic "**Batch Activate Lookup Paths errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
10. Fix any problems with the relevant lookup paths or logical records by using tasks:
    - "**Modify lookup paths**"
    - "**Modify logical records**"

    To find these task topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

    If you use screens in the workbench to fix errors any items that affect lookup paths, return to the Batch Activate Lookup Paths screen to retry the activate again.
11. At any time, you may return to step 1 to try again with the same or different lookup paths.

20 Searching in Lookup Paths

If there is a long list of Lookup Paths, then the list can be searched as follows:

1. Click inside the list under "**Lookup Paths**".
2. Press the **F3 key**. Alternatively, click on the **search icon**  in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the Lookup Path name.
5. Click OK to start the search.

If the Lookup Path is found, then you are returned to the list with that Lookup Path highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Environments section

Field	**Definition**
Name	The name of the environment selected. (Display only.) Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

60 Fields - Lookup Paths section

Field	**Definition**
Select	Tick this box to select this Lookup Path.
Result	The result of clicking **Activate**. Values are "**Pass**", "**Fail**", or "**Load Error**". (Display only.)
Status	The status of that Lookup Path. (Display only.)
ID	The ID of the Lookup Path. Click on the column heading "**ID**" to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of the Lookup Path. Click on the column heading "**Name**" to sort the list by Name. Click repeatedly to switch between ascending and descending sort order. (Display only.)

70 Fields - Errors section

Field **Definition**

Field	Definition
Errors	Any errors associated with the **Lookup Path highlighted** in the Lookup Path section. Errors depend on the **result** for the highlighted Lookup Path: • For **Fail result** this field displays the **reasons** this Lookup Path is inactive. • For **Load Error result** this field displays the **logical records that are inactive**, where these logical records are necessary for the Lookup Path. (Display only.) For errors or messages on this screen, see topic "**Batch Activate Lookup Paths errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

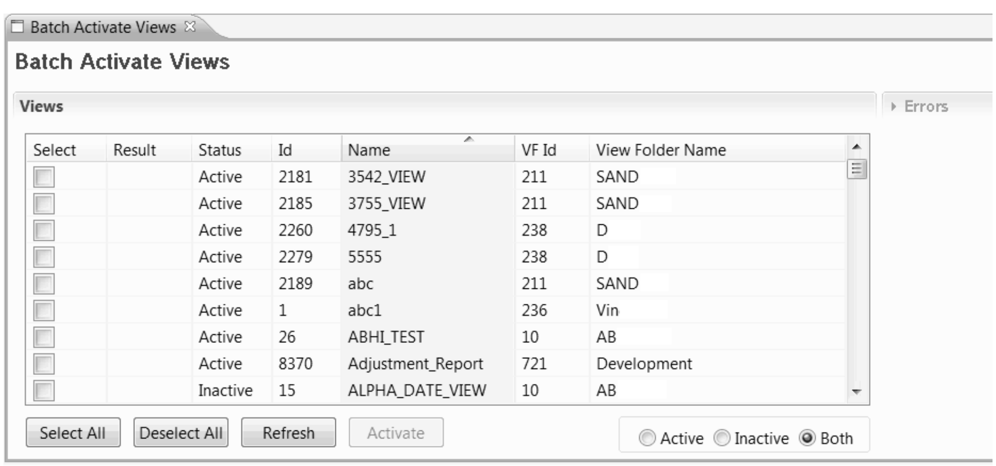
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Batch Activate Views screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use the Batch Activate Views screen to activate a group of views or to find out why individual views are not active.

System and environment administrators can always use this screen. There are two ways a general user can use this screen:

- The **group selected during login** has the **Migrate In** run permission in the environment for the relevant views. In this case the general user can run this utility for any view in the environment.
- The **group selected during login** has at least **modify rights to one or more view folders** in the environment. In this case the general user can run this utility for those views where the user has modify rights to the view folder.

See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Batch Activate Views errors**" and "**View Activation Errors message help**". To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

1. When you first enter this screen, the list displays **all views in the current environment where you have rights to activate those views**.

   For more on rights, see above.
2. Refine the list by a choosing a button at bottom right for **Active, Inactive or Both**.
3. Sort this list by any of the following options:
   - Click "**Name**" in the heading to sort the views into reverse name order. Click repeatedly to switch between ascending and descending sort order.
   - Click "**Id**" in the heading to sort the views into ID number order. Click repeatedly to switch between ascending and descending sort order.
   - Click "**VF Id**" in the heading to sort the views into view folder ID number order. Click repeatedly to switch between ascending and descending sort order.
   - Click "**View Folder Name**" in the heading to sort the views into reverse View Folder Name order. Click repeatedly to switch between ascending and descending sort order.
   - The same behavior works for columns "**Select**", "**Result**" and "**Status**" if required.
4. If the list is long, you can search the list - see section "**Searching in Views**" below.
5. Optionally, **right** click any value already in the column "**Name**" and select "**Open Editor**". This opens the "**Edit View**" screen.

   Optionally, **right** click any value already in the column "**View Folder Name**" and select "**Open Editor**". This opens the "**Edit View Folder**" screen.
6. **Select views to activate** by any of the following methods:
   - **Tick (or untick)** individual views in the Select column.

     To select a large number of views in sequence, select the first view and then **hold the Shift key down and select the last view**. All other views will be deselected when this occurs, so this should be the first action for a complex group of selections.

- Click **Select All** or **Deselect All** as required.

7. At any time during these steps, click the **Refresh** button to reload the data shown in the**Views** section. The data can change during your time on this screen, and the **Refresh** button ensures the data displayed is current once more. The Refresh button will remove any ticks present and also remove any results and error messages.
8. When the appropriate views are ticked, click **Activate** to start the batch activation.
9. The column **Result** displays **Pass** or **Fail** or **Load Error**.
   - "**Pass**" means the view is now status **active** and ready for use.
   - "**Fail**" means the view has an error. Click on "Fail" for that row and the **View Activation Errors** section displays the errors in that view.
   - "**Load error**" means a logical record or lookup path used in the view is inactive. All logical records and lookup paths used in a view must be status active for the view to be active. Click on "Load error" for that row and the **Errors** section displays which items are inactive in that view.

   For errors or messages on this screen, see topic "**Batch Activate Views errors**" or "**View Activation Errors message help**". To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".
10. Fix any problems with logical records, lookup paths or views by using tasks:
    - "**Modify logical records**"
    - "**Modify lookup paths**"
    - "**Modify views**"

    To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

    If you use screens in the workbench to fix errors any items that affect views, return to the Batch Activate Views screen to retry the activate again.
11. At any time, you may press Refresh and return to step 2 to try again with the same or different views.

20 Searching in Views

If there is a long list of views, then the list can be searched as follows:

1. Click inside the list under "**Views**".
2. Press the **F3 key**. Alternatively, click on the **search icon**  in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the view name.
5. Click OK to start the search.

If the view is found, then you are returned to the list with that view highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Views section

Field	Definition
Select	Tick this box to select this view.
Result	The result of clicking **Activate**. Values are **Pass**, **Fail**, or **Load Error**. Click on the column heading **Result** to sort the list by Result. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Status	The status of that view. Click on the column heading **Status** to sort the list by Status. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Id	The ID of the view. Click on the column heading **ID** to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of the view. Click on the column heading **Name** to sort the list by Name. Click repeatedly to switch between ascending and descending sort order. (Display only.)
VF Id	The ID of the view folder that contains this view. Click on the column heading **VF ID** to sort the list by view folder ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
View Folder Name	The name of the view folder that contains this view. Click on the column heading **View Folder Name** to sort the list by view folder name. Click repeatedly to switch between ascending and descending sort order. (Display only.)

60 Fields - Errors section

Field	Definition
Errors	Any errors associated with the **view highlighted**. Errors depend on the **result** for the highlighted view: • For **Fail result** this field displays the **reasons** this view is inactive. • For **Load Error result** this field displays the **logical records that are inactive**, where these logical records are necessary for the view. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

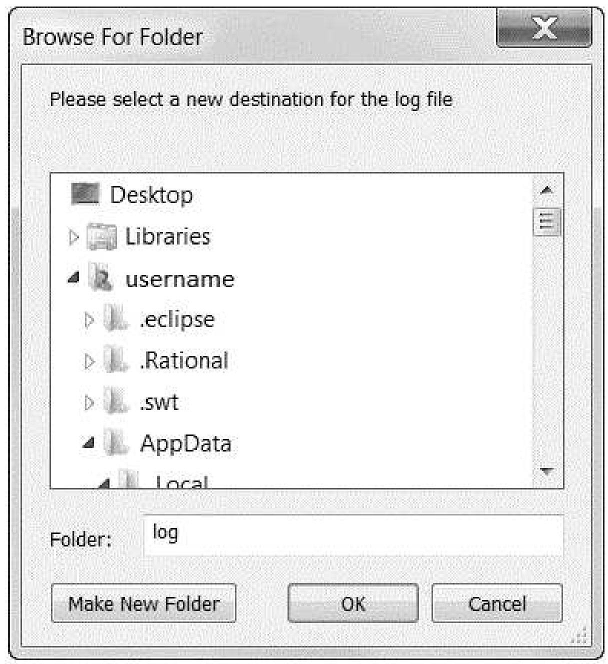
Change Log Path screen help

01 Summary of this topic

The sections in this topic are as follows:

- “05 Errors”
- “10 Action on this screen”
- “99 Keyboard Shortcuts” on page 11

02 Screen function and rights



Use this screen to specify a path to the WE log file. This new path applies only to your current User ID to WE.

For an introduction to the WE log file, see topic "**WE log file overview**"

To find that overview in a PDF, see chapter "**Cross reference of topics and PDF files**".

This screen is available to all users of the workbench.

05 Errors

There are no workbench errors displayed on this screen.

10 Action on this screen

When this screen displays for the first time, the screen shows the existing log file path. This screen is similar to Windows Explorer, and navigation on this screen works the same way. If viewing the existing log path is sufficient, then press Cancel.

To change the log file path, use one of the following methods:

- **EITHER** navigate to an existing folder. The right click options of Windows Explorer are available. Scroll down to access **Computer** and **Network** to select a drive letter on this computer or a remote computer.

- **OR** in the Folder field type the full path to an existing folder. For example, type "**C:\Log**" (without the quotes). If the folder specified in this field does not exist, then this field is ignored and clicking OK results in no change to the log file path. If the folder specified does exist, then that folder becomes the new log file path after clicking OK.
- **OR** navigate to an existing folder and click the **Make New Folder** button to create a new sub-folder under the current folder. Type the name of the new sub-folder and press enter. This can be repeated to create further sub-folders.

When the new path is highlighted, click OK to save. When the log file path changes, the existing log is transferred to the new path and no log file data is lost for that session. Log files for completed sessions are untouched by this process.

This screen was called from the task topic "**Changing Log Path**".

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

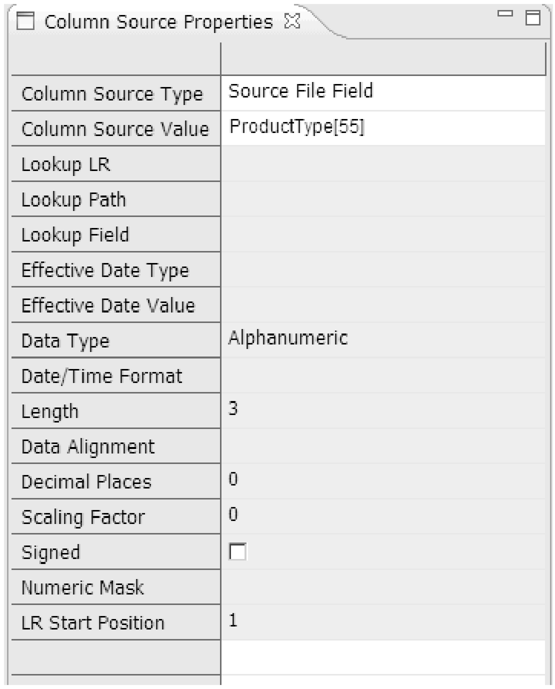
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Column Source Properties screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use the Column Source Properties screen to specify the type of column and the source of the value.

This screen in available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Column Source Properties errors**". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

10 Action on this screen

Most of the rows in this screen are display only. There are a small number of fields that you can change, depending on the **Column Source Type** field.

Change any values required, and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

To change values on this screen start with a double click in the **Column Source Type** field and select a value from the drop down list. Further change is based on that choice, as given below:

Column Source Type	Actions possible

Column Source Type	Actions possible
Constant	Double click in the cell to the right of **Column Source Value** and type a value. The value can be any characters up to 255 characters.
Formula	Double click in the cell to the right of **Column Source Value**. Click on to open either the **Create New Extract Column Assignment** screen or the **Edit Extract Column Assignment** screen. The Logic Text Helper screen also appears. These screens allow creation or modification of Extract Column Assignment logic text for this column.
Lookup Field	Select values by double clicking in these fields: • **Lookup LR** - select the target logical record for the lookup path. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen. • **Lookup Path** - select the specific lookup path name. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Lookup Path**" screen. • **Lookup Field** - select the field in the target logical record. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen. • **Effective Date Type** - select a format for an effective date (optional). • **Effective Date Value** - type a date in the format specified in the previous field (optional: required if the previous field has a value set). If the Effective Date Type is "Source File Field", sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. When all selections are complete, click on a grey cell underneath and values appear for the lookup field specified.
Source File Field	Click in the cell to the right of **Column Source Value**. From the drop down list, select a field. Once selected, click in a grey cell underneath and values appear for the field selected.

Change any values required, and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
Column Source Type	Select a value from the drop down box that describes where to source the value of his column. The other fields on this screen change depending on the choice.

Field	Definition
Column Source Value	This field depends on the choice for Column Source Type: • **Constant** - type a value for the constant that can be any characters up to 255 characters. • **Formula** - double click in the cell to the right of **Column Source Value**. Click on ... to open either the **Create New Extract Column Assignment** screen or the **Edit Extract Column Assignment** screen. The Logic Text Helper screen also appears. These screens allow creation or modification of Extract Column Assignment logic text for this column. • **Lookup Field** - this cell is disabled. • **Source File Field** - from the drop down list, select a field. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Once selected, click in a grey cell underneath and values appear for the field selected.
Lookup LR	Only enabled if **Column Source Type** is **Lookup Field**. Select a target logical record for a lookup. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Once selected, this cell displays the logical record name and Id number.
Lookup Path	Only enabled if **Column Source Type** is **Lookup Field**. Select a lookup path. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Once selected, this cell displays the lookup path name and Id number.
Lookup Field	Only enabled if **Column Source Type** is **Lookup Field**. Select a field in the target logical record. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Once selected, this cell displays the target field name and Id number.
Effective Date Type	Disabled if the screen View Properties General tab has a value for "Output Logical Record". Without that value, this field is enabled only if **Column Source Type** is **Lookup Field**. Select a value from the drop down list. (Optional.)
Effective Date Value	Disabled if the screen View Properties General tab has a value for "Output Logical Record". Without that value, this field is enabled only if **Column Source Type** is **Lookup Field** and a value is set in the previous field. Proceed depending on the value in the previous field: • **CCYYMMDD** - type a value in this format. • **Run Date** - this field is disabled and set to the value of Runday(). • **Source File Field** - from the drop down list, select a field from the drop down list of view source logical record fields applicable. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Data Type	Displays the data type of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)

Field	Definition
Date/Time Format	Displays the data and time format of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
Length	Displays the length of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
Data Alignment	Displays the data alignment of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
Decimal Places	Displays the number of decimal places of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
Scaling Factor	Displays the scaling factor of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
Signed	Displays whether there is a sign for this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. The checkbox is cleared if the data type is "Alphanumeric" or "BCD". The checkbox is checked if data type of "Edited Numeric". (Display only.)
Numeric Mask	Displays the numeric mask of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)
LR Start Position	Displays the logical record start position of this logical record field only if the Column Source Type is **Lookup Field** or **Source File Field**. Otherwise this field is disabled. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Create New Extract Record Filter screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights

Use this screen to create Extract Record Filter logic text for a view.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:

- "**Logic text 1: Extract Record Filter overview**" (for an introduction),
- "**Logic text 1: Extract Record Filter**" (for statements allowed and examples),
- "**Logic text diagrams 1: Extract Record Filter**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Create New Extract Record Filter errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to create logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Check logic text	1. Do the following: • **EITHER** click ✓ • OR select **Action, Check Logic Text** • OR press **F7** 2. If you see: • Message **The Logic Text is Valid** then your logic text is ready to use. • Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.
Create new logic text	1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench. Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**". 2. To create the logic text itself • **EITHER** type the logic text on the screen **Create New Extract Record Filter**. • **OR** a. Place your cursor at the point where the text is required on the screen **Create New Extract Record Filter**. b. Go to the **Logic Text Helper** screen. c. Expand any relevant plus + sign to expose **keywords**. d. **Double click keywords** for the text to automatically copy to the screen **Create New Extract Record Filter**. e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Create New Extract Record Filter**. 3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
Delete logic text	To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters. To delete some other character(s), do the following: 1. Highlight the relevant part of the logic text. 2. Click the **Delete** key.
Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen	1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**. 2. Inside the logic text on the Create New Extract Record Filter screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Create New Extract Record Filter**.
Save the logic text	1. Do the following: • **EITHER** click (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. 2. Once you save, the screen becomes **Edit Extract Record Filter**. See the screen help topic "**Edit Extract Record Filter screen help**". That topic is elsewhere in this PDF - see the table of contents.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

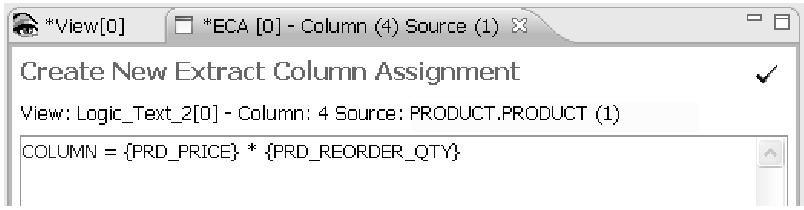
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Create New Extract Column Assignment screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create Extract Column Assignment logic text for a view.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:

- "**Logic text 2: Extract Column Assignment overview**" (for an introduction),
- "**Logic text 2: Extract Column Assignment**" (for statements allowed and examples),
- "**Logic text diagrams 2: Extract Column Assignment**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Create New Extract Column Assignment errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to create logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	**then ...**
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ... — **then ...**

Check logic text

1. Do the following:
   - **EITHER** click ✓
   - OR select **Action, Check Logic Text**
   - OR press **F7**
2. If you see:
   - Message **The Logic Text is Valid** then your logic text is ready to use.
   - Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.

Create new logic text

1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench.

   Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
2. To create the logic text itself
   - **EITHER** type the logic text on the screen **Create New Extract Column Assignment**.
   - **OR**
     a. Place your cursor at the point where the text is required on the screen **Create New Extract Column Assignment**.
     b. Go to the **Logic Text Helper** screen.
     c. Expand any relevant plus + sign to expose **keywords**.
     d. **Double click keywords** for the text to automatically copy to the screen **Create New Extract Column Assignment**.
     e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Create New Extract Column Assignment**.
3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**"

   To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Delete logic text

To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters.

To delete some other character(s), do the following:

1. Highlight the relevant part of the logic text.
2. Click the **Delete** key.

Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen

1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**.
2. Inside the logic text on the Create New Extract Column Assignment screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Create New Extract Column Assignment**.
Save the logic text	1. Do the following: • **EITHER** click (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. 2. Once you save, the screen becomes **Edit Extract Column Assignment**. See the screen help topic "**Edit Extract Column Assignment screen help**". That topic is elsewhere in this PDF - see the table of contents.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

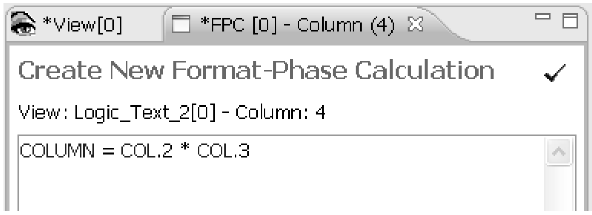
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Create New Format-Phase Calculation screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create Format-Phase Calculation logic text for a view.

Format-Phase Calculation logic text can also be called **Format Column Calculation** logic text.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:

- "**Logic text 3: Format Column Calculation overview**" (for an introduction),
- "**Logic text 3: Format Column Calculation**" (for statements allowed and examples),
- "**Logic text diagrams 3: Format Column Calculation**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Create New Format-Phase Calculation errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to create logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Check logic text	1. Do the following: • **EITHER** click ✓ • OR select **Action, Check Logic Text** • OR press **F7** 2. If you see: • Message **The Logic Text is Valid** then your logic text is ready to use. • Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.
Create new logic text	1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench. Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**". 2. To create the logic text itself • **EITHER** type the logic text on the screen **Create New Format-Phase Calculation**. • **OR** a. Place your cursor at the point where the text is required on the screen **Create New Format-Phase Calculation**. b. Go to the **Logic Text Helper** screen. c. Expand any relevant plus + sign to expose **keywords**. d. **Double click keywords** for the text to automatically copy to the screen **Create New Format-Phase Calculation**. e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Create New Format-Phase Calculation**. 3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
Delete logic text	To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters. To delete some other character(s), do the following: 1. Highlight the relevant part of the logic text. 2. Click the **Delete** key.
Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen	1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**. 2. Inside the logic text on the Create New Format-Phase Calculation screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Replace highlighted logic text</td><td>Do the following:
Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted.
EITHER overtype the highlighted logic text
OR
Go to the Logic Text Helper screen. If you cannot see this screen, select Window -> Show -> Logic Text Helper.
Click any relevant plus + sign or greater than > sign to expand.
Double click items for the text to automatically copy to the screen Create New Format-Phase Calculation.</td></tr>
<tr><td>Save the logic text</td><td>Do the following:
EITHER click (the save icon)
OR select File -> Save
OR click Ctrl+S.
Once you save, the screen becomes Edit Format-Phase Calculation.
See the screen help topic "Edit Format-Phase Calculation screen help". That topic is elsewhere in this PDF - see the table of contents.</td></tr>
</table>

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

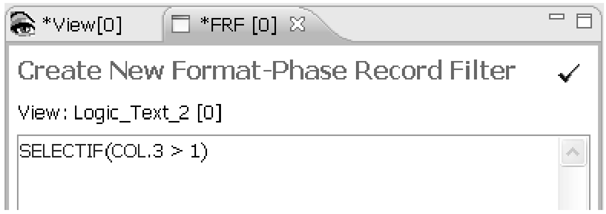
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Create New Format-Phase Record Filter screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create Format Record Filter logic text for a view.

Format-Phase Record Filter logic text can also be called **Format Record Filter** logic text.

This screen in available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:
- "**Logic text 4: Format Record Filter overview**" (for an introduction),
- "**Logic text 4: Format Record Filter**" (for statements allowed and examples),
- "**Logic text diagrams 4: Format Record Filter**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Create New Format-Phase Record Filter errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to create logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...

Check logic text

1. Do the following:
   - **EITHER** click ✓
   - OR select **Action, Check Logic Text**
   - OR press **F7**
2. If you see:
   - Message **The Logic Text is Valid** then your logic text is ready to use.
   - Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.

Create new logic text

1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench.

   Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
2. To create the logic text itself
   - **EITHER** type the logic text on the screen **Create New Format-Phase Record Filter**.
   - **OR**
     a. Place your cursor at the point where the text is required on the screen **Create New Format-Phase Record Filter**.
     b. Go to the **Logic Text Helper** screen.
     c. Expand any relevant plus + sign to expose **keywords**.
     d. **Double click keywords** for the text to automatically copy to the screen **Create New Format-Phase Record Filter**.
     e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Create New Format-Phase Record Filter**.
3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**"

   To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Delete logic text

To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters.

To delete some other character(s), do the following:

1. Highlight the relevant part of the logic text.
2. Click the **Delete** key.

Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen

1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**.
2. Inside the logic text on the Create New Format-Phase Record Filter screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Edit Extract Record Filter**.
Save the logic text	1. Do the following: • **EITHER** click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. 2. Once you save, the screen becomes **Edit Format-Phase Record Filter**. See the screen help topic "**Edit Format-Phase Record Filter screen help**". That topic is elsewhere in this PDF - see the table of contents.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

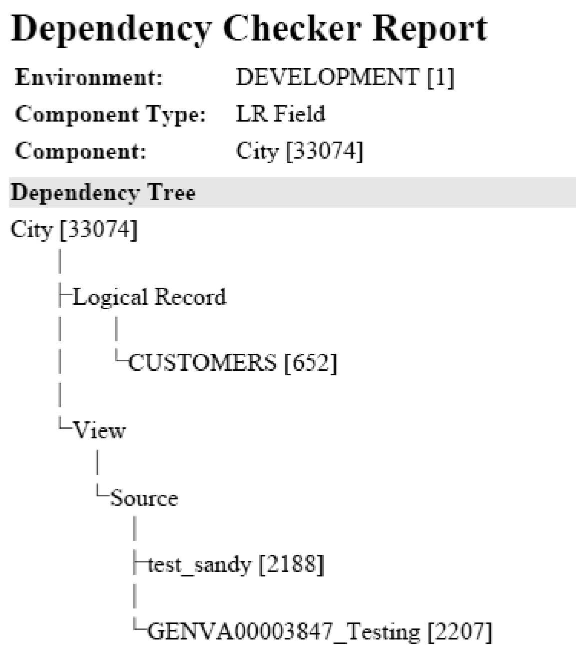
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Dependency Checker screen help

01 Summary of this topic

The sections in this topic are:

02 Introduction to a Dependency Checker Report



This report shows the dependencies for one specific metadata item. The report can focus on a metadata item of the following types:

- Logical Record (LR) Field,
- Global Field,
- Logical File,
- Logical Record,
- Lookup Path,
- Physical File,
- User-Exit Routine,
- View.

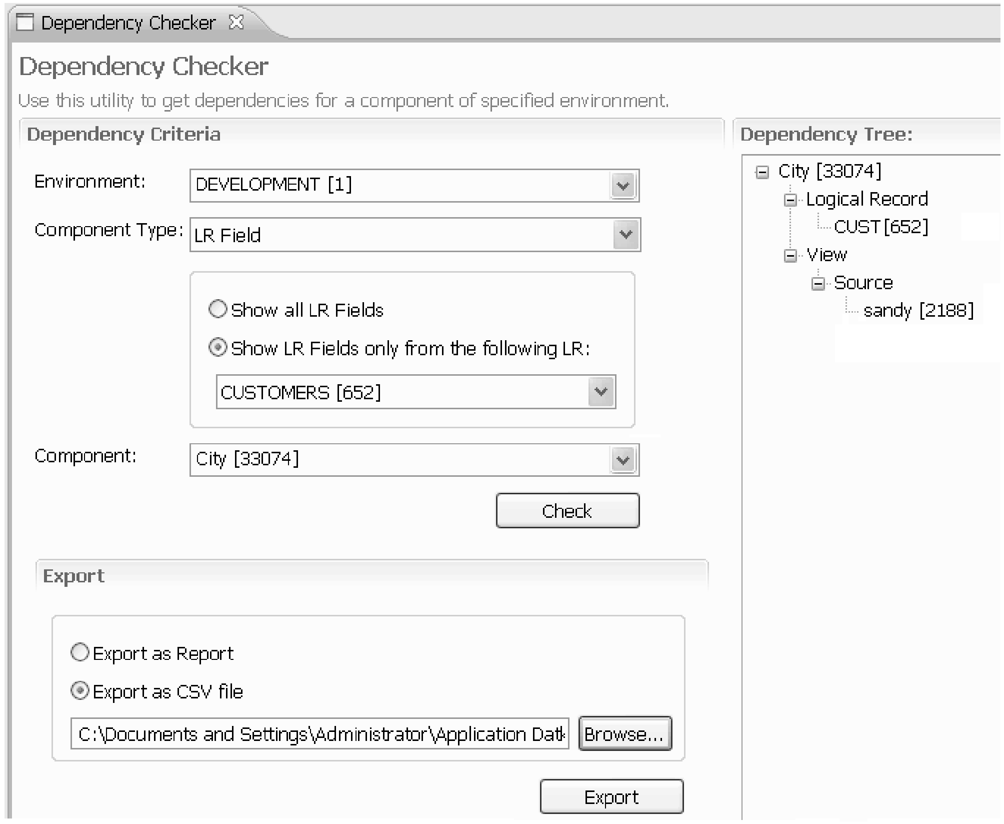
System and environment administrators can always generate this report for a specific metadata item (that is one of the above types) in any environment. General users can generate this metadata report if the **group selected during login** has at least the **read** right to the environment of the metadata item. See your system administrator if you require more rights.

The Dependency Checker Report can be **viewed on the screen or stored as a PDF file** for viewing in Adobe Acrobat Reader. Viewing reports as a PDF file requires once only setup of the Adobe Acrobat Reader - see below.

05 Errors

For errors or messages on this screen, see topic "**Dependency Checker errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action: Generate the report



Do the following:

1. Ensure you know the specific metadata item. This means knowing the **metadata name or id** and the type of metadata item (e.g. logical file).
2. **Ensure you have the read right to the environment of the metadata item**. System and environment administrators always have read rights. General users have read rights depending on the group selected during login. A general user may be required to login into a different group and environment - see task "**Return to login**". See your system administrator if you require read rights to more environments.
3. Click "**Reports -> Dependency Checker...**".
4. Select an **environment** from the drop down list. System administrators can select any environment. General users and environment administrators can choose only from the environments associated with group selected during login.
5. Select a **component type** from the drop down list.
6. If the component type is **LR Field**, the screen displays radio buttons for "**Show All LR Fields**" and "**Show LR Fields only from the following LR**". There is also a drop down list below the second radio button.

   The radio button "**Show All LR Fields**" changes the drop down list "**Component**" to show every LR (Logical Record) field in the environment selected above.

   The radio button "**Show LR Fields only from the following LR**" allows choosing one logical record from the drop down list immediately below. This changes the drop down list "**Component**" to show only the LR fields from the selected logical record.

7. Select a particular metadata item from the drop down list "**Component**".

   Optionally, **right** click any value already in the field "**Component**" and select "**Open Editor**". This opens the editor screen for that component.
8. Click **Check** to view the Dependency Checker Report for this metadata item under **Dependency Tree** at right. For more on navigating this tree, see section "**The Dependency Tree**" below.
9. Optionally, click **Export as Report** and click the **Export** button to create a PDF file containing the Dependency Tree as displayed. This means that if you expand or close various parts of the tree, the PDF file created is different. If a PDF file of this report is already open when you click **Export**, the old PDF file is closed and the newly generated PDF file is opened. The report displays in Adobe Acrobat Reader. The Acrobat Reader allows printing, saving and other choices. Click X to close the report. Note that once the PDF file is saved to a location on disk, you can view and print the PDF file outside the Workbench.
10. Optionally, click **Export as CSV file** and (if required) **modify the location text field** underneath. You must provide a valid location (folder name) which includes the drive letter. If the folder is a new name, then the folder will be created when you click the Export button. The location specifies the path where the CSV file is stored. Optionally click **Browse...** to navigate to an existing location. Once the location is appropriate, click the **Export** button to create a CSV file in the given location containing the Dependency Tree as displayed. This means that if you expand or close various parts of the tree, the CSV file created is different.

For errors or messages on this screen, see topic "**Dependency Checker errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

20 The Dependency Tree

Click ⊞ to expand parts of the dependency tree. Click ⊟ to close the structure underneath.

The **nodes** in the Dependency Tree that can be expanded or close are one of these items:

- Metadata types,
- Dependency usage types,
- Specific metadata items.

The **metadata types** are:

- Logical Record (LR) Field,
- Global Field,
- Logical File,
- Logical Record,
- Lookup Path,
- Physical File,
- User-Exit Routine,
- View.

The **dependency usage types** are:

- **Source** (used in a Lookup Path or View),
- **Target** (used in a Lookup Path Target),

- **Output** (used in a View),
- **Logic Text** (used in a View),
- **Effective Date**,
- **Sort Key Title** (used in a View),
- **Properties** (used in a View).

Specific metadata items are shown in format: **name[id]** for example **Customers[652].**

Right click on any **specific metadata item** in the Dependency Tree and select "**Open Editor**". This opens the editor for that component.

Double click on a metadata item in the dependency tree to create a new sub-tree under that item. A new sub-tree does not occur of a metadata item is already displayed higher in the dependency tree. If you do see a sub-tree, you can expand the sub-tree by clicking ⊞ . Any metadata items in the sub-tree are also opportunities to double click.

50 Fields - Dependency Checker screen

Field	Definition
Environment	Select from the drop down list of environments. System administrators always see a list of all environments. General users and environment administrators see a list of environments associated with the group selected during login.
Component Type	Select from the drop down list. Values are LR Field, Global Field, Logical File, Logical Record, Lookup Path, Physical File, User-Exit Routine, View.
Show All LR Fields	This radio button appears only for Component Type of Logical Record (LR) Field. Select this button to populate Component below with every LR Field in the environment selected above.
Show LR Field only from the following LR	This radio button appears only for Component Type of Logical Record (LR) Field. Select this button to populate Component below with only the LR fields in the logical record selected in the drop down list below. The drop down list contains all logical records in the environment selected.
Component	Select from the drop down list. Components are metadata item names and ids that satisfy the fields given above.
Export as Report	Click this radio button and click the **Export** button to create a PDF file containing the Dependency Tree as displayed. This means that if you expand or close various parts of the tree, the PDF file created is different. The report displays in Adobe Acrobat Reader. The Acrobat Reader allows printing, saving and other choices. Click X to close the report. Note that once the PDF file is saved to a location on disk, you can view and print the PDF file outside the Workbench.

Field	Definition
Export as CSV file	Click this radio button and click the **Export** button to create a CSV file containing the Dependency Tree as displayed. This means that if you expand or close various parts of the tree, the CSV file created is different. The CSV file is stored at the location given in the next field below.
Location	Text field underneath the radio button "**Export as CSV file**". This Location field specifies a valid directory path where a CSV file can be stored. Optionally, type the value of the location. An alternative is to click **Browse...** which displays the "**Browse to Folder**" screen, where you can navigate to the path or click the **Make New Folder** button. There is a default value in the Location field that can be changed by either of these two methods. When the "**Export as CSV file**" radio button is selected, click the **Export** button to create a CSV file of the current Dependency Tree in the location given. If the location does not exist, then clicking **Export** creates that path.

60 Fields - Dependency Checker Report - Header

Field	Definition
Environment	Name and id number of the environment for the metadata item for this report.
Component Type	Type of metadata item for this report.
Component	Name and id number of the metadata item for this report.

70 Fields - Dependency Checker Report - Dependency Tree

Field	Definition

Field	Definition
Node in the tree	The **nodes** in the Dependency Tree that can be expanded or close are one of these items: • Metadata Types • Dependency usage type • Specific metadata items The **metadata types** are: • LR Field, • Global Field, • Logical File, • Logical Record, • Lookup Path, • Physical File, • User-Exit Routine, • View. The **dependency usage types** are: • **Source** (used in a Lookup Path or View), • **Target** (used in a Lookup Path Target), • **Output** (used in a View), • **Logic Text** (used in a View), • **Effective Date**, • **Sort Key Title** (used in a View), • **Properties** (used in a View). **Specific metadata items** are shown in format: **name[id]** for example **Customers[652].** **Double click on a metadata item in the dependency tree to create a new sub-tree under that item.** A new sub-tree does not occur of a metadata item is already displayed higher in the dependency tree. If you do see a sub-tree, you can expand the sub-tree by clicking ⊞ . Any metadata items in the sub-tree are also opportunities to double click.

80 Fields - Dependency Checker Report - Footer

Field	Definition
Date and time	Date and time the report was generated.
Number / Number	Page number / Total number of pages

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

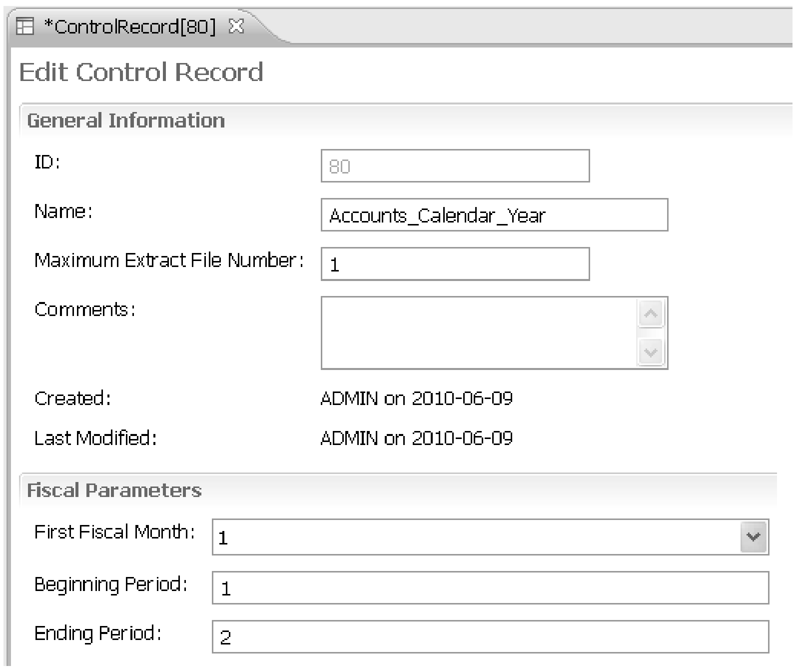
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Control Record screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit an existing control record.

This screen is for system and environment administrators only.

05 Errors

For errors or messages on this screen, see topic "**Edit Control Record errors**". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all control records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique among control record names in this environment. Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Maximum Extract File Number	The maximum number of extract files that can be created in the Extract Phase. Must be greater than zero and up to nine digits.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)
First Fiscal Month	Mandatory: the calendar month in which the fiscal year starts. A number in the range one to 12, representing the months January to December.
Beginning Period	A month numbered from zero to 11. This is an alternative to First Fiscal Month which is from one to 12. (Optional.)
Ending Period	A month numbered from zero to 11. Must be larger than Beginning Period, if set. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Environment screen help

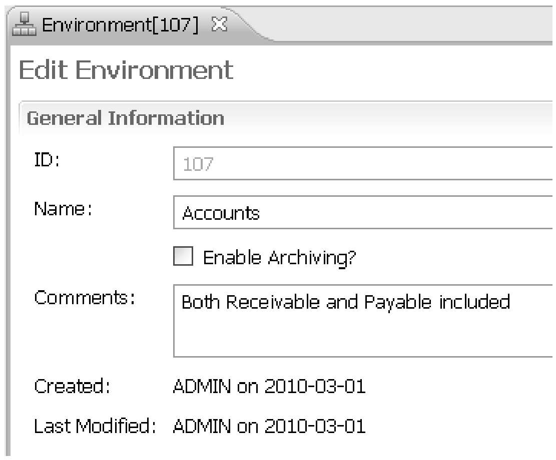
01 Summary of this topic

The sections in this topic are as follows:

- "02 Screen function and rights" on page 36
- "05 Errors" on page 36

- “10 Action on this screen”
- “50 Fields”
- “99 Keyboard Shortcuts” on page 37

02 Screen function and rights



Use this screen to edit any existing environment record.

This screen is for system and environment administrators only.

05 Errors

For errors or messages on this screen, see topic "**Edit Environment errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all environments. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among environment names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Enable Archiving?	Tick if this environment might be a target of the Migration Utility. Once ticked, the Migration Utility archives data to an XML file before overwriting this environment. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

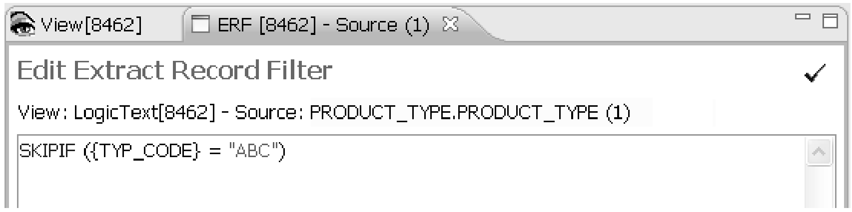
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Extract Record Filter screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit the Extract Record Filter logic text for a view.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:
- "**Logic text 1: Extract Record Filter overview**" (for an introduction),
- "**Logic text 1: Extract Record Filter**" (for statements allowed and examples),
- "**Logic text diagrams 1: Extract Record Filter**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Edit Extract Record Filter errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to edit logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	**then ...**
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Check logic text	1. Do the following: • **EITHER** click ✓ • OR select **Action, Check Logic Text** • OR press **F7** 2. If you see: • Message **The Logic Text is Valid** then your logic text is ready to use. • Screen **Logic Text Validation Errors** then click the plus + sign to expand the messages. You must fix the problems and try the check again.
Create new logic text	1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench. Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**". 2. To create the logic text itself • **EITHER** type the logic text on the screen **Edit Extract Record Filter**. • **OR** a. Place your cursor at the point where the text is required on the screen **Edit Extract Record Filter**. b. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. c. Click any relevant plus + sign or greater than > sign to expand. d. **Double click items** for the text to automatically copy to the screen **Edit Extract Record Filter**. 3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
Delete logic text	To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters. To delete some other character(s), do the following: 1. Highlight the relevant part of the logic text. 2. Click the **Delete** key.
Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen	1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**. 2. Inside the logic text on the Edit Extract Record Filter screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Edit Extract Record Filter**.
Save the logic text	• **EITHER** click (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

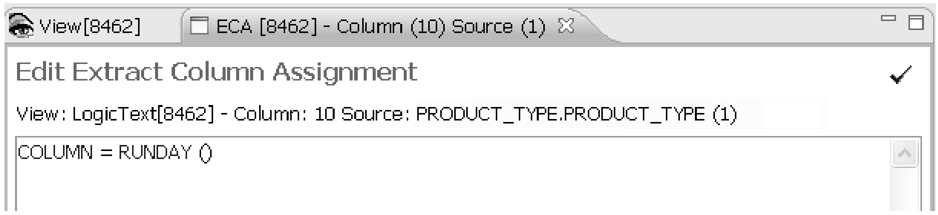
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Extract Column Assignment screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit the Extract Column Assignment logic text for a view.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:
- "**Logic text 2: Extract Column Assignment overview**" (for an introduction),
- "**Logic text 2: Extract Column Assignment**" (for statements allowed and examples),
- "**Logic text diagrams 2: Extract Column Assignment**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Edit Extract Column Assignment errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to edit logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Check logic text</td><td>

Do the following:

EITHER click ✓
OR select Action, Check Logic Text
OR press F7

If you see:

Message The Logic Text is Valid then your logic text is ready to use.
Screen Logic Text Validation Errors then click on the plus + sign to expand the messages. You must fix the problems and try the check again.

</td></tr>
<tr><td>Create new logic text</td><td>

Logic text often requires drafting on paper before the text is entered into the SAFR Workbench.

Ensure you have read topic "Rules for all logic text". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".
To create the logic text itself

EITHER type the logic text on the screen Edit Extract Column Assignment.
OR
<ol type="a">
Place your cursor at the point where the text is required on the screen Edit Extract Column Assignment.
Go to the Logic Text Helper screen.
Expand any relevant plus + sign to expose keywords.
Double click keywords for the text to automatically copy to the screen Edit Extract Column Assignment.
Proceed by either double clicking items on the screen Logic Text Helper or by directly editing the logic text in the screen Edit Extract Column Assignment.

For keyboard shortcuts, see topic "What are the keyboard shortcuts?"

To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

</td></tr>
<tr><td>Delete logic text</td><td>
To delete the last character typed, press Ctrl + Z. To retype the deleted character, press Ctrl + Y. Can be used for up to 25 characters.

To delete some other character(s), do the following:

Highlight the relevant part of the logic text.
Click the Delete key.

</td></tr>
<tr><td>Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen</td><td>

Ensure the Logic Text Helper screen is displayed. If required, select Window -> Show -> Logic Text Helper.
Inside the logic text on the Edit Extract Column Assignment screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

</td></tr>
</table>

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Edit Extract Column Assignment**.
Save the logic text	• **EITHER** click (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

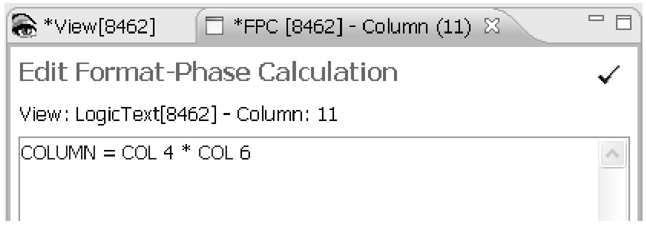
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Format-Phase Calculation screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit the Format-Phase Calculation logic text for a view.

Format-Phase Calculation logic text can also be called **Format Column Calculation** logic text.

This screen is available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:

- "**Logic text 3: Format Column Calculation overview**" (for an introduction),
- "**Logic text 3: Format Column Calculation**" (for statements allowed and examples),
- "**Logic text diagrams 3: Format Column Calculation**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Edit Format-Phase Calculation errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to edit logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...

Check logic text

1. Do the following:
   - **EITHER** click
   - OR select **Action, Check Logic Text**
   - OR press **F7**
2. If you see:
   - Message **The Logic Text is Valid** then your logic text is ready to use.
   - Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.

Create new logic text

1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench.

   Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
2. To create the logic text itself
   - **EITHER** type the logic text on the screen **Edit Format-Phase Calculation**.
   - **OR**
     a. Place your cursor at the point where the text is required on the screen **Edit Format-Phase Calculation**.
     b. Go to the **Logic Text Helper** screen.
     c. Expand any relevant plus + sign to expose **keywords**.
     d. **Double click keywords** for the text to automatically copy to the screen **Edit Format-Phase Calculation**.
     e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Edit Format-Phase Calculation**.
3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**"

   To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Delete logic text

To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters.

To delete some other character(s), do the following:
1. Highlight the relevant part of the logic text.
2. Click the **Delete** key.

Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen

1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**.
2. Inside the logic text on the Edit Format-Phase Calculation screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Edit Format-Phase Calculation**.
Save the logic text	• **EITHER** click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Format-Phase Record Filter screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights

Use this screen to edit the Format-Phase Record Filter logic text for a view.

Format-Phase Record Filter logic text can also be called **Format Record Filter** logic text.

This screen in available to all users of the workbench.

03 Examples of this logic text

Useful topics to read are:
- "**Logic text 4: Format Record Filter overview**" (for an introduction),
- "**Logic text 4: Format Record Filter**" (for statements allowed and examples),
- "**Logic text diagrams 4: Format Record Filter**" (for all relevant syntax diagrams).

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

05 Errors

For errors or messages on this screen, see topic "**Edit Format-Phase Record Filter errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The general objective is to edit logic text, save it, and then check the logic text. Fix any errors, save and repeat the check until you see a message "**The Logic Text is Valid**".

Specifically, choose from the following actions:

If you want to ...	then ...
Change highlighted logic text	• **To replace highlighted** logic text see a row lower in this table for a description. • **To delete highlighted** logic text click the **Delete** key. • For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Check logic text</td><td>

1. Do the following:
   - **EITHER** click ✓
   - OR select **Action, Check Logic Text**
   - OR press **F7**
2. If you see:
   - Message **The Logic Text is Valid** then your logic text is ready to use.
   - Screen **Logic Text Validation Errors** then click on the plus + sign to expand the messages. You must fix the problems and try the check again.

</td></tr>
<tr><td>Createnew logic text</td><td>

1. Logic text often requires drafting on paper before the text is entered into the SAFR Workbench.

   Ensure you have read topic "**Rules for all logic text**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
2. To create the logic text itself
   - **EITHER** type the logic text on the screen **Edit Format-Phase Record Filter**.
   - **OR**
     a. Place your cursor at the point where the text is required on the screen **Edit Format-Phase Record Filter**.
     b. Go to the **Logic Text Helper** screen.
     c. Expand any relevant plus + sign to expose **keywords**.
     d. **Double click keywords** for the text to automatically copy to the screen **Edit Format-Phase Record Filter**.
     e. Proceed by either double clicking items on the screen **Logic Text Helper** or by directly editing the logic text in the screen **Edit Format-Phase Record Filter**.
3. For keyboard shortcuts, see topic "**What are the keyboard shortcuts?**"

   To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

</td></tr>
<tr><td>Delete logic text</td><td>

To delete the last character typed, press **Ctrl + Z**. To retype the deleted character, press **Ctrl + Y**. Can be used for up to 25 characters.

To delete some other character(s), do the following:
1. Highlight the relevant part of the logic text.
2. Click the **Delete** key.

</td></tr>
<tr><td>Find logic text item inside curly brackets and highlight the same item on the Logic Text Helper screen</td><td>

1. Ensure the Logic Text Helper screen is displayed. If required, select **Window -> Show -> Logic Text Helper**.
2. Inside the logic text on the Edit Format-Phase Record Filter screen, double click on an item in curly brackets. The same item is now highlighted on the Logic Text Helper screen.

</td></tr>
</table>

If you want to ...	then ...
Replace highlighted logic text	Do the following: • Ensure the relevant text is highlighted. If you are replacing a field, ensure the curly brackets are also highlighted. • **EITHER** overtype the highlighted logic text • **OR** 1. Go to the **Logic Text Helper** screen. If you cannot see this screen, select **Window -> Show -> Logic Text Helper**. 2. Click any relevant plus + sign or greater than > sign to expand. 3. **Double click items** for the text to automatically copy to the screen **Edit Format-Phase Record Filter**.
Save the logic text	• **EITHER** click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**.

50 Fields

This screen is one big field for your logic text.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

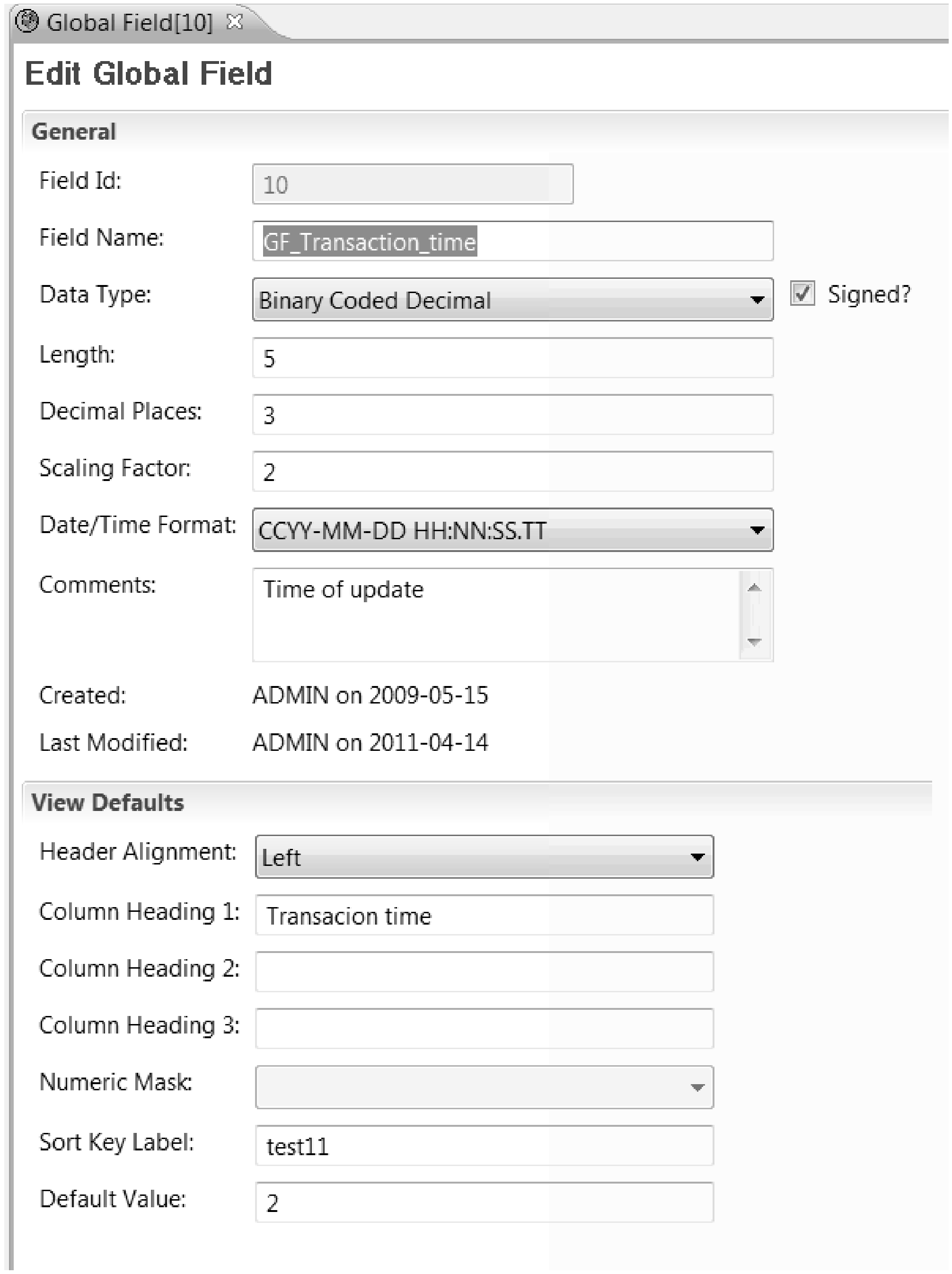
Edit Global Field screen help

01 Summary of this topic

The sections in this topic are as follows:

- “02 Screen function and rights” on page 50
- “05 Errors” on page 51
- “10 Action on this screen” on page 51
- “50 Fields - General section” on page 51
- “60 Fields - View Defaults section” on page 52
- “99 Keyboard Shortcuts” on page 52

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to edit an existing global field record.

This screen is for system and environment administrators only.

05 Errors

For errors or messages on this screen, see topic "**Edit Global Field errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - General section

Field | **Definition**

Field ID

The position in the list of all global fields. (Display only.)

Name

Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among global field names in this environment).

Examples of permitted names:

- Adjustment_Parameter_2009
- Company_Number

These names are not permitted:

- 2009_Report_Code (doesn't start with a letter)
- Growth factor (must not include spaces)
- USA/Canada.Region.Code (must not include "/" or fullstop)

Data Type

Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal. If the choice is Masked Numeric, then a Numeric Mask is mandatory in the section "Fields - view defaults" below.

Signed

Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is **Alphanumeric**. This field is also disabled if the field Data Type is **Binary** and you have selected a value in the field Date/Time Format below. (Optional.)

Length

The length of this global field. A number up to five digits.

- Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.**
- Values 1-16 for data types **packed, packed sortable, and zoned decimal.**
- Values 1, 2, 4, or 8 for data types **binary and binary sortable.**
- Values 1-10 for data type **binary coded decimal**.

Decimal Places

The number of decimal places for this global field. Must be a value between 0 and 9 inclusive. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)

Field	Definition
Scaling Factor	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - View Defaults section

Field	Definition
Header Alignment	The position of the header on that line. (Optional.)
Column Heading 1	Up to 254 characters. (Optional.)
Column Heading 2	Up to 254 characters. (Optional.)
Column Heading 3	Up to 254 characters. (Optional.)
Numeric Mask	Controls the display of numeric values. Mandatory for a data type of "Masked Numeric", otherwise optional.
Sort key label	Up to 48 characters. (Optional.)
Default value	Up to 254 characters. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

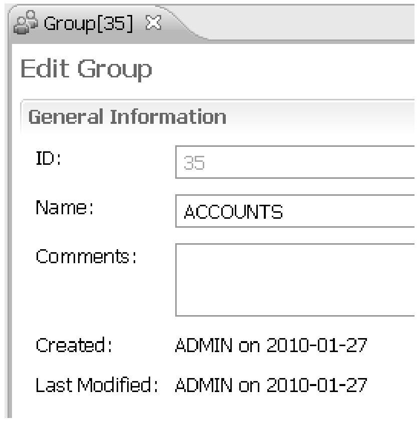
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Group screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit an existing group.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**Edit Group errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all group records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among group names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)

Field	Definition
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

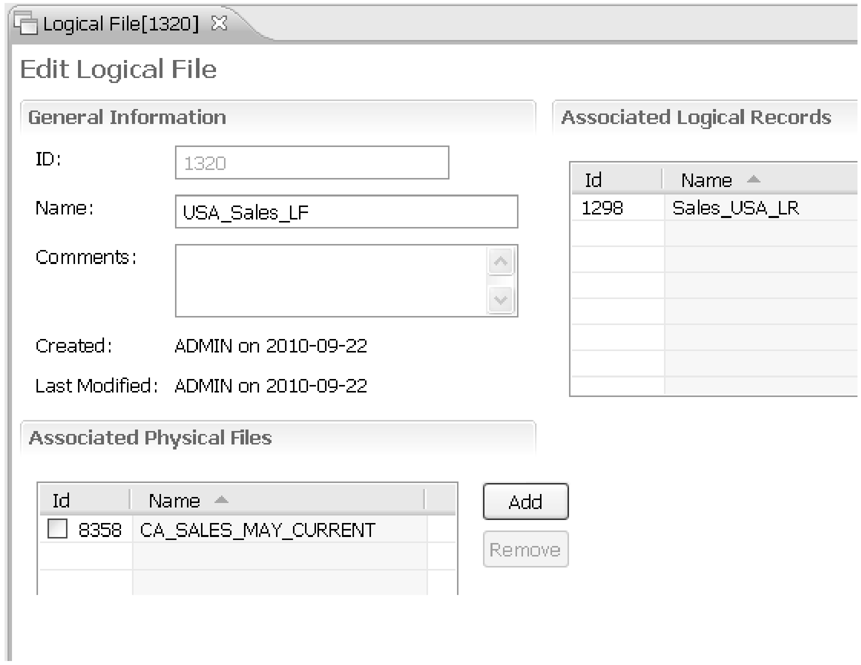
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Logical File screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to edit an existing logical file record.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular logical file in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Edit Logical File errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values.

Optionally, **right** click any associated physical file already listed in this table and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

To add an associated physical file, do the following:

1. Click **Add**. The "**Select components to be associated**" dialog box appears.
2. If the list on this screen is long, this list can be searched - see the section on this below.
3. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.

4. Click **Select All** or **Deselect All** as required.
5. Click **OK**.

To remove an associated physical file, do the following:
1. If the list under "**Associated Physical Files**" is long, this list can be searched - see the section on this below.
2. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.
3. Click **Remove**. If the button **Remove** is grey, ensure there is at least one tick for a physical file to allow the button to be used.

When the logical file is complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Searching in Associated Physical Files

If there is a long list of associated physical files, then the list can be searched as follows:
1. Click inside the list under "**Associated Physical Files**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the physical file name.
5. Click OK to start the search.

If the physical file is found, then you are returned to the list with that physical file highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Searching in "Select Components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the physical files available. If there is a long list of physical files, then this list can be searched as follows:
1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".

4. In the field "**Search text**" type either the ID or the first characters in the physical file name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated physical files.
7. You may search again if required. You may tick as many physical files as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

40 Searching in Associated Logical Records

Right click any associated logical record listed in this table and select "**Open Editor**". This opens the "**Edit Logical Record**" screen for that particular item.

If there is a long list of associated logical records, then the list can be searched as follows:

1. Click inside the list under "**Associated Logical Records**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the logical record name.
5. Click OK to start the search.

If the logical record is found, then you are returned to the list with that logical record highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - General Information section

Field	**Definition**
ID	The position in the list of all logical files. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among logical file names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - Associated Physical File

Field	Definition
ID	The position in the list of all associated physical files records for this logical file. (Display only.)
Name	The name of a Physical File associated with this Logical File. (Display only.)

70 Fields - Associated Logical Records section

Field	Definition
ID	The position in the list of all associated logical records for this logical file. (Display only.)
Name	The name of a logical record associated with this logical file. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

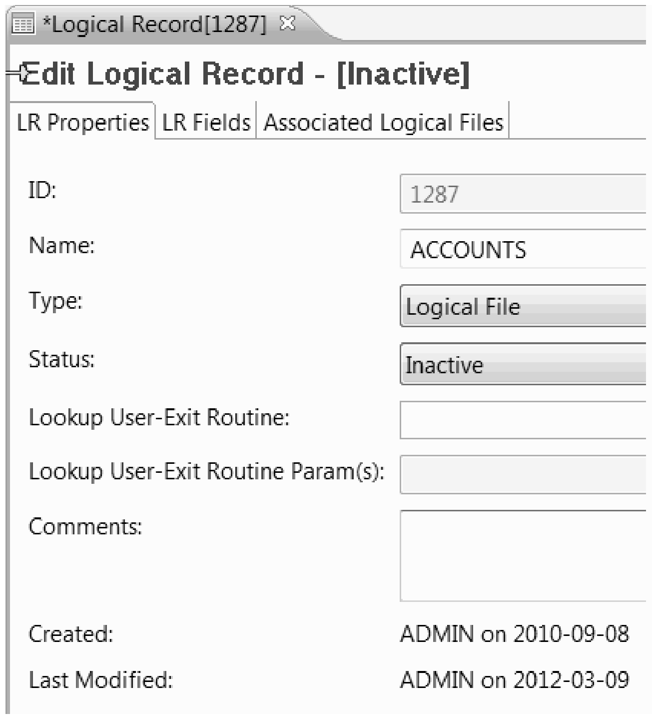
Edit Logical Record (LR Properties tab) screen help

01 Summary of this topic

The sections in this topic are as follows:
- “02 Screen function and rights” on page 59

- "05 Errors"
- "10 Action on this screen"
- "50 Fields - LR Properties tab" on page 60
- "99 Keyboard Shortcuts" on page 60

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to edit the name of a logical record and edit a few other details.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular logical record in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**Edit Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values as required.

Optionally, **right** click any value already in the field "**Lookup User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When work on this screen is complete, either select another tab or

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - LR Properties tab

Field	Definition
ID	The position in the list of all logical records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among logical record names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Type	Indicates the whether the record describes the logical file or describes a structure specific to a view.
Status	Indicates the status of the logical record as a whole.
Lookup User-Exit Routine	Specify a routine with type Lookup. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Lookup due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Lookup User-Exit Routine Parameters	Up to 32 characters. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

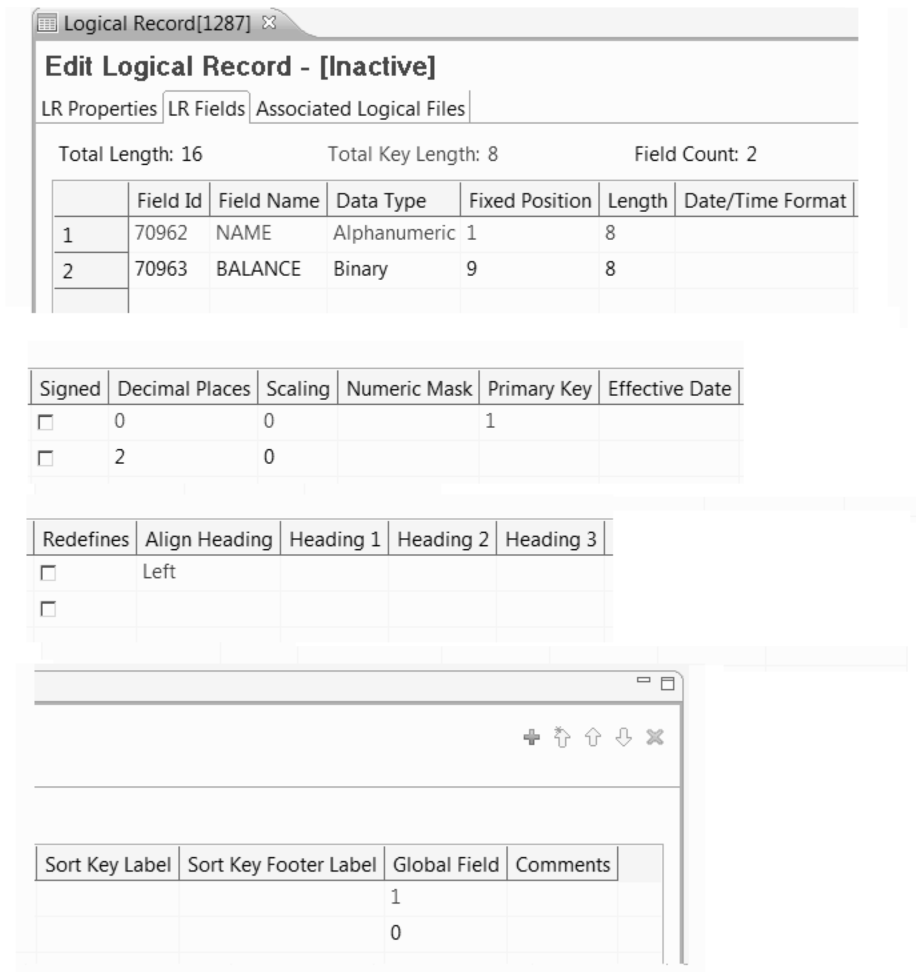
Edit Logical Record (LR Fields tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

- "02 Screen function and rights"
- "05 Errors" on page 62
- "10 Action on this screen" on page 62
- "50 Fields - LR Fields tab" on page 68
- "99 Keyboard Shortcuts" on page 70

02 Screen function and rights



The above screen image has been split and compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to edit the field data for a logical record.

The **Edit** menu only appears when the "**LR Fields**" tab is displayed.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular logical record in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**Edit Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Each row on the screen describes one field in the logical record. Each row that represents a primary key field is displayed in red.

When everything is finished,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

The table below contains the actions for this screen.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Assign a global field to an existing row</td><td>1. Click or navigate to the Global Field cell in that row,
2. Select from the drop down list. For keyboard instructions, see "Edit a cell" below in this table.</td></tr>
<tr><td>Add a blank row at the bottom</td><td>• EITHER click (Add field)
• OR right click in any cell in any row and select Add field
• OR select Edit, Add Field
• OR click Alt+Insert
• OR
1. Navigate to the last row,
2. Ensure the row has a value for Field Name,
3. Press the Arrow Down key.
• OR
1. Navigate to the last row,
2. Navigate to the rightmost cell by pressing the End key
3. Press the Arrow Right key.</td></tr>
</table>

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Auto-Calculate</td><td>
To turn this feature on

EITHER right click in any cell in any row and select Set Auto-Calculate ON.
If you see a choice of "Set Auto-Calculate OFF" then this feature is already on.
OR select Edit menu and item Set Auto-Calculate ON.
If the Edit menu has an item "Set Auto-Calculate OFF" then this feature is already on.

When this feature is on, the values for Fixed Position adjust automatically after these actions (described in this table):

"Add a blank row at the bottom"
"Delete a row"
"Edit a cell" (either Length or Fixed Position)
"Insert a row above an existing row"
"Move a row up"
"Move a row down"

If this feature is off, you can still manually recalculate the values of Length and Fixed Position - see "Recalculate" in this table.
</td></tr>
<tr><td>Copy a row</td><td>

Highlight the relevant row or navigate to the Field Id cell in that row,
Choose from the following:

EITHER select Edit, Copy
OR right click and select Copy
OR press Ctrl+C

</td></tr>
<tr><td>Delete a row</td><td>

Perform "Highlight one or more rows" below in this table
Do the following:

EITHER click (delete field)
OR right click and select Delete
OR select Edit, Delete
OR press the Delete key.

You are prompted to confirm the delete(s).
The workbench checks for any views or lookup paths that depend on this row. If these dependencies exist, the workbench displays these and refuses the delete.
If relevant, see "Ensure accurate values for all rows" in this table for possible further action.

</td></tr>
</table>

If you want to ...	then ...
Edit a cell	1. For **editing mode** • **EITHER** click in the cell for **editing mode** • **OR** navigate to the cell and press **Spacebar** 2. While in editing mode, **type** new characters or press **Delete** to remove characters. For a **drop down list** • **EITHER** click to select a value, • **OR** press **Arrow Up** or **Arrow Down** to select a value. 3. To **undo a change** while still in that cell • **EITHER** press **Escape**, • **OR right** click and select **Undo**. 4. To **commit** the changes in that cell • **EITHER** click in a different cell, • **OR** press **Enter**. 5. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Ensure accurate values for all rows	The values for **Fixed Position** must adjust after these actions: • "**Add a blank row** at the bottom" • "**Delete** a row" • "**Edit** a cell" (either Length or Fixed Position) • "**Insert a row** above an existing row" • "Move a row **up**" • "Move a row **down**" If the **Auto-Calculate** feature is turned on, then these values automatically adjust. For more on this, see "**Auto-Calculate**" in this table. If the Auto-Calculate feature is off, you can still keep these values accurate - see "**Recalculate**" in this table.
Find a field	1. Do the following: • **EITHER** click **Edit, Find Field** • **OR** press **Ctrl+F** • **OR right** click and select **Find Field** 2. Enter the **first few letters of the name** of the field, and press OK. This finds the first occurrence of that name in the logical record.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Highlight one or more rows</td><td>

To highlight <u>one</u> row

EITHER click on the row number in the first (grey) column,
OR navigate to the Field Id cell in that row.

To highlight <u>adjacent</u> rows

EITHER

Click on the row number for Row X in the first (grey) column,
Hold the Control key,
Click on the row number for Row X+1 or Row X-1 in the first (grey) column,
UNDO by repeating steps 2 and 3.

OR

Navigate to the Field Id cell in Row X.
Hold the Shift key,
Press Arrow Up or Arrow Down.
UNDO by repeating steps 2 and 3.

To highlight rows that are <u>not adjacent</u>

Click on the row number for Row X in the first (grey) column,
Hold the Control key,
Click on the row number for Row Y in the first (grey) column
UNDO by repeating steps 2 and 3.

No keyboard method is available for rows that are not adjacent.
</td></tr>
<tr><td>Insert a row above an existing row</td><td>

Highlight one row using "Highlight one or more rows" above in this table
Do the following:

EITHER click (Insert field).
If the button is grey, ensure only one row is selected.
OR click the Insert key.
OR select Edit, Insert field
OR right click and select Insert field.

If relevant, see "Ensure accurate values for all rows" in this table for possible further action.
</td></tr>
</table>

If you want to ...	then ...
Keyboard navigation	Editing mode is discussed under **Spacebar** in the dot points below, and in "**Edit** a cell" above in this table. Use the following keys: • **Arrow Down** has several uses. In **editing mode** in a cell, this key selects a new value form a drop down list. When **not in editing mode**, this key moves the cursor to the row below. In the last row, if that row has a Field Name value then this key creates a new row underneath. • **Arrow Left** has several uses. In **editing mode** in a cell, this key moves the cursor one character left in the value. When **not in editing mode**, this key moves the cursor to the cell to the left. In the leftmost cell of a row, this key moves to the rightmost cell in the row above. In the leftmost cell in the first row, this key has no effect. • **Arrow Right** has several uses. In **editing mode** in a cell, this key moves the cursor one character right in the value. When **not in editing mode**, this key move the cursor to the cell to the right. In the rightmost cell of a row, this key moves to the leftmost cell in the row below. In the rightmost cell in the last row, if that row has a Field Name value then this key creates a new row underneath. • **Arrow Up** has several uses. In **editing mode** in a cell, this key selects a new value form a drop down list. When **not in editing mode**, this key moves the cursor to the row above. In the first row, this key has no effect. • **Delete** removes the highlighted row(s). You are prompted to confirm the delete(s). The workbench then checks for any views or lookup paths that depend on this row. If these dependencies exist, the workbench displays these and refuses the delete. • **End** moves the cursor to the rightmost cell in the current row. • **Enter** commits any changes made to the current cell, and exits editing mode. To resume editing mode, press Spacebar. • **Escape** restores the original value in a cell before the current editing mode started. The current cell must be in editing mode for this key to have any effect. • **Home** moves the cursor to the leftmost cell in the current row. • **Insert** creates a new row above the current row. • **Spacebar** places the current cell in editing mode. Make changes to the value in the cell. Press Enter to commit the changes and exit editing mode. Press Escape while still in editing more to undo all changes to that cell.
Move a row **up**	1. Perform "**Highlight one or more rows**" above in this table 2. Do the following: • **EITHER** click ⇧ (Move field up). • **OR** press **Alt+Up** • **OR** select **Edit, Move field up** • **OR right** click and select **Move field up** 3. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	then ...
Move a row **down**	1. Perform "**Highlight one or more rows**" above in this table 2. Do the following: • **EITHER** click ⇩ (Move field down). • **OR** press **Alt+Down** • **OR** select **Edit, Move field down** • **OR right** click and select **Move field down** 3. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Paste above a row	1. Perform '**Copy a row**" above in this table. 2. Locate the relevant row for the "paste above" action. Highlight this row using "**Highlight one or more rows**" above in this table. 3. Do the following: • **EITHER** click **Edit, Paste Above** • **OR** press **Ctrl+V** • **OR right** click and select **Paste Above** 4. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Paste below a row	1. Perform '**Copy a row**" above in this table. 2. Locate the relevant row for the "paste below" action. Highlight this row using "**Highlight one or more rows**" above in this table. 3. Do the following: • **EITHER** click **Edit, Paste Below** • **OR** press **Ctrl+Shift+V** • **OR right** click and select **Paste Below** 4. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	then ...

Recalculate	The values for **Fixed Position** need recalculation after these actions described in this help table:
	• "**Add a blank row** at the bottom"
	• "**Delete** a row"
	• "**Edit** a cell" (either Length or Fixed Position)
	• "**Insert a row** above an existing row"
	• "Move a row **up**"
	• "Move a row **down**"
	
	If the Auto-Calculate feature is on, then the recalculation is done automatically - see "**Auto-Calculate**" in this table.
	
	If the Auto-Calculate feature is off, you can recalculate manually as follows:
	1. Do the following:
	  • **EITHER** click **Edit, Recalculate**,
	  • **OR right** click on any row and select **Recalculate**.
	2. Choose one of **All Rows**, **From Highlighted Row** and **Only Highlighted Row**.
	  The selection **From Highlighted Row** means the recalculate starts from the highlighted row and continues for all rows below that.

Save all changes	• **EITHER** click (the save icon) • **OR** select **File, Save**, • **OR** click **Ctrl+S**.
Undo a change	You must be in editing mode in a cell. Do the following: • **EITHER** press **Escape** • **OR right** click and select **Undo**. This (right click) cannot undo change to a drop down list.

50 Fields - LR Fields tab

Field	Definition
Total Length	The total length of all the fields in the logical record. (Display only.)
Total Key Length	The total length of all the primary key fields in the logical record. (Display only.)
Field Count	The total number of fields (rows) in the logical record. (Display only.)
Field ID	The position in the list of all global fields. (Display only.)

Field	Definition
Field Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among field names in this logical record). Examples of permitted names: • Adjustment_Parameter_2009 • Company_Number These names are not permitted: • 2009_Report_Code (doesn't start with a letter) • Growth factor (must not include spaces) • USA/Canada.Region.Code (must not include "/" or fullstop)
Data Type	Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal. If the choice is Masked Numeric, then a value is mandatory in the Numeric Mask field below.
Fixed Position	The starting position of this field. Automatically generated by the system, but you can modify the value. Maximum length 9 digits. If you enter zero in this field and attempt to save the logical record, an error message displays and the logical record is saved as inactive.
Length	The length of this field. A number up to five digits. • Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.** • Values 1-16 for data types **packed, packed sortable, and zoned decimal.** • Values 1, 2, 4, or 8 for data types **binary and binary sortable.** • Values 1-10 for data type **binary coded decimal**.
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Signed	Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is Alphanumeric. This field is also disabled if the field Data Type is Binary and you have selected a value in the field Date/Time Format. (Optional.)
Decimal Places	The number of decimal places for this field, up to value nine. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Scaling	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Numeric Mask	This field specifies the mask to be used on column output. Choose one of the options from the drop down list. Mandatory for a data type of "Masked Numeric", otherwise optional.

Field	Definition
Primary Key	The sequence number of this field in the primary key. Choose from the drop down list of sequence numbers. If a sequence number is selected, then the entire field (row) is displayed in red. For each field, you can set Primary Key or Effective Date but not both. To remove this field from the primary key, select blank from the drop down list. (Optional.)
Effective Date	The type of date in this field. Choose either Start Date or End Date from the drop down list. The entire logical record can have only one field where you select Start Date in this field, and only one row where you select End Date in this field. For any field, you can set Primary Key or Effective Date but not both. If you want to create a key based on a date then create a Primary Key (and do not use this field). (Optional.)
Redefines	Indicates this field redefines another field occupying the same position in the logical record. If this checkbox is selected, the fixed position of this field is set to that of the previous field. (Optional.)
Align Heading	Aligns the View column heading. (Optional.)
Heading 1	The text for the first line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Heading 2	The text for the second line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Heading 3	The text for the third line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Sort Key Label	Specifies the label for this field when used as a sort key in a view. Up to 48 characters. (Optional.)
Sort Key Footer Label	Up to 48 characters. (Optional.)
Global Field	The global field associated with this row. Choose from a drop down list of all global fields in this environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**20 Shortcuts: New/Edit Logical Record screen (LR Fields tab)**".

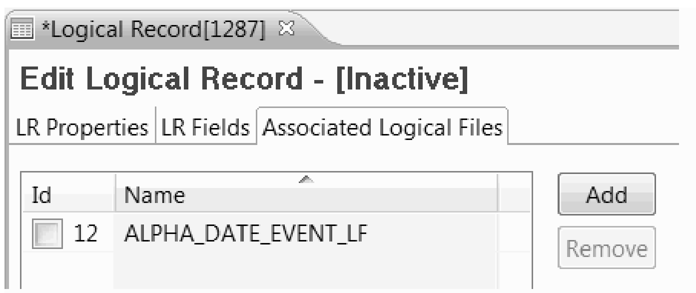
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Logical Record (Assoc. Log. Files tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



This screen links this logical record to one or more logical files. Ensure at least one associated logical file.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular logical record in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**Edit Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Optionally, **right** click any value already in the table and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

To add an associated logical file, do the following:

1. Click **Add**. The "**Select components to be associated**" dialog box appears.
2. If the list on this screen is long, this list can be searched - see the section on this below.
3. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.

4. Click **Select All** or **Deselect All** as required.
5. Click **OK**.

To remove an associated logical file, do the following:
1. If the list under "**Associated Logical Files**" is long, this list can be searched - see the section on this below.
2. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.
3. Click **Remove**. If the button **Remove** is grey, ensure there is at least one tick for a logical file to allow the button to be used.

When all changes are complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Searching in Associated Logical Files

If there is a long list of associated logical files, then the list can be searched as follows:
1. Click inside the list under "**Associated Logical Files**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the logical file name.
5. Click OK to start the search.

If the logical file is found, then you are returned to the list with that logical file highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Searching in "Select components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the logical files available. If there is a long list of logical files, then this list can be searched as follows:
1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".

4. In the field "**Search text**" type either the ID or the first characters in the logical file name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated logical files.
7. You may search again if required. You may tick as many logical files as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Associated Logical Files tab

Field	Definition
ID	Each file has an automatic number in the list. Click on the column heading 'ID' to sort the list by ID. Clicking it repeatedly toggles the list sort sequence between numeric ascending and descending. (Display only.)
Name	The name of the associated logical file. Click on the column heading 'Name' to sort the list by Name. Clicking it repeatedly toggles the list sort sequence between alphanumeric ascending and descending. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

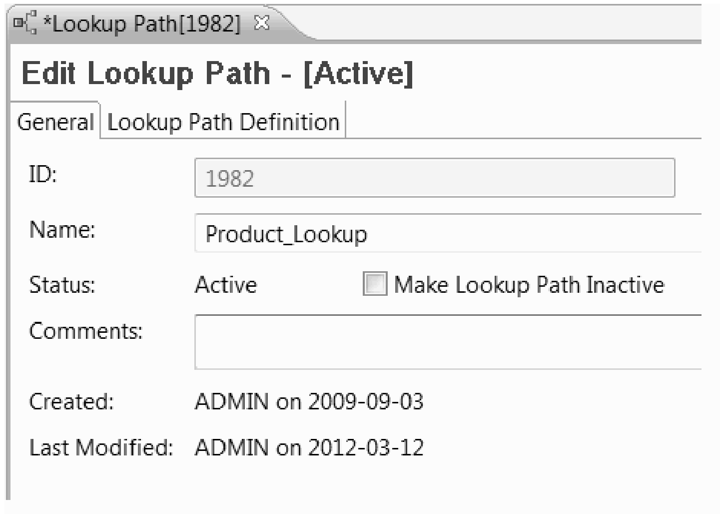
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Lookup Path (General tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to give a lookup path a name and to define few other fields.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Edit Lookup Path errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - General tab

Field	**Definition**
ID	The position in the list of all lookup paths. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among lookup path names in that environment). Examples of permitted names: • Lookup_Dept_Mgr • Company_type_code_lookup These names are not permitted: • 2009_Lookup (doesn't start with a letter) • Head Office Codes Lookup (must not include spaces) • USA/Canada Lookup 1.1 (must not include "/" or fullstop)
Status	Indicates the status of this Lookup Path. A new Lookup Path starts with Inactive by default. (Display only.)
Make Lookup Path Inactive	Tick to explicitly set the status of this lookup path to inactive. This field is disabled if the status is already inactive.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

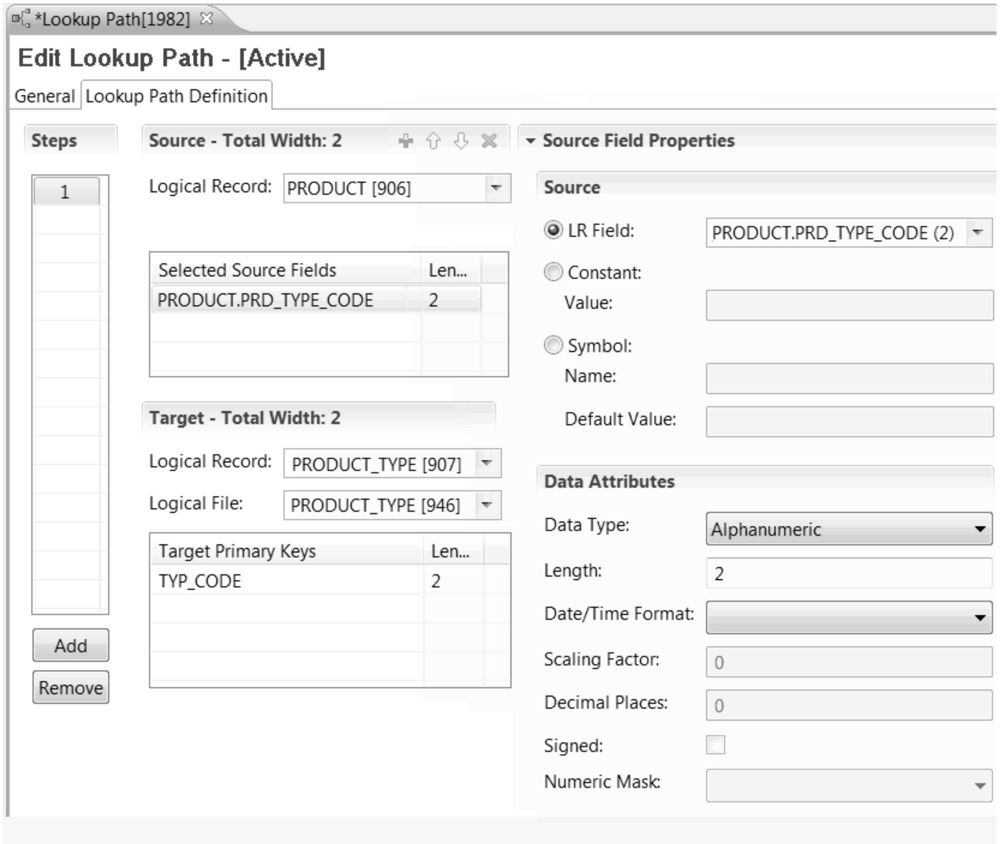
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit Lookup Path (Lookup Path Definition tab) screen help

01 Summary of this topic

The sections in this topic are:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to modify the steps in a lookup path.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Edit Lookup Path errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action - Lookup Path Definition tab

A lookup path allows data from a source file to access a target file. The data from the source file is optionally combined with constants and symbols to create a key. That key consists of selected source fields and must match the primary key of the target file.

For an introduction to constants and symbols, see topic "**Lookup Path overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

A lookup path consists of one or more steps, where each step defines a key that accesses a target file. The color of the step number indicates that status of that step:

- **Black** means an **active** step.
- **Red** means an **inactive** step.
- **Blue** means an **incomplete** step.

Use the recommended actions in the table below.

Recommended actions	Notes
1. Under **Source**, select a **Logical Record**	Makes all fields in the source file available for inclusion in the Selected Source Fields. Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
2. Under **Target**, select a **Logical Record**	Once selected, the heading for the Target section changes to **Target - Total Width: ?** This defines the length of the primary key of the target file. Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
3. Under **Target**, select a **Logical File**	Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical File**" screen.
4. Go to section **04 Action - detail a step** below.	This details one particular step.
5. For an extra step, see section **06 Action - two or more steps** below.	This creates (or removes) an extra step(s).

6. Save the lookup path.	**EITHER:**
	• click (the save icon)
	• **OR** select **File -> Save**
	• **OR** click **Ctrl+S**.
	
	To save a copy of the lookup path with a different name:
	1. **EITHER:**
	  • select **File, Save As**,
	  • **OR** press **Ctrl+Shift+S**
	2. Type a new name
	3. Click **Save** or press **Enter**.

20 Action - Detail a step

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

To complete a step in the lookup path, inside that step the **Source - Total Width** must be equal to **Target - Total Width**. The **Source - Total Width** is the total length of the list of **Selected Source Fields**. The **Target - Total Width** is the length of the primary key for the target logical record.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Add a field</td><td>1. EITHER:
• click (Add a source field),
• OR select Edit, Add a source field,
• OR right click and select Add Source Field,
• OR click Alt+Shift+Insert.
2. Right click the value set in this field and select "Open Editor". This opens the "Edit Logical Record" screen that contains the field.
3. Go to the row in this help table for "Configure a Source field".</td></tr>
<tr><td>Change the order of the field list</td><td>EITHER:
• click (Move source field up) or (Move source field down). See note below when one or both icons are grey.
• OR select Edit and then Move source field up or Move source field down. See note below when one or both menu items are grey.
• OR right click and select Move source field up or Move source field down. See note below when one or both menu items are grey.
• OR click Alt+Shift+Up (Move source field up) or Alt+Shift+Down (Move source field down). See note below if nothing happens.

If any of the following are true:
• The icon is grey,
• OR the menu item is grey,
• OR pressing the given keys does nothing

then this means the one of the following is true:
• A row is not highlighted. You must ensure one row is highlighted.
• OR the action is impossible,
• OR you do not have enough rights to perform this action. You need modify rights to this lookup path to perform this action.</td></tr>
<tr><td>Change the Source Logical Record</td><td>This is only permitted in Step 1. Under Source click on the drop down box for Logical Record. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical record is selected.</td></tr>
<tr><td>Change the Source Logical File</td><td>This field does not display for Step 1. For all steps after that, to change this field you must change the target logical file in the previous step.</td></tr>
<tr><td>Change the Target Logical Record</td><td>Under Target click on the drop down box for Logical Record. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical record is selected.</td></tr>
</table>

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Change the Target Logical File</td><td>Under Target click on the drop down box for Logical File. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical file is selected.</td></tr>
<tr><td>Configure a Source field</td><td>Under Source Field Properties and Source, do the following:
Ensure the radio button for LR Field is selected.
Select a field from the drop down list.
Go to the row in this help table for Set Data Attributes.</td></tr>
<tr><td>Configure a Constant</td><td>Under Source Field Properties and Source, do the following:
Ensure the radio button for Constant Value is selected.
Type data for Value.
Go to the row in this help table for Set Data Attributes.</td></tr>
<tr><td>Configure a Symbol</td><td>Under Source Field Properties and Source, do the following:
Ensure the radio button for Symbol Name is selected.
Type in the symbol name in the field to the right. In logic text, the syntax requires "$" (a dollar sign) before the symbol name, but the symbol name here starts with a letter.
Type data for Default Value.
Go to the row in this help table for Set Data Attributes.</td></tr>
<tr><td>Create a extra <u>step</u></td><td>See section 06 Action - two or more steps below.</td></tr>
<tr><td>Delete a field</td><td>Highlight the relevant row in Selected Source Fields.
EITHER:
click (Delete source field). See note below if icon is grey.
OR select Edit, Delete source field. See note below if menu item is grey.
OR right click and select Delete. See note below if menu item is grey.
OR click Delete. See note below if nothing happens.
If any of the following are true:
The icon is grey,
OR the Delete menu item is grey,
OR pressing Delete does nothing
then this means the one of the following is true:
A row is not highlighted. You must ensure one row is highlighted.
OR you do not have enough rights to perform this action. You need modify rights to this lookup path to perform this action.</td></tr>
</table>

If you want to ...	then ...
Delete a <u>**step**</u>	See section **06 Action - two or more steps** below.
Edit or review the **source logical record**	**EITHER:** • **Right** click the value in field "**Logical Record**" under "**Source**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen. • **OR** **Right** click the value in field "**LR Field**" under "**Source Field Properties**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
Modify a field	1. Ensure the row is highlighted. 2. Choose one of these rows in this help table: • **Change the order**. • Configure a **Source field**. • Configure a **Constant**. • Configure a **Symbol**.
Reorder the field list	See row **Change the order** in this help table.
Save the lookup path	**EITHER:** • click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. To save a copy of the lookup path with a different name: 1. **EITHER:** • select **File, Save As**, • **OR** press **Ctrl+Shift+S** 2. Type a new name 3. Click **Save** or press **Enter**.
Set Data Attributes for a field	Ensure the field is highlighted. Select or type values as appropriate under **Data Attributes**. For more on each field, see heading **Fields - Source Field Properties - Data Attributes section** below. When the Data Attributes are correct, then this field in "Selected Source Fields" is finally complete.

30 Action - Two or more steps

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Modify an existing step	Do the following: 1. Click on the step number. After a short pause, the details of that step display. 2. Go to section **04 Action - detail a step** above.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Add a new last step</td><td>Do the following:
1. Highlight the current last step
2. Ensure selections for Source Logical Record, Target Logical Record and Target Logical File.
3. Underneath the list of steps, click Add.
4. Under Target, select a Logical Record.
5. Under Target, select a Logical File.
6. Go to section 04 Action - detail a step above.</td></tr>
<tr><td>Remove a step and <u>all steps below that</u></td><td>Do the following:
1. Highlight the step number and click Remove. An alternative to the Remove button is to hit the Delete key.
2. A message appears that provides the option to cancel the action.</td></tr>
<tr><td>Save the lookup path</td><td>EITHER:
• click  (the save icon)
• OR select File -> Save
• OR click Ctrl+S.

To save a copy of the lookup path with a different name:
1. EITHER:
  • select File, Save As,
  • OR press Ctrl+Shift+S
2. Type a new name
3. Click Save or press Enter.</td></tr>
</table>

50 Fields - Source section

Field	Definition
Logical Record	The source logical record. Step 1 must have a logical record selected from this box. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. For all steps after that, this field is the target logical record of the previous step and is display only.
Logical File	One of the logical files associated with the logical record above. This field is not required for Step 1. For all steps after that, this field is the target logical file of the previous step. (Display only.)
Selected Source Fields	The names of the selected source fields. The fields may be a logical record field that was selected from the logical record above, or may be a constant or symbol defined for this lookup. Double click on a field to highlight the relevant entries in the Source Field Properties section.
Length	The length of the Selected Source Field in that row. (Display only.)

60 Fields - Source Field Properties - Source section

Field	Definition
LR Field	A field in the source logical record for this step of the lookup. Click this radio button and select a logical record field from the drop down box. If the radio button is not selected, the drop down field is disabled.
Constant	Click this radio button to define a constant value. Use the Value field for the actual value itself.
Value	The value of a constant. The Constant radio button must be selected to enter a value in this field.
Symbol	Click this radio button to define a symbol. A symbol is a variable that is controlled by logic text in the view. In logic text, the syntax requires "**$**" (a dollar sign) before the symbol name, but the actual symbol name starts with a letter. The field Default Value below applies to this symbol.
Name	The name of this symbol (required if the radio button for symbol is selected). Up to 254 characters.
Default Value	The default value of this symbol (required if the radio button for symbol is selected). Up to 254 characters.

70 Fields - Source Field Properties - Data Attributes section

Field	Definition
Data Type	Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal.
Length	The length of this field. A number up to five digits. • Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.** • Values 1-16 for data types **packed, packed sortable, and zoned decimal.** • Values 1, 2, 4, or 8 for data types **binary and binary sortable.** • Values 1-10 for data type **binary coded decimal**. For a **constant**, set the length based on the Value field of the **Source Field Properties Source** section
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Scaling Factor	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Decimal Places	The number of decimal places for this field, up to value nine. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)

Field	Definition
Signed	Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is Alphanumeric. This field is also disabled if the field Data Type is Binary and you have selected a value in the field Date/Time Format. (Optional.)
Numeric Mask	This field specifies the mask to be used on column output. Choose one of the options from the drop down list. (Optional.)

80 Fields - Target section

Field	Definition
Logical Record	The target logical record, which must have a primary key defined, and must be in the current environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Logical File	The target logical file which must associated with the target logical record in the current environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Target Primary Keys	The names of the target logical record fields that are primary keys. (Display only).
Length	The length of the Target Primary Key in that row. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

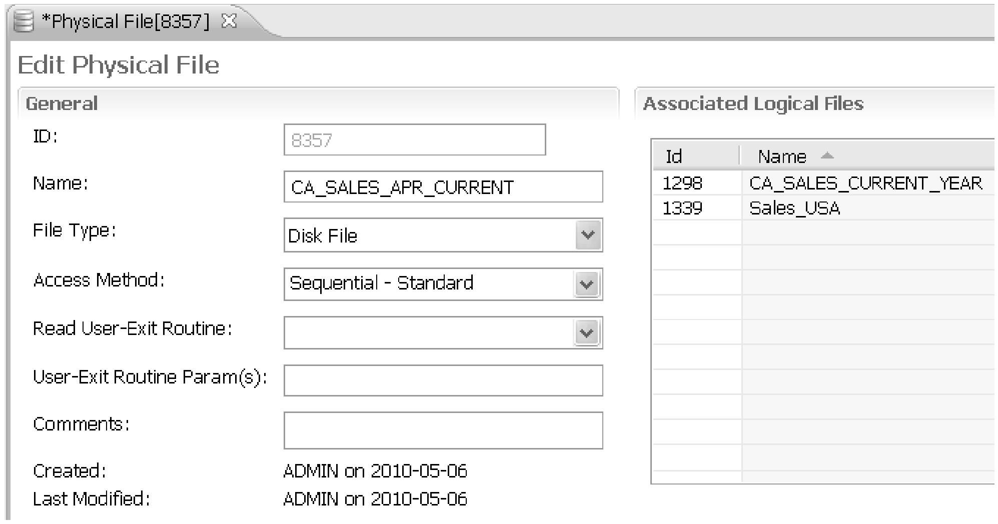
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

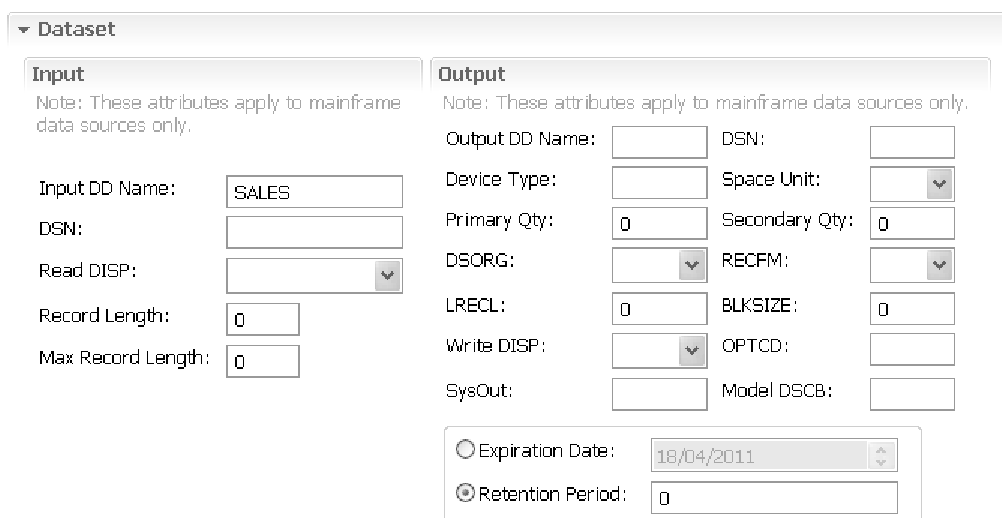
Edit Physical File screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights





The above screen images have been compressed horizontally and vertically for ease of printing and display. Some fields are wider and taller than shown.

Use this screen to edit a physical file.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular physical file in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Edit Physical File errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action - sections General, SQL and Dataset (Input, Output)

This screen has three sections:
1. **General section** - mandatory for a new physical file.
2. **SQL section** - opens automatically for **DB2 via SQL access**. Enter any SQL parameters.
3. **Dataset section** - is relevant for **sequential access**. Enter any relevant **Input** and **Output** parameters.

Enter any relevant parameters in the above sections.

Optionally, **right** click any non blank value in the field "**Read User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When work on this Physical File is complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Action - section Associated Logical Files

Optionally, **right** click any logical file listed in this table and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Another action for this section is to **search the list of logical files** (which is useful for a long list). Do the following:
1. Click inside the list under "**Associated Logical Files**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the logical file name.
5. Click OK to start the search.

If the logical file is found, then you are returned to the list with that logical file highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - General section

Field	Definition
ID	The position in the list of all physical files. (Display only.)
Name	The name of this file inside SAFR (which may not be the same as the file name on the mainframe). This SAFR name is part of the metadata of SAFR. For the actual name of this file on the mainframe, see the DSN fields under the Input and Output screens below. Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among physical file names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
File Type	Choose one of: Disk File, Pipe, Tape File, Token.
Access Method	The method to access the physical file. Choose one of: DB2 via SQL, DB2 via VSAM, Sequential-Cylinder Read, Sequential-Standard, VSAM-ordered, VSAM-unordered. If you choose **DB2 via SQL**, then the SQL section opens automatically. If you choose any of the other values, then proceed to the Dataset section.
Read User-Exit Routine	Choose from a list of User-Exit Routines that are all type Read. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If you cannot find the selection you require, see your system administrator. In rare cases, the User-Exit Routine named in this field may no longer be type Read due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
User-Exit Routine Parameters	The data parameters or arguments passed to the User-Exit Routine selected above. Up to 32 characters. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - SQL section

Field	Definition
DD Name	A symbolic name used by the SAFR performance engine to refer to this SQL physical file definition. Similar to a DD name in JCL and has the same syntax. Up to eight characters. This field is always the same as the Input DD Name field under the Dataset Input section. (Optional.)
Connection String	The information required by the SAFR performance engine to connect to the database containing the event data (i.e. the target of the SQL). For example, for a mainframe DB2 environment, this field is the four-byte DB2 subsystem on which the DB2 table exists. Up to 48 characters. (Optional.)
Table Name	The name of the DB2 table that is the target of the SQL. Up to 48 characters. (Optional.)
Row Format	Choose SQL Standard or DB2 Internal. If your Access Method in the first screen is **DB2 via SQL**, this field is **'SQL Standard'** and is display only.
Return Null Indicator	Tick this field to display a null indicator value in the output data where relevant. The default is not to display any null indicators. (Optional.)
SQL	The SQL statement to retrieve the event data rows. Up to 1280 characters. (Optional.)

70 Fields - Dataset section - Input

Field	Definition
Input DD Name	The Data Definition (DD) name - a symbolic name used by the SAFR performance engine to refer to this input file in the JCL. Up to eight characters. This field is always the same as the DD Name field under the SQL section. (Optional.)
DSN	DSN means dataset name on your mainframe. Up to 44 characters. (Optional.)
Read Disposition	The data set disposition (DISP) parameter value to the SAFR Performance Engine in the event that it is dynamically allocated. (Optional.)
Record Length	The length of a record. Used for datasets with fixed length records. Up to 15 digits. (Optional.)
Max Record Length	The maximum length of a record. Used for datasets with variable length records. Up to 15 digits. (Optional

80 Fields - Dataset section - Output

Field	Definition

Field	Definition
Output DD Name	The Data Definition (DD) name - a symbolic name used by the SAFR performance engine to refer to this output file in the JCL. Up to eight characters. (Optional.)
DSN	DSN means dataset name on your mainframe. Up to 44 characters. (Optional.)
Device Type	The mainframe storage device type. Up to eight characters. (Optional.)
Space Unit	The space unit on the storage device. Choose one of Blocks, Cylinders, Tracks. (Optional.)
Primary Quantity	The primary quantity of space units to be allocated for this dataset. Up to nine digits. (Optional.)
Secondary Quantity	The secondary quantity of space units to be allocated for this dataset if the primary quantity is used up. Up to nine digits. (Optional.)
DSORG	The dataset organization. Choose one of Direct Access, Partitioned, Physical Sequential or VSAM or blank. (Optional.)
RECFM	The record format. Choose one of FB (fixed block), FBA (fixed block with print attribute), VB (variable block) or VBA (variable block with print attribute) or blank. (Optional.)
LRECL	The logical record length. Up to nine digits. (Optional.)
BLKSIZE	The block size. Up to nine digits. (Optional.)
Write Disposition	The data set disposition (DISP) parameter value to the SAFR Performance Engine in the event that it is dynamically allocated. (Optional.)
OPTCD	A sub-parameter of IEBGENER, which is a mainframe utility that converts to and from EBCDIC and ASCII. OPTCD is a sub-parameter of the DCB parameter for the JCL of this utility. OPTCD refers to optional services in conversion of data. Up to nine characters. (Optional.)
Sysout	The message class for the output of the JCL for the SAFR Performance Engine. Up to 48 characters. (Optional.)
Model DSCB	The name of a dataset control block to use as a model for this dataset. Up to 48 characters. (Optional.)
Expiration Date	The expiration date of the file, given by a radio button with a date selection to the right. Select this option and provide a date during the create of a new physical file. SAFR selects this button automatically when you edit an existing physical file that already has an expiration date. You can modify the expiration date in this situation. (Optional.)
Retention Period	The retention period for the file (in days) given by a radio button with a text area to the right. If relevant, select this option. Up to nine digits. (Optional.)

90 Fields - Associated Logical Files section

Field	Definition
ID	The position in the list of all logical files. (Display only.)
Name	The name of a logical file associated with this physical file. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

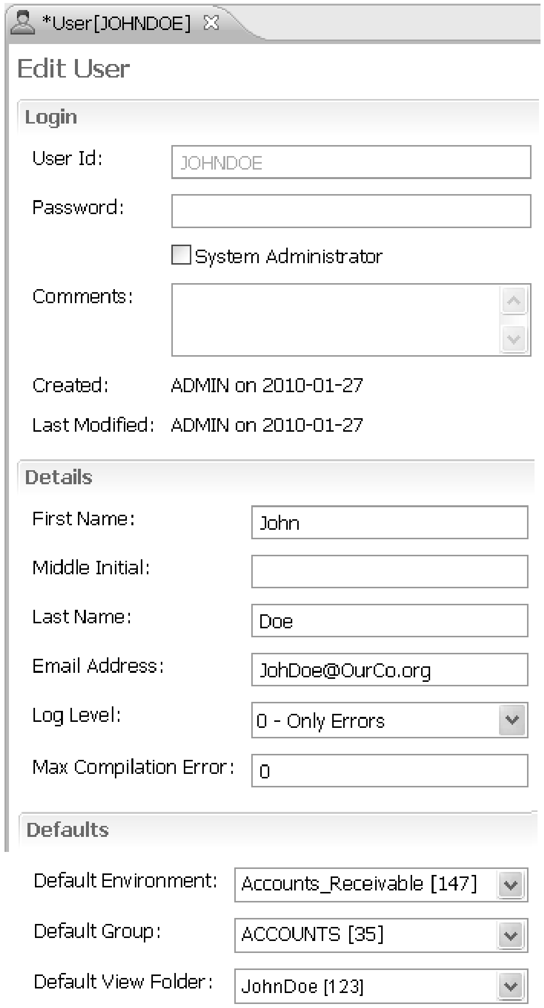
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit User screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to edit user records.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**Edit User errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values on this screen.

Optionally, **right** click any value already in the field "**Default Environment**" and select "**Open Editor**". This opens the "**Edit Environment**" screen.

Optionally, **right** click any value already in the field "**Default Group**" and select "**Open Editor**". This opens the "**Edit Group**" screen.

Optionally, **right** click any value already in the field "**Default View Folder**" and select "**Open Editor**". This opens the "**Edit View Folder**" screen if the view folder is in the environment of your current session. The words "Open Editor" are grey if the view folder is not in the environment of your current session.

When required, save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

If a default environment, default group or default view folder is assigned and is no longer required, then click the **Refresh defaults** button at right or press Alt+F6.

Make the user a member of their default group or at least one group using topic "**Modifying group membership**". To change the permissions in the group, see topics "**Modifying group permissions by group**" and "**Modifying group permissions by environment**".

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Login section

Field	Definition
User ID	A unique identifier for this user. Type 4 to 8 characters, composed of letters, numbers, and special characters ! @ # $ % ^ & * and the underscore (_). Must be unique among user names in this SAFR database.
Password	As you type the screen shows only asterisks. A string of up to 20 characters. (Optional.)
Comments	Useful notes, up to 200 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - Details section

Field	Definition
System Administrator	If ticked, the user has system administrator rights. If not ticked, this is a general user. Note that a general user can become an environment administrator with the help of group rights which are not configured here. (Optional.)

Field	Definition
First Name	A string of up to 50 characters. (Optional.)
Middle Initial	Any single character. (Optional.)
Last Name	A string of up to 50 characters. (Optional.)
Log Level	Choose from 0-Errors Only, 1-High Level, 2-Detail Level. (Optional.) Log level 0 - the error log contains only error messages. Log level 1 - the error log contains error messages and various events like buttons clicked. Log level 2 - the error log contains all log level 1 data with database data such as SQL statements and procedure calls.
Max Compilation error	The maximum number of errors SAFR displays when compiling a view before it stops. A number up to four digits. Zero is allowed. The default value is 20.

70 Fields - Default section

Field	Definition
Default Environment	Choose an environment from the drop down list. This environment is the first environment that the user sees during login to SAFR. The user can choose a different environment during login. The only environments the user can select during login are those environments where the user has access rights. For an existing General User, this drop down list consists of all Environments associated with any Group that the user is a member of. For an existing system administrator, this drop down list consists of all environments. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Default View Folder	Choose from a drop down list of view folders. All views created by the user are stored in this view folder, unless the user explicitly chooses a different view folder for that view. The only view folders the user can select are those folders where the user has access to that environment. The Default Environment field must have a value to set this field. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Default Group	Choose from a drop down list of groups. Set this field only for a general user (not a system administrator). This group is the first group that the user sees during login to SAFR. The user can choose a different group during login. The only groups the user can select during login are those groups where the user is a member. The Default Environment field must have a value to set this field, and the default group must have access to the default environment chosen. A value in this field does not make the user a member of that default group - use the Group Membership screen to do this. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

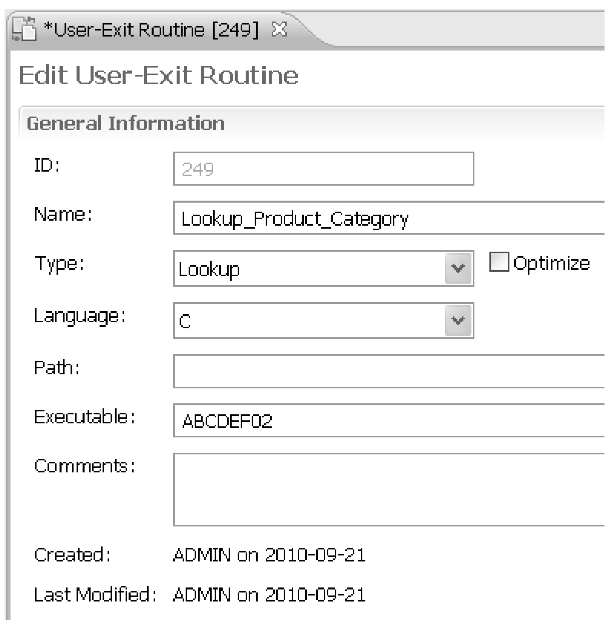
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit User-Exit Routine screen help

01 Summary of this topic

The sections in this topic are as follows:
- "02 Screen function and rights"
- "05 Errors"
- "10 Action on this screen" on page 94
- "50 Fields" on page 94
- "99 Keyboard Shortcuts" on page 94

02 Screen function and rights



Use this screen to edit a user-exit routine record.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular user-exit routine in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Edit User-Exit Routine errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all user-exit routines. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among user-exit routine names in this environment). Examples of permitted names: • Accounts_Format_401 • Read_Special_Fields These names are not permitted: • 2009_Write_Routine (doesn't start with a letter) • Special Lookup (must not include spaces) • USA/Canada Format 1.1 (must not include "/" or fullstop)
Type	The function of the user-exit routine.
Optimize	This tells SAFR to avoid an unnecessary read. Check this field to tell SAFR to reuse previously read lookup values if the record keys/value have not changed. (Optional.)
Language	The language of the user-exit routine.
Path	The path to the user-exit routine. Up to 1016 characters. (Optional.)
Executable	The executable name must be unique within an environment. Up to 18 characters, consisting of letters (both cases), numbers, #, $, and the underscore (_).
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.)
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

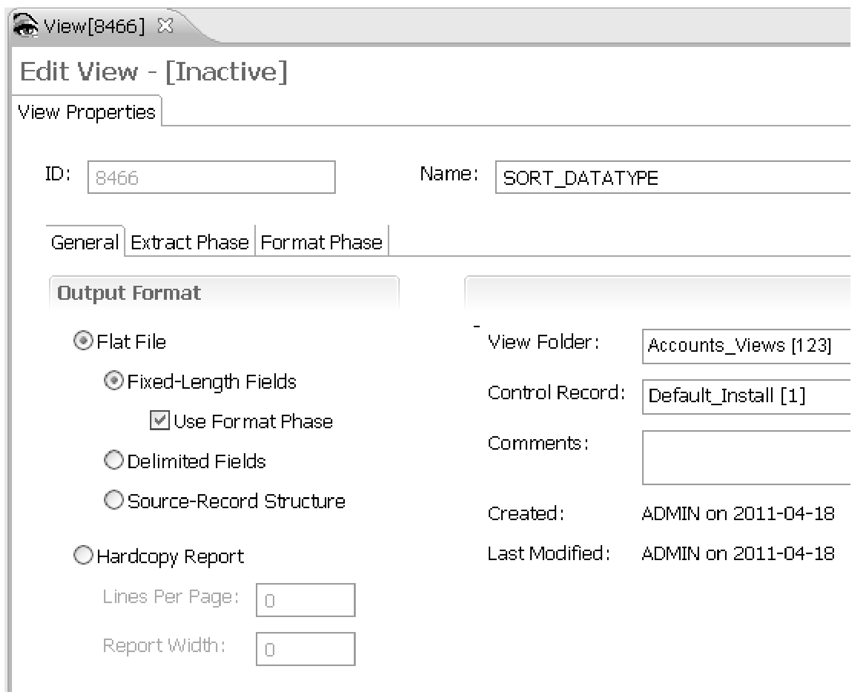
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit View (View Properties, General tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.
  - **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
  - **Format Phase sub-tab**

    This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.
  - **Header/ Footer sub-tab**

    This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

  The "**View Properties**" tab can also be called the "**Properties**" tab.
- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button  or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**Edit View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Properties, General" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, General**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**View Folder**" and select "**Open Editor**". This opens the "**Edit View Folder**" screen.

Optionally, **right** click any value already in the field "**Control Record**" and select "**Open Editor**". This opens the "**Edit Control Record**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - above the General sub-tab

Field	Definition

Field	Definition
ID	The position in the list of all logical records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among view names in this environment). Examples of permitted names: • Report_CA_SF_Accounts_Receivable_2009 • Update_Sales_DivisionC76 These names are not permitted: • 2009_Expenses_Report (doesn't start with a letter) • New York Sales Update (must not include spaces) • USA/Canada Summary Report 1.1 (must not include "/" or fullstop)

60 Fields - General sub-tab

Field	Definition
Flat File	Select this button to indicate that the output of this view is a flat file. By default selecting this button also selects Fixed Length Fields and Use Format Phase, although these defaults can be changed. (Optional).
Fixed Length Fields	Select this button to indicate that the fields in the output flat file are of fixed length. (Optional.)
Use Format Phase	Tick this box to include a format phase for this view. (Optional.)
Delimited Fields	Select this button to indicate that the fields in the output file are delimited. A format phase is mandatory if this button is selected. See the Delimiters section in the Format Phase sub-tab to choose the delimiting characters. (Optional.)
Source-Record Structure	Select this button to indicate that the output flat file has the same structure as the source record. A format phase is not possible if this button is selected. (Optional.)
Hardcopy Report	Select this button to indicate the output of the view is a hardcopy report. If this field is selected, the Lines Per Page field and the Report Width field display (Optional.)
Lines Per Page	The number of lines per page for the output hardcopy report. An integer between 0 and 999999999. This field is 60 by default and can be changed. This field is required if the Hardcopy Report button is selected.
Report Width	The width of the output hardcopy report. This field is 132 by default and can be changed to any integer between 0 and 999999999. (Optional).

Field	Definition
View Folder	Select the view folder to store this view. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. The only view folders available to choose are those view folders where you have access rights.
Control Record	Select a control record for this view. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.)
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

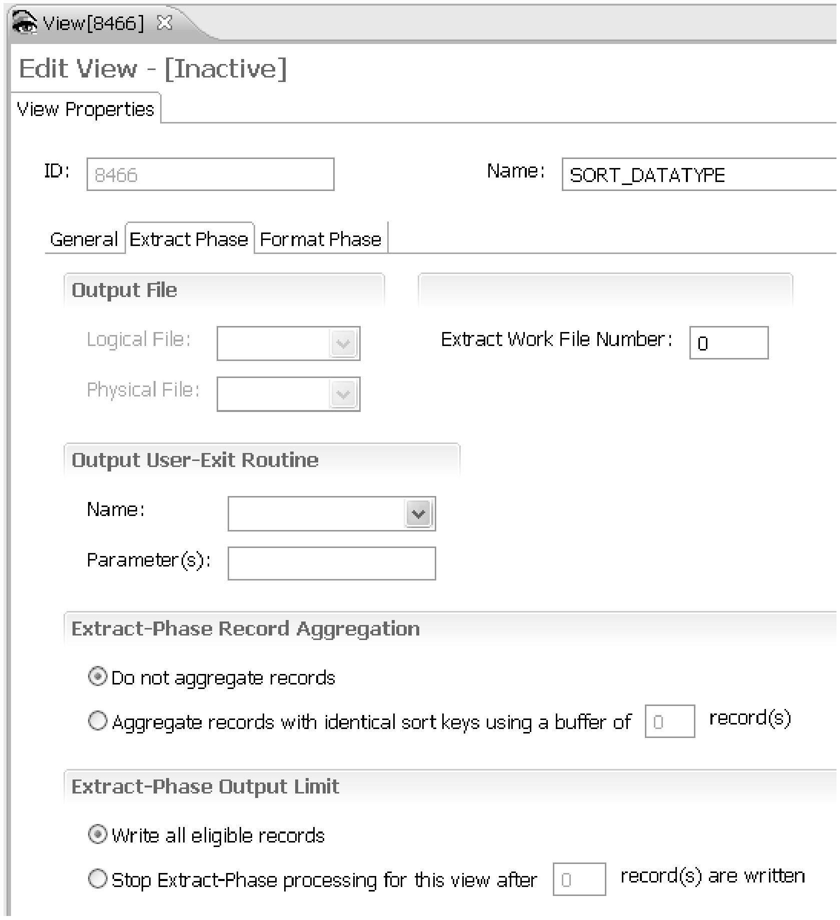
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit View (View Properties, Extract Phase tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

– **Extract Phase sub-tab**

This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.

– **Format Phase sub-tab**

This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

– **Header/ Footer sub-tab**

This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**Edit View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Properties, Extract Phase" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, Extract Phase**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**Logical File**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Optionally, **right** click any value already in the field "**Physical File**" and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

Optionally, **right** click any value already in the field "**Name**" for "**Output User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - Output File section

Field	**Definition**
Logical File	Select an output logical file for this view. Click the drop down arrow to see a list of logical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

Field	Definition
Physical File	Select a physical file that matches the given logical file in the field above. This drop down field lists the relevant physical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

60 Fields - Output User-Exit Routine section

Field	Definition
Name	Select a User-Exit Routine from the drop down list. All the routines are of type Write. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Write due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Parameters	Input data for the user-exit routine, up to 32 characters. (Optional.)

70 Fields - Extract-Phase Record Aggregation section

Field	Definition
Do not aggregate records	Select this button to stop aggregation of output records. (Optional.)
Aggregate records with identical sort keys using a buffer of ? records	Select this button to aggregate records with identical sort keys using a buffer with a limit of the ? field. The ? value is a positive integer up to 9 digits. The default for the ? value is 4000. (Optional.)

80 Fields - Extract-Phase Output Limit section

Field	Definition
Write all eligible records	Select this button to ensure that all eligible records are output. This button is selected by default. (Optional.)
Stop Extract-Phase processing for this view after ? records are written	Select this field to stop the processing of this view after ? records are written. The ? value is a positive integer up to 9 digits. The default for the ? value is 100. (Optional.)
Extract Work File Number	The sequence number of the Work File passing data from the Extract Phase to the Format Phase. This field can only be used if a Format Phase is enabled for this view. The value is a positive integer up to 9 digits. The default value of this field is 1. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and

- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

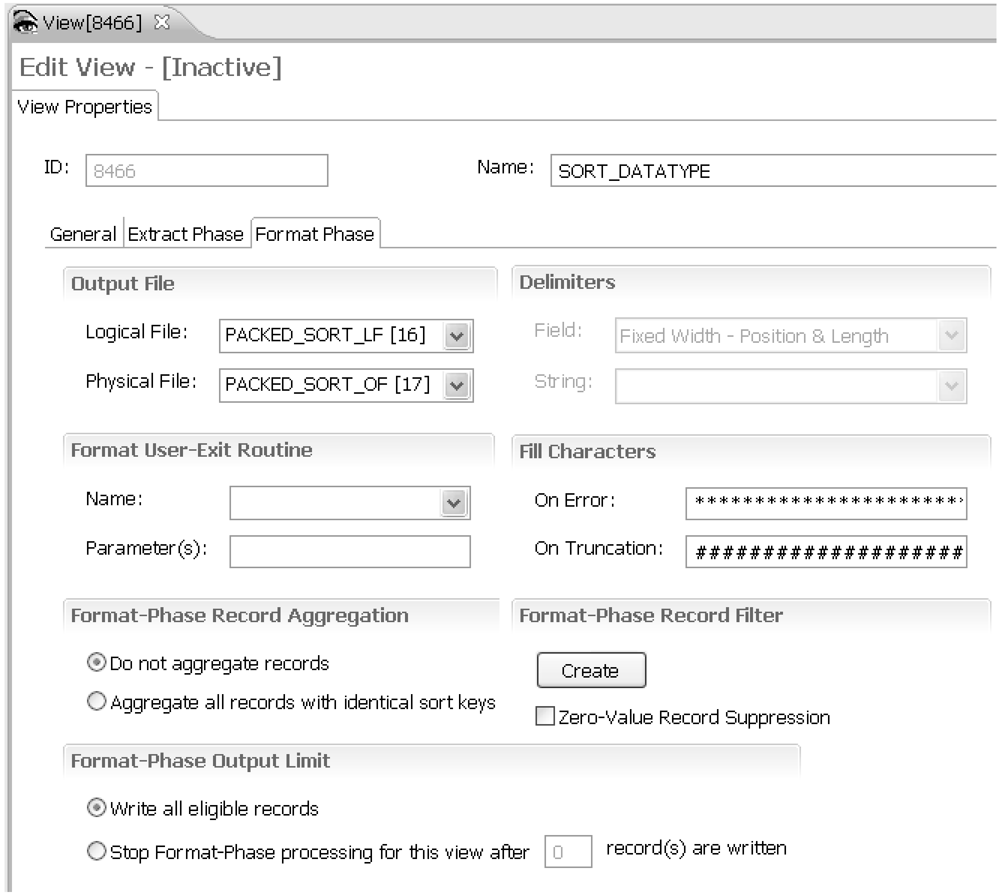
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit View (View Properties, Format Phase tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



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Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

  - **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
  - **Format Phase sub-tab**

    This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.
  - **Header/ Footer sub-tab**

    This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

  The "**View Properties**" tab can also be called the "**Properties**" tab.
- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button  or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:
- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**Edit View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

07 Calculation Test (CT) fields

A **Calculation Test** field is either a numeric aggregate field or a field involved in a column calculation. For example, consider a view with 3 columns:

- Column 1 - Product Number - Alphanumeric (source file field)
- Column 2 - Total Amount - Packed (source file field)
- Column 3 - Rebate Amount - Packed (source file field)

At the moment, none of these fields are CT fields.

Add **Column 4 - Net Amount** with a Column Source Type of "Formula" and Data Type of "Packed". Give this field the format-phase calculation logic text of :
COLUMN = COL.2 - COL.3

Now columns 2, 3, and 4 are CT columns. If these three columns are zero, and the field **Zero-Value Record Suppression** is ticked, then this record is not output.

10 Action on the "View Properties, Format Phase" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, Format Phase**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**Logical File**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Optionally, **right** click any value already in the field "**Physical File**" and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

Optionally, **right** click any value already in the field "**Name**" for "**Format User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - Output File section

Field	Definition
Logical File	Select an output logical file for this view. Click the drop down arrow to see a list of logical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Physical File	Select a physical file that matches the given logical file in the field above. This drop down field lists the relevant physical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

55 Fields - Format User-Exit Routine section

Field	Definition
Name	Select a User-Exit Routine from the drop down list. All the routines are of type Format. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Format due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Parameters	Input data for the user-exit routine, up to 32 characters. (Optional.)

60 Fields - Format-Phase Record Aggregation section

Field	Definition
Do not aggregate records	Select this button to stop aggregation of output records. (Optional.)
Aggregate records with identical sort keys	Select this button to aggregate records with identical sort keys. (Optional.)

65 Fields - Format-Phase Output Limit section

Field	Definition
Write all eligible records	Select this button to ensure that all eligible records are output. This button is selected by default. (Optional.)

Field	Definition
Stop Format-Phase processing for this view after ? records are written	Select this field to stop the processing of this view after ? records are written. The ? value is a positive integer up to 9 digits. The default for the ? value is 100. (Optional.)

70 Fields - Delimiters section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition
Field	The method to delimit the fields in the output record. A delimiter of comma can be used, for example, for output files that can be imported into Excel spreadsheets. Choose from one of the following: • Back Slash • Colon • Comma • Ctrl-A • Fixed Width-Position & Length This field is optional.
String	The method to indicate a string value. Choose from one of the following: • Double Quote • No String Delimiter • Single Quote This field is optional.

75 Fields - Fill Characters section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition
On Error	The fill character(s) to display when an error has occurred. Any character up to 64 characters. The default value is asterisk *. (Optional).
On Truncation	The fill character(s) to display when a value is truncated. Any character up to 64 characters. The default value is the Number sign #. (Optional).

80 Fields - Format-Phase Record Filter section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition

Field	Definition
Create	Click this button to open the Create New Format-Phase Record Filter screen, and the Logic Text Helper screen.
Zero-Value Record Suppression	Tick this box to avoid output of records with zero in numeric **CT (Calculation Test)** fields. (This field is optional.) For more discussion, see section "**Calculation Test (CT) fields**" above.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

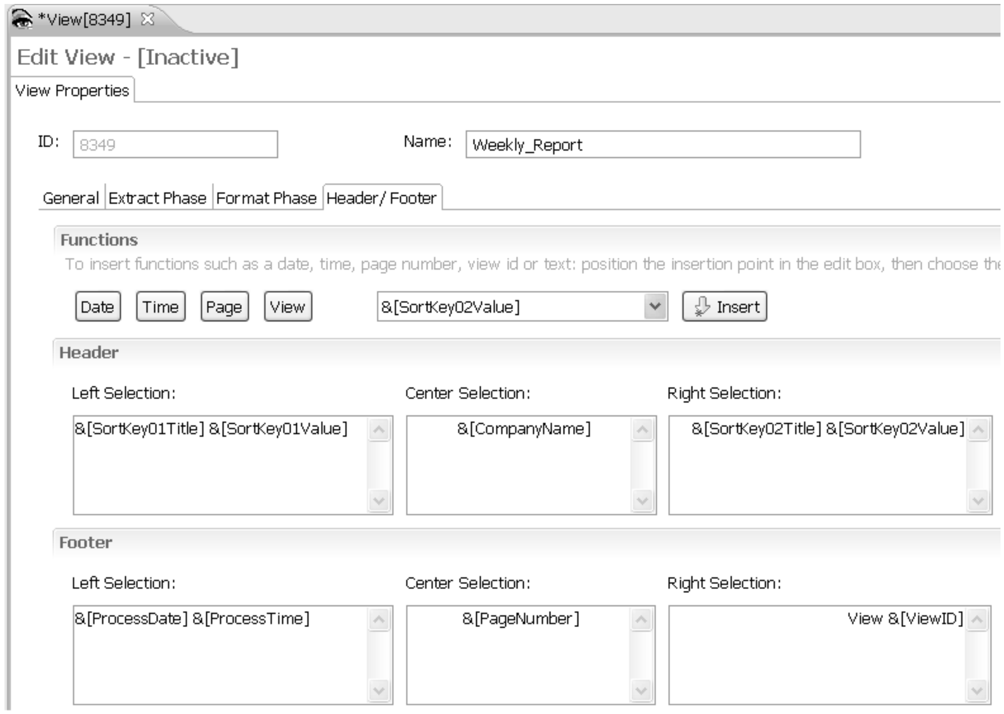
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit View (View Properties, Header/ Footer tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.
  - **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
  - **Format Phase sub-tab**

This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

– **Header/ Footer sub-tab**

This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**Edit View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

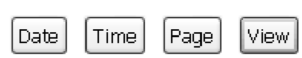
10 Action on this screen

The header or footer are both split into three selections: **Left**, **Center** and **Right**.

Headers and footers typically contain useful information for long hardcopy reports such as page numbers, dates, and sort keys. This screen allows creating a header and footer specifically for this view (this hardcopy report).

A header or footer selection area can use a function by using text such as **&[PageNumber]** for the page number. If this text is changed in some way, then the function no longer works, and the literal text is used. For example, if the page number text is changed to **&[PPPageNNNumber]** then these actual characters are printed in the header or footer, rather than the page number. The text for functions must not be changed, although text or spaces can be placed before and after that function text.

Make changes to the Header and Footer as follows:

If you want to ...	then ...
Add your own text (such as "Accounts Report").	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Type in the text you require.
Delete existing text in a header or footer.	1. **Highlight any existing text** in one of the header or footer selection areas. 2. Press the **Delete** key.
Insert function text for the **Date**, **Time**, **Page** number or **View** number in a header or footer.	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Press the relevant button: 
Insert function text from the **drop down box under "Functions"** into a header or footer.	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Select the function text from the drop down box under section "**Functions**". 3. Press 
Save changes to the view	• **EITHER** click  (the save icon), • **OR** select **File, Save**, • **OR** press **Ctrl+S**.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields

Field	Definition
Functions (drop down)	Provides a list of function text. Add to a header or footer selection area as described in "Action on this screen" above. (Optional.)
Header Left Selection	Area for text for the left hand side of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Header Center Selection	Area for text for the center of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Header Right Selection	Area for text for the right hand side of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Left Selection	Area for text for the left hand side of the footer. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Center Selection	Area for text for the center of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Right Selection	Area for text for the right hand side of the footer. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

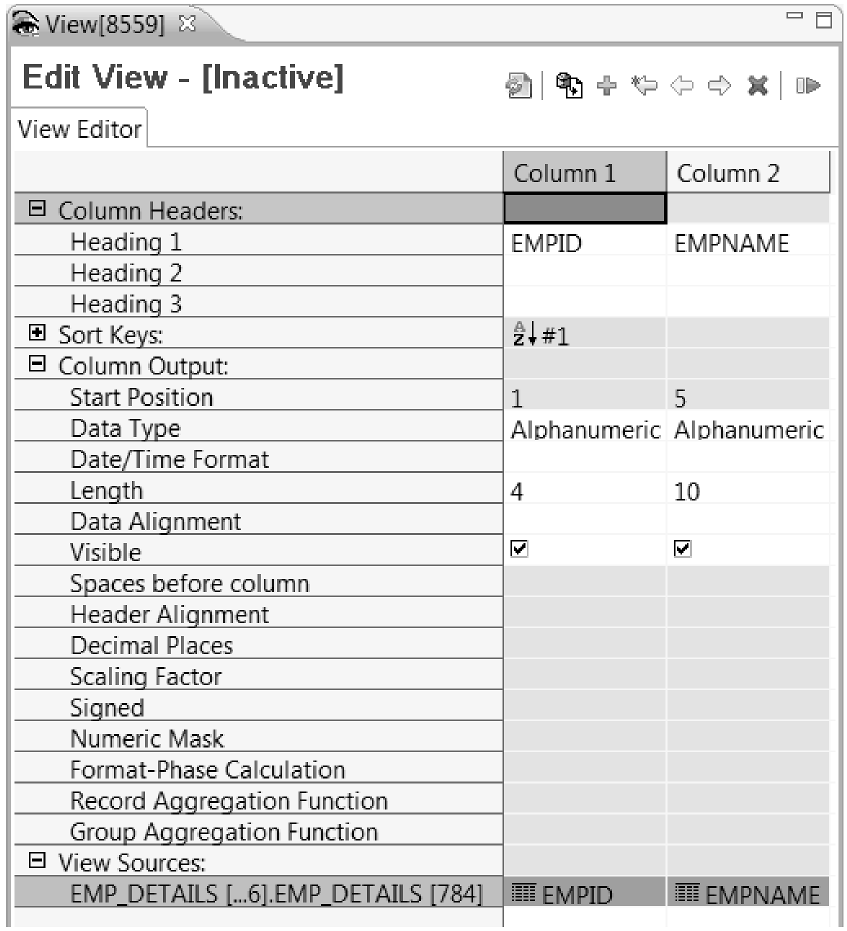
Edit View (View Editor tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

- “99 Keyboard Shortcuts” on page 130

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

– **Extract Phase sub-tab**

  This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.

– **Format Phase sub-tab**

  This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

– **Header/ Footer sub-tab**

  This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**Edit View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Editor" tab

The first action for a view is usually about the input files which are called **view source files**. To define these, see "Add a **view source**" in the table below.

Once defined, the view source files are listed as light blue rows under "**View Sources**" in the column immediately under "View Editor". If present, double click on the plus + sign to the left of "View Sources" to expand the list of view source files.

Note that in general, in any column **double click on any plus + sign** on the left to expand the rows, and **double click on any minus - sign** to collapse rows.

Most of the action on the "View Editor" tab focuses on the **columns** each with heading "Column X". Each column describes a field in the logical record of the output file. Each column has a "**Column Source Type**" to classify the processing for that column. The Column Source Type can be:

- EITHER a **field** from a view source file,
- OR a **constant**,
- OR a **formula** which is logic text,
- OR a **lookup field** which uses a lookup path.

To configure a particular column as one of these choices, see "**Define a Column Source Type**" in the table below. This is the most important action in the table below.

Remember that to switch between the "**View Editor**" tab and the "**View Properties**" tab click  (the **Show Grid / Properties** button) or press F9 or select **Edit, Show Grid / Properties**.

Remember to **right click** on any cell in the grid for a choice of actions, all described in the table below.

Overall, the actions on this screen are as follows:

If you want to ...	**then ...**
Activate the view	The current screen heading must contain the text **[Inactive]**. If the heading contains the text **[Active]** then the view is already activated and the view is ready to run in the SAFR Performance Engine. 1. To activate, • **EITHER** click , • **OR** press **F5**, • **OR** click **Action, Activate / Inactivate View**. 2. If activation is **unsuccessful** you see the screen **View Activation Errors**. For help with that screen see topic "**View Activation Errors screen help**". That topic is elsewhere in this PDF - see the table of contents. 3. After a **successful** activation, the heading displays **[Active]**. Once the view is "Active", repeating step 1 inactivates the view - see "**Inactivate** the view" below in this table.
Add a column at left of existing column	See "**Insert a column** to left of existing column" below in this table.
Add a column at right hand end	To add a column at the right hand end (or to create the first column), • **EITHER** click (Add column). • **OR right** click anywhere in the grid and select **Add column**, • **OR** click **Alt-Insert** , • **OR** click **Edit, Add column**. To modify cells in the new column see "**Define a Column Source Type**" and "**Edit** a cell" below in this table. As a comparison, see "**Insert a column** to left of existing column" below in this table.
Add a view source	To add a view source, do the following: 1. Launch the "Add View Source" window as follows: • **EITHER** click , • **OR right** click anywhere in the grid and select **Add view source**, • **OR** click **Shift-Insert**, • **OR** click **Edit, Add view source**. 2. The "**Add View Source**" screen appears. Select a logical record and logical file and click OK. 3. Once you have clicked OK, a light blue cell appears under **View Sources**.

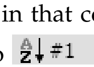
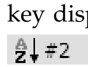
If you want to ...	then ...
Copy a column	1. Click on any grey area in the relevant column so that the cell is highlighted. 2. Do the following: • **EITHER right** click and select **Copy**, • **OR** press Ctrl+C, • **OR** click **Edit, Copy**. This is usually in preparation for "**Paste left** of a column" or "**Paste right** of a column" below in this table.
Create **Extract Record Filter** logic text	This logic text applies to a view source file. 1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**View Source Properties**" screen appears. Double click in the field to the right of "**Record Filter**". 3. Click ... to display the **Create New Extract Record Filter** screen. Use that screen to create Extract Record Filter logic text.
Create **Extract Column Assignment** logic text for a column	1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, select "**Formula**". 3. Double click in the field to the right of "**Column Source Value**". 4. Click ... to display the **Create New Extract Column Assignment** screen or the **Edit Extract Column Assignment** screen. Use either screen to create Extract Column Assignment logic text for this column.
Create **Format-Phase Calculations** logic text for a column	This logic text can also be called **Format Column Calculation** logic text. The view must have a format phase. In the relevant column in the row marked **Format-Phase Calculation**, a grey cell means that column cannot have a Format-Phase Calculation logic text applied. In this row, only columns that are numeric and are not part of a sort key have a cell with a white or blue background which indicates this logic text is permitted. 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click ... to display the **Create New Format-Phase Calculation** screen or the **Edit Format-Phase Calculation** screen. Use that screen to create Format-Phase Calculation logic text for this column.

If you want to ...	then ...
Create **Format Record Filter** logic text	1. Your view must have a format phase. If you need help configuring a format phase, see screen help for the "**View Properties, General**" tab on the "New View" or "Edit View" screen. 2. When you have a format phase, go to the "**View Properties, Format Phase**" tab and see screen help for details on creating Format Record Filter logic text.
Deactivate the view	See "**Inactivate** the view" below in this table.
Define a Column Source Type	The relevant column to define (or redefine) must already exist. If you need to create a new column, see these rows in this table: • "**Add a column** at right hand end" • "**Insert a column** to left of existing column" To define (or redefine) the "Column Source Type" for a column, see one of the following rows in this table: • "Define a **field** from a view source file" • "Define a **constant**" • "Define a **formula**" • "Define a **lookup field**" Once a "Column X" is defined, you can optionally perform "Make **sort** key" below in the table. For any defined "Column X", change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.
Define a **constant**	You require a column to be a constant value. Do the following: 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, ensure you have selected "**Constant**". 3. Double click in the field to the right of "**Column Source Value**". 4. Type the value for this constant. When complete, press Enter. 5. Change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.

If you want to ...	then ...
Define a **field** from a view source file	You require a column to be a field in a view source file. Do the following: 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, ensure you have selected "**Source File Field**". 3. Double click in the field to the right of "**Column Source Value**". In the drop down box, select the source file field for this column. 4. Optionally perform "Make **sort** key" below in the table.
Define a **formula**	You require a column to be a calculated from a formula. All formulas for columns must use logic text. The two choices are as follows: • For **Format-Phase Calculations** logic text, see "Create **Format-Phase Calculations** logic text for a column" above in this table. • For **Extract Column Assignment** logic text, do the following 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, select "**Formula**". 3. Double click in the field to the right of "**Column Source Value**". 4. Click  to display the **Create New Extract Column Assignment** screen or the **Edit Extract Column Assignment** screen. Use either screen to create Extract Column Assignment logic text for this column. Once a "Column X" is defined, you can optionally perform "Make **sort** key" below in the table. Change cells in the "Column X" by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.

If you want to ...	then ...
Define a **lookup field**	You require a column to be a lookup field. Do the following: 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, ensure you have selected "**Lookup Field**". 3. Double click in the field to the right of "**Lookup LR**". In the drop down box, select a logical record that is the target of the lookup path you require. See your system administrator if you cannot see the lookup record you require. 4. Double click in the field to the right of "**Lookup Path**". In the drop down box, select the lookup path you require. See your system administrator if you cannot see the lookup path you require. 5. Double click in the field to the right of "**Lookup Field**". In the drop down box, select the lookup field you require. See your system administrator if you cannot see the lookup field you require. 6. Press Enter. 7. Optionally perform "Make **sort** key" below in the table. 8. Change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.
Define a **sort key**	See "Make **sort** key" below in this table.
Define a **source file field**	See "Define a **field** from a view source file" above in this table.
Define a **view source**	See "Add a **view source**" above in this table.
Delete a column(s)	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To highlight more than one column, hold down the Control key and click on any grey area in another column. This creates a group of highlighted columns. To remove a column from that group, keep the Control key pressed and click on that grey highlighted cell again. There are now one or more highlighted columns. 3. To delete, • **EITHER** click (Delete), • **OR right** click and select **Delete**, • **OR** click the **Delete** key, • **OR** click **Edit, Delete**. 4. A window named "**Delete Columns**" appears. If the window is named "**Delete View Source**" then press **Cancel** and return to step 1 to ensure you have highlighted the relevant column(s). If the window is named "**Delete Columns**", then press **OK** to delete or **Cancel** to retain the column(s).

If you want to ...	then ...
Delete a sort key	See "Make **non-sort** key" below in this table.
Delete a view source	1. Ensure the relevant **view source cell** (light blue in color) under **View Sources** is highlighted (becomes darker blue). 2. To delete, • **EITHER** click (Delete), • **OR right** click and select **Delete**, • **OR** click the **Delete** key, • **OR** click **Edit, Delete**. 3. A window named "**Delete View Source**" appears. If the window is named "**Delete Columns**" then press **Cancel** and return to step 1 to ensure you have highlighted the relevant view source cell. If the window is named "**Delete View Source**", then press **OK** to delete or **Cancel** to retain the view source.
Edit a cell	1. To **change** the value in a cell, • **EITHER** click in the cell, • **OR** arrow to the cell and press **Enter**. 2. Make your changes. 3. To **undo a change** in that cell immediately after making the change, press **Escape**. 4. To **commit** the changes in that cell, press **Enter**.
Inactivate the view	The current screen heading must contain the text **[Active]**. If the heading contains the text **[Inactive]** then the view is already inactivated. 1. To inactivate the view • **EITHER** click , • **OR** press **F5**, • **OR** click **Action, Activate/Inactivate View**. 2. A message appears: **Are you sure you want to make the current view Inactive?** If you click **Cancel**, then no action is taken. If you click **OK**, the heading displays the text **[Inactive]**. Once the view is inactive, repeating step 1 attempts to activate the view - see "**Activate** the view" above in this table.
Insert a column to left of existing column	1. Click on any grey area in the relevant column so that the cell is highlighted. 2. To insert a column to the left • **EITHER** click (Insert column), • **OR right** click and select **Insert column**, • **OR** click the **Insert** key, • **OR** click **Edit, Insert column**. As a comparison, see "**Add column** at right hand end" above in this table. To modify cells in the new "Column X" see "**Define a Column Source Type**" and "**Edit** a cell" below in this table.

If you want to ...	then ...
Insert a column at right hand end	See "**Add a column** to right hand end" above in this table.
Insert a **view source**	See "Add a **view source**" above in this table.
Logic text	See these rows in this table: • "Create **Extract Record Filter** logic text" • "Create **Extract Column Assignment** logic text for a column" • "Create **Format-Phase Calculations** logic text for a column" • "Create **Format Record Filter** logic text" • "Modify or delete **Extract Record Filter** logic text" • "Modify or delete **Extract Column Assignment** logic text for a column" • "Modify or delete **Format-Phase Calculations** logic text for a column" • "Modify or delete **Format Record Filter** logic text"
Make **non-sort** key	This applies to a column or a selected group of columns each headed "Column X". 1. In the relevant "Column X" or the highlighted group of columns • **EITHER right** click and select **Make non-sort key**, • **OR** click **Ctrl-K**, • **OR** select **Edit, Make non-sort key**. 2. The sort key icon for this column disappears. 3. If you repeat step 1, "**Make non-sort key**" becomes '**Make sort key**". For one column, the action in step 1 toggles between the two alternatives
Make **sort** key	This applies to a column or a selected group of columns each headed "Column X". 1. In the relevant "Column X" or the highlighted group of columns • **EITHER right** click and select **Make sort key**, • **OR** click **Ctrl-K**, • **OR** select **Edit, Make sort key**. 2. The cell in that column in this row changes to a symbol similar to  . Repeating this action removes the column from the sort key. The first column to join the sort key displays the icon above. The second column displays  and so on. 3. If you repeat step 1, "**Make sort key**" becomes '**Make non-sort key**". For one column, the action in step 1 toggles between the two alternatives. See also "Modify a **sort key**" lower in this table. The data type needs to be carefully selected for a sort key. For more, see field "**Data Type**" under section "**Fields**" below.
Modify a **cell**	See "**Edit** a cell" above in this table.

If you want to ...	then ...
Modify a **column**	To modify cells in a "Column X" see "**Define a Column Source Type**" and "**Edit** a cell" above in this table.
Modify a **sort key**	1. Click on the cell in the grid with an icon similar to . 2. The **Sort Key Properties** screen appears, and sometimes the **Sort Key Titles** screen. Modify fields as appropriate. The "Sort Key Titles" screen is not displayed if the output format of the view is Flat File. This "Sort Key Titles" screen is also not displayed if the output format is Hardcopy and the Display Mode of the Sort Key is As Data. If you wish to remove this column from the sort key, see "Make **non-sort** key" above in this table.
Modify a **view source logical record**	See "**Delete a view source**" and "Add a **view source**" in this table.
Modify a **view source logical file**	1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. Double click on the field to the right of "Logical File". Select a new value from the drop down box. If you cannot see the required logical file in the list, see your system administrator.
Modify or delete **Extract Record Filter** logic text	This logic text applies to a view source file. 1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**View Source Properties**" screen appears. Double click in the field to the right of "**Record Filter**". 3. Click to display the **Edit Extract Record Filter** screen. Use that screen to modify or delete Extract Record Filter logic text. To delete, simply highlight logic text and press the delete key.
Modify or delete **Extract Column Assignment** logic text for a column	1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, select "**Formula**". 3. Double click in the field to the right of "**Column Source Value**". 4. Click to display the **Edit Extract Column Assignment** screen. Use that screen to create Extract Column Assignment logic text for this column. To delete, highlight the logic text and press the delete key.

If you want to ...	then ...
Modify or delete **Format-Phase Calculations** logic text for a column	This logic text can also be called **Format Column Calculation** logic text. The view must have a format phase. In the relevant column in the row marked **Format-Phase Calculation**, a grey cell means that column cannot have a Format-Phase Calculation logic text applied. In this row, only columns that are numeric and are not part of a sort key have a cell with a white or blue background which indicates this logic text is permitted. 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click [...] to display the **Edit Format-Phase Calculation** screen. Use that screen to modify or delete Format-Phase Calculation logic text. for this column To delete, simply highlight logic text and press the delete key.
Modify or delete **Format Record Filter** logic text	Go to the "**View Properties, Format Phase**" tab and see screen help for details on modifying or deleting Format Record Filter logic text.
Move column **left**	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To move the column • **EITHER** click ⇦ (Move column left) , • **OR right** click anywhere in the column and select **Move column left**, • **OR** press **Alt-Left arrow**, • **OR** select **Edit, Move column left**.
Move column **right**	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To move the column • **EITHER** click ⇨ (Move column right), • **OR right** click anywhere in the column and select **Move column right**, • **OR** press **Alt+Right arrow**, • **OR** select **Edit, Move column right**.
Paste left of a column	1. You must first have copied a column - see "**Copy** a column" above in this table. 2. Click on any grey area in the relevant "Column Y" so that the cell is highlighted. 3. To paste • **EITHER right** click and select **Paste Left**, • **OR** press **Ctrl+V**, • **OR** click **Edit, Paste Left**.

If you want to ...	then ...
Paste right of a column	1. You must first have copied a column - see "**Copy** a column" above in this table. 2. Click on any grey area in the relevant "Column Y" so that the cell is highlighted. 3. To paste • **EITHER right** click and select **Paste Right**, • **OR** press **Ctrl+Shift+V**, • **OR** click **Edit, Paste Right**.
Remove a column(s)	See "**Delete a column(s)**" above in this table.
Remove a **sort key**	See "Make **non-sort** key" above in this table.
Remove a view source	See "**Delete a view source**" above in this table.
Save changes to the view	• **EITHER** click  (the save icon), • **OR** select **File, Save**, • **OR** press **Ctrl+S**. If the options above are grey, you only have the read right to the view folder. See your administrator to obtain the modify right to the view folder, which allows saving of the view.

50 Fields

Field	Definition
Column Headers	A plus + sign indicates that "**Column Headers**" only displays the Heading 1 value and that rows for Heading 1, 2 and 3 are hidden (collapsed). A minus - sign appears when this is expanded to display rows for Heading 1, 2 and 3. Double click on the plus + sign to expand this row to show rows for Heading 1, 2 and 3. Double click the minus - sign to collapse back to just the row for "**Column Headers**" field showing the Heading 1 value. The row "**Column Headers**" itself is a read-only field.
Heading 1	The text for the first line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)
Heading 2	The text for the second line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)
Heading 3	The text for the third line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)

Field	Definition
Sort Keys	**Pass the cursor over the symbol**  to change the cursor to a magnifying glass. Click on the magnifying glass to display the **Sort Key Properties** screen and possibly the **Sort Key Titles** screen. A plus sign to the left of "**Sort Keys**" indicates the sort key fields are **collapsed** into one row. A minus sign to the left of "**Sort Keys**" means the sort key fields are **expanded** into rows underneath. Double click the plus sign to expand the sort keys as rows. Double click the minus sign to collapse the sort key rows. The cell with the heading "Sort Keys" is a read-only field.
Column Output	A plus + sign indicates that rows giving output properties of the columns are hidden (collapsed). Double click on the plus + sign to expand to show many other rows. Double click on the minus - sign to collapse all the rows into one row showing the Start Position only. The cells in row "Column Output" are always display only.
Start Position	The starting position of this field in the view logical record. (Display only.)
Data Type	The data type of this field. Click to select a value from the drop down list. The types "**Binary Sortable**" and "**Packed Sortable**" are provided only to allow for negative values in the sort data. If the data is always positive or zero, then other data types can be used, and this results in faster performance for sorting.
Date/Time Format	The format of dates or times in this field. Click to select a value from the drop down list. (Optional.) This field is disabled if the data type is "Edited Numeric" or "Masked Numeric".
Length	The length of this field. A positive integer with a maximum of five digits. The lengths must satisfy the following constraints according to the data types specified for the fields: • **Zoned Decimal** must have minimum length of 1 and maximum length of 16 (inclusive). • **Alphanumeric / Masked Numeric / Edited Numeric** must have length between 1 and 256 (inclusive). • **BCD** must have minimum length of 1 and maximum length of 10. • **Packed / Packed Sortable** must have length between 1 and 16. • **Binary / Binary Sortable** must have length 1, 2, 4 or 8 only.
Data Alignment	The alignment of the data in this field. (Optional.) This field is disabled if the screen "View Properties, General" tab specifies Output Format as a Flat File with Delimited Fields.
Visible	This field controls if this column is displayed in the final output of this view. (Optional.) This field is disabled if there is no format phase for this view.
Spaces before column	The number of spaces before this output field in a Hardcopy report (Optional.) A positive number up to a maximum of 5 digits. This field is disabled if the "View Properties, General" tab specifies Output Format that is something other than a Hardcopy Report.

Field	Definition
Header Alignment	The alignment of the heading for this field. (Optional.) This field is disabled if the "View Properties, General" tab specifies Output Format as Flat File.
Decimal Places	The number of physical bytes to be occupied by decimal values in this field. (Optional.) This field is disabled if the data type is "Alphanumeric".
Scaling Factor	This field is used for rounding values. (Optional.) An integer from -9 to +9. This field is disabled if the data type is "Alphanumeric".
Signed	This field indicates whether the numeric data in this field is signed or not. (Optional.) This field is disabled and unchecked if Data Type = Alphanumeric OR Data Type = BCD. This field is disabled and checked if Data Type selected is 'Edited Numeric'.
Numeric Mask	The mask to be used on column output. (Optional.) Select a value from the drop down list. This field is disabled if the data type is something other than 'Masked Numeric'.
Format Phase Calculation	Cells that have a white or blue background in this row can have a format-phase calculation logic text applied. Grey cells mean this column cannot have logic text. Cells for this row are grey if there is no format phase, or if the data type is "Alphanumeric", or if the column is a sort key. To create / modify / delete logic text, do the following: 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click  to display the **Create New Format-Phase Calculation** screen or the **Edit Format-Phase Calculation** screen. Use either of those screens (and the screen help topics) to create / modify / delete Format-Phase Calculation logic text. for this column. To delete, simply highlight logic text and press the delete key.
Record Aggregation Function	Drop down list containing a list of record aggregation function codes. (Optional.) This field gets disabled if there is no format phase, or if the data type of column is "Alphanumeric" or if the column is a sort key or if the "View Properties, Format Phase" tab selects "Do not aggregate records".
Group Aggregation Function	Drop down list containing a list of group aggregation function codes. This field gets disabled if there is no format phase, or if the data type of column is "Alphanumeric" or if the column is a sort key or if the "View Properties, Format Phase" tab selects "Do not aggregate records". If the Record Aggregation Function selected above is something other than "SUM" then the Group Aggregation Function field is set to the same value and cannot be changed. Only when the Record Aggregation Function is "SUM" does this field offer a drop down list. The value "SUM" is selected by default and can be changed. (Optional.)

Field	Definition
View Sources	To create a view source, see "Add a **view source**" in the table under section **Action on the "View Editor" tab** above. To delete a view source, see "**Delete a view source**" in the table under section **Action on the "View Editor" tab** above. A plus + sign to the left of "View Sources" indicates that the rows giving the view source files are collapsed. Double click on the plus + sign to expand this row to show a row for each view source. Double click on the minus - sign to collapse all the view source rows into one row. The cells in this row "View Sources" are always display only.**Pass the cursor over a light blue cell with text under "View Sources"** to change the cursor to a magnifying glass. Click on the magnifying glass to display the screen **View Source Properties**.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**30 Shortcuts: New/Edit View screen (View Editor tab)**".

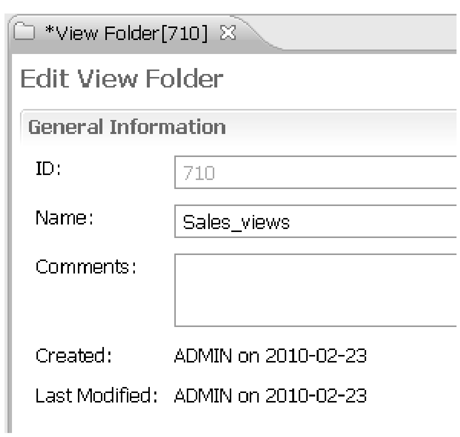
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Edit View Folder screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to edit an existing view folder.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Modify or Delete** rights to the particular view folder in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Edit View Folder errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

The Refresh Navigator icon is used to ensure the View Folder list in the Navigator contains current data. If this icon is grey, dick on the "**View Folders**" node in the Navigator to activate this icon. When active, click on this icon or press F4 to refresh the Navigator with current view folder data. Alternatively, double click on "**View Folders**" to refresh the Navigator in one action.

50 Fields

Field	**Definition**
ID	The position in the list of all view folders for that environment. (Display only.)
Name	Up to 32 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique among view folder names. Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Environment Checker screen help

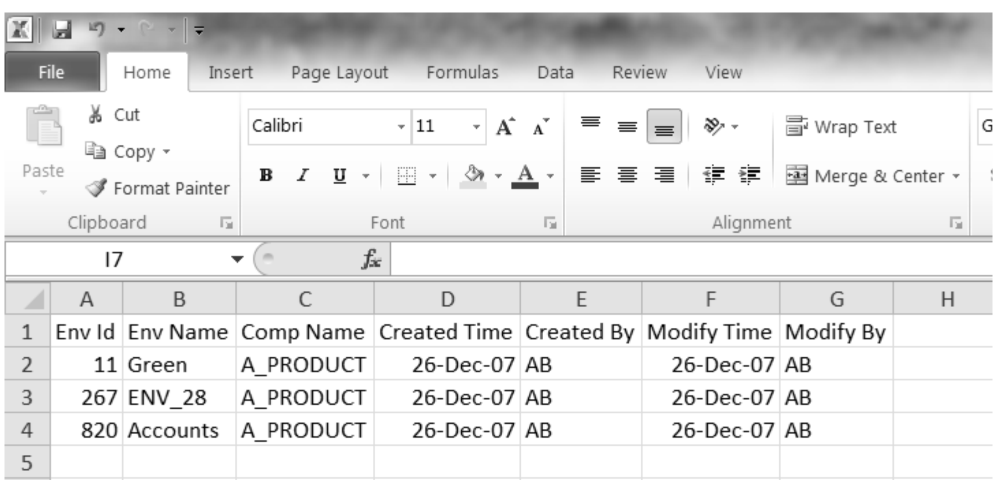
01 Summary of this topic

The sections in this topic are:

02 Introduction to an Environment Checker Report

This report shows all environments for a particular a metadata item name. This is useful when planning to update or delete a metadata item, because the same action may be necessary for the same item name in other environments.

In the example below, the physical file name "A_PRODUCT" exists in three environments. The Environment Checker Report was exported as a CSV file and opened in Excel:



	A	B	C	D	E	F	G	H
1	Env Id	Env Name	Comp Name	Created Time	Created By	Modify Time	Modify By	
2	11	Green	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
3	267	ENV_28	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
4	820	Accounts	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
5								

The report can focus on a metadata item name that is one of the following types:

- Logical Record (LR) Field,
- Global Field,

- Logical File,
- Logical Record,
- Lookup Path,
- Physical File,
- User-Exit Routine,
- View.

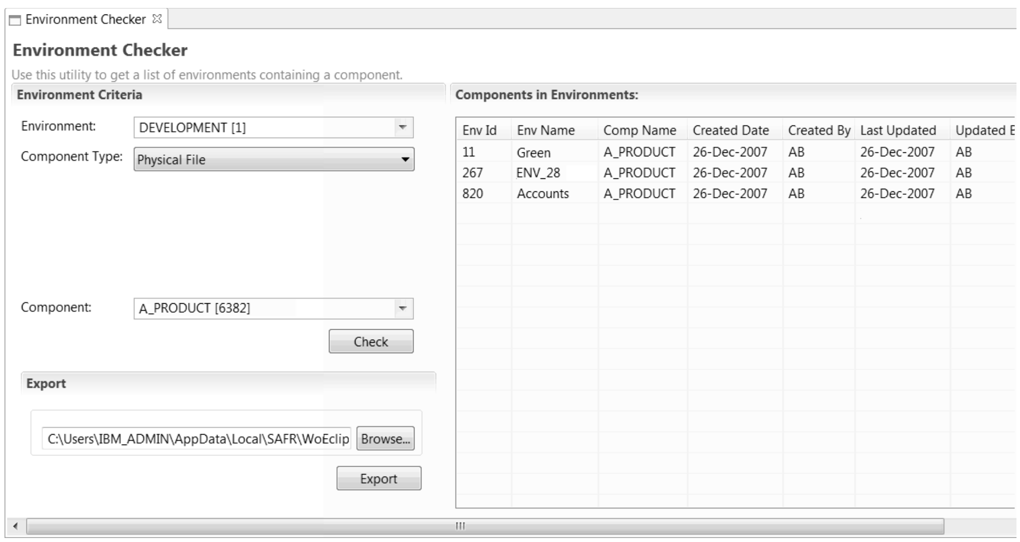
All users of the workbench can generate this report.

The Environment Checker Report can be **viewed on the screen or exported as a CSV (Comma Separated Values) file**. A CSV file is useful data for a spreadsheet.

10 Errors

For errors or messages on this screen, see topic "**Environment Checker errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

20 Procedure - generate the Environment Checker Report



Do the following:

1. Ensure you know the specific metadata item. This means knowing the **metadata name or id** and the type of metadata item (e.g. logical file).
2. Click "**Reports -> Environment Checker...**".
3. Select an **environment** from the drop down list.
4. Select a **component type** from the drop down list.
5. If the component type is **LR Field**, the screen displays radio buttons for "**Show All LR Fields**" and "**Show LR Fields only from the following LR**". There is also a drop down list below the second radio button.

   The radio button "**Show All LR Fields**" changes the drop down list "**Component**" to show every LR (Logical Record) field in the environment selected above.

The radio button "**Show LR Fields only from the following LR**" allows choosing one logical record from the drop down list immediately below. This changes the drop down list "**Component**" to show only the LR fields from the selected logical record.

6. Select a particular metadata item from the drop down list "**Component**".

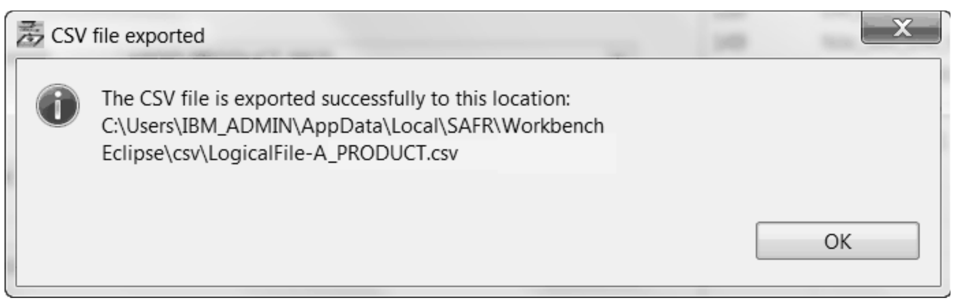
   Optionally, **right** click any value already in the field "**Component**" and select "**Open Editor**". This opens the editor screen for that component. If "Open Editor" is grey then the editor is not available for that field.
7. Click **Check** to view the Environment Checker Report for this metadata item. The report is shown at right under the heading "Components in Environments".
8. Optionally, you can save a copy of the report in a CSV file - see the next section below.

For errors or messages on this screen, see topic "**Environment Checker errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Export a CSV file

Do the following:

1. Ensure you have an Environment Checker Report displayed under the heading "Components in Environments". If not, see the previous section.
2. Under the section heading "Export", provide a valid location (folder name) which includes the drive letter. If the folder is a new name, then the folder will be created when you click the Export button. The location specifies the path where the CSV file is stored. Optionally click **Browse...** to navigate to an existing folder.
3. Once the location is appropriate, click the **Export** button to create a CSV file in the given location. Click OK when you see a window such as the following:



4. The CSV file is now stored in the location specified.

40 Fields - Environment Criteria section

Field	Definition
Environment	Select from the drop down list of environments.
Component Type	Select from the drop down list. Values are LR Field, Global Field, Logical File, Logical Record, Lookup Path, Physical File, User-Exit Routine, View.
Show All LR Fields	This radio button appears only for Component Type of Logical Record (LR) Field. Select this button to populate Component below with every LR Field in the environment selected above.

Field	Definition
Show LR Field only from the following LR	This radio button appears only for Component Type of Logical Record (LR) Field. Select this button to populate Component below with only the LR fields in the logical record selected. The drop down list contains all logical records in the environment selected.
Component	Select from the drop down list. Components are metadata item names and ids that satisfy the fields given above.

50 Fields - Components in Environments section

Field	Definition
Env ID	The environment id of the component listed in this row. (Display only.)
Env Name	The environment name of the component listed in this row. (Display only.)
Comp Name	The component name for this row. This is the same as the field "Component" selected in the Environment Criteria section of the screen. (Display only.)
Created Date	The creation date for the component in this row. (Display only.)
Created By	The user who created the component in this row. (Display only.)
Last Updated	The date of the most recent update to the component in this row. (Display only.)
Updated By	The user for the most recent update to the component in this row. (Display only.)

60 Fields - Export section

Field	Definition
Location	This is a text field underneath the section heading "**Export**". This field specifies a valid folder where a CSV file can be stored. Optionally, type the value of the location. An alternative is to click **Browse...** which displays the "**Browse For Folder**" screen, where you can navigate to the folder or click the **Make New Folder** button. There is a default value in the Location field that can be changed by either of these two methods. Click the **Export** button to create a CSV file in the folder given. If the folder does not exist, then clicking **Export** creates that folder.

70 Format of the CSV file

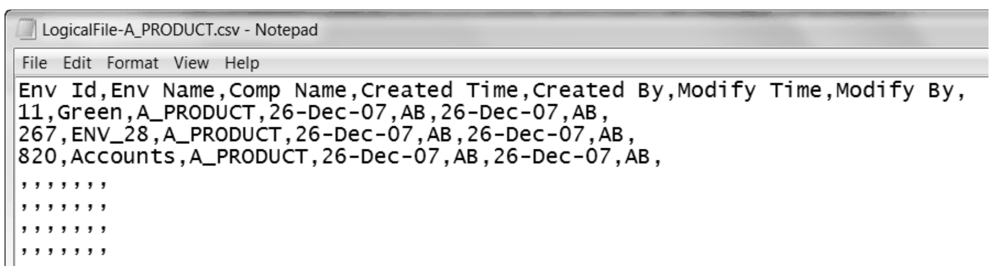
The CSV file has the format below with each field value separated by a comma:

Field	Definition
Env ID	The environment id of the component listed in this row.

Field	Definition
Env Name	The environment name of the component listed in this row.
Comp Name	The component name for this row. This is the same as the field "Component" selected in the Environment Criteria section of the screen.
Created Date	The creation date for the component in this row.
Created By	The user who created the component in this row.
Last Updated	The date of the most recent update to the component in this row.
Updated By	The user for the most recent update to the component in this row.

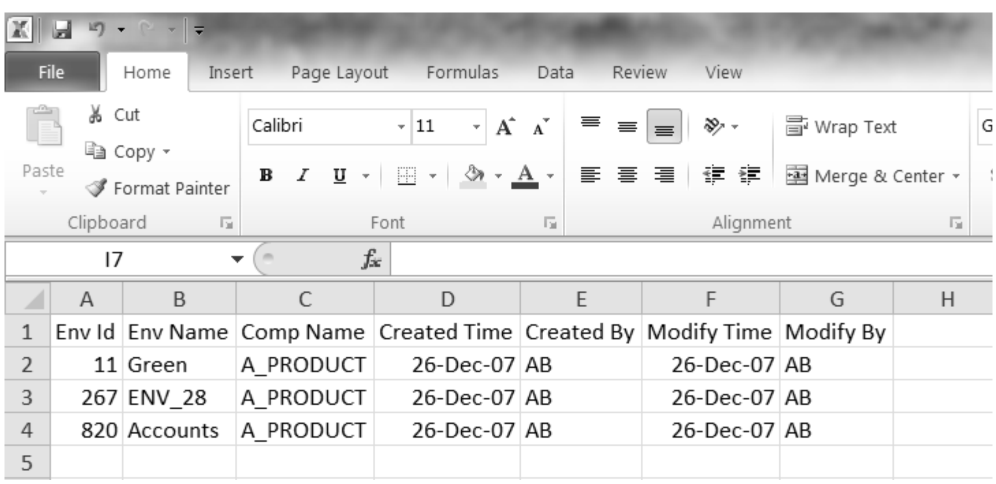
80 Example of CSV file

This help topic displays a Environment Checker report for the physical file "A_PRODUCT". Below is an image of the raw CSV file:




```
Env Id,Env Name,Comp Name,Created Time,Created By,Modify Time,Modify By,
11,Green,A_PRODUCT,26-Dec-07,AB,26-Dec-07,AB,
267,ENV_28,A_PRODUCT,26-Dec-07,AB,26-Dec-07,AB,
820,Accounts,A_PRODUCT,26-Dec-07,AB,26-Dec-07,AB,
,,,,,,,
,,,,,,,
,,,,,,,
,,,,,,,
```

In a spreadsheet program such as Microsoft Excel, the CSV file displays as follows:



	A	B	C	D	E	F	G	H
1	Env Id	Env Name	Comp Name	Created Time	Created By	Modify Time	Modify By	
2	11	Green	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
3	267	ENV_28	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
4	820	Accounts	A_PRODUCT	26-Dec-07	AB	26-Dec-07	AB	
5								

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

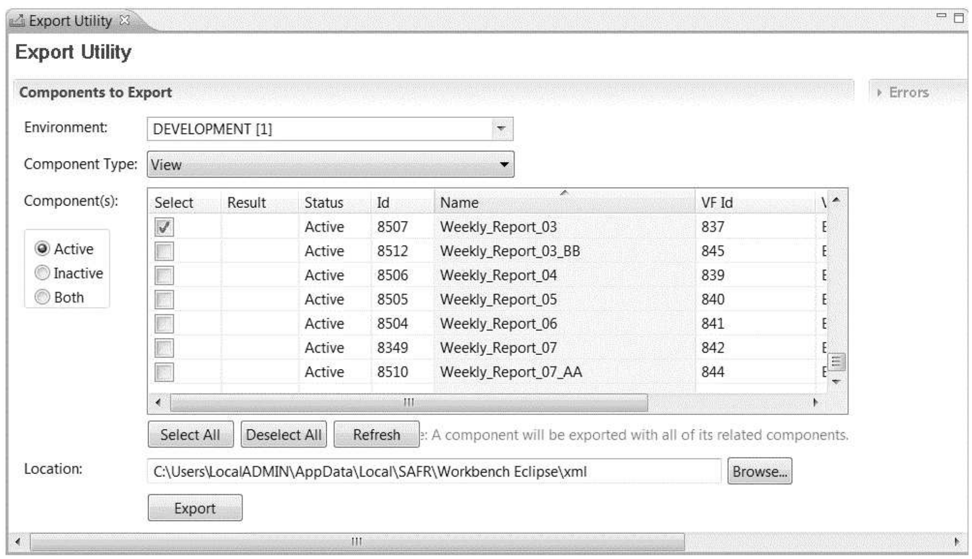
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Export Utility screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



It is essential that you read topic "**Export metadata overview**" before you perform an export. To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Use this screen to export metadata components from the SAFR Workbench into XML files. This screen outputs a separate XML file for each component exported. These XML files are potentially a backup that can be imported back into SAFR at another time.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Read** rights to the particular components in that environment that are exported. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**Export Utility errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Do the following:

1. Select an **Environment** from the drop down box. System administrators can choose from all environments. Environment administrators can only choose the environment selected during login. General users can choose from the environments that the **group selected during login** has access to.
2. Select a **Component Type** from the drop down box.
3. Wait a moment. The table of **Component(s)** is populated. System and environment administrators can see all the components of the selected type in that environment. For general users, the only components listed are where the group has read or modify or delete rights.
4. For component types of **Logical Record, Lookup Path and View**, further refine the list of components by **any choice of buttons** at the left of the list for **Active, Inactive or Both**.
5. **Sort** the list of "**Component(s)**" by clicking on any of the column headings. **Reverse the sort order** by clicking again on that heading. In particular, if the Component Type is "View" then the columns include "**View Folder Id**" and "**View Folder Name**". Sorting by these columns allows the views in a view folder to be listed together.
6. Select components to export using some combination of the following options:
   - **Search the list** if the list is long - see section below.
   - **Tick (or untick)** individual components in the Select column.

     To select a large number of components in sequence, select the first component and then **hold the Shift key down and select the last component**. All other components will be deselected when this occurs, so this should be the first action for a complex group of selections.
   - Click **Select All** or **Deselect All** as required.
7. At any time during these steps, click the **Refresh** button to reload the data shown in the **Component(s)** table. The data can change during your time on the Export Utility screen, and the **Refresh** button ensures the data displayed is current once more.
8. If required, modify the **Location** field. If you type a new folder name that does not exist, this is created when you perform the next step. Alternatively, click **Browse** to select an existing folder. When you perform the next step, the folder you specify in **Location** is automatically given a sub-folder named for the Component Type. That sub-folder is where the XML file is stored.
9. Click **Export**. If this button is grey, ensure at least one component above is selected.
10. A value in the **Result** column of "**Pass**" indicates that the folder for **Location** now has a sub-folder for the **Component Type** and an XML file exported for that item. Each XML file in that sub-folder is named **componentName[id[.xml**.

    The **Result column** shows if any errors affected the export of the XML file for each component. The errors may be caused by the general user not having read rights to a component. Errors may also be caused by a system input/output error. **Click on the row for a component** to see any error messages in the **Errors section** on the right.

For errors or messages on this screen, see topic "**Export Utility errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

11. Use Windows Explorer to go to the **folder given in the Location field.** This folder has sub-folders for each component type. Each XML file has name **componentName[id[.xml** in that sub-folder.

20 Searching in "Components"

If there is a long list of components, then the list can be searched as follows:

1. Click inside the list for "**Components**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.

If the component is found, then you are returned to the list with that component highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Components to Export section

Field	**Definition**
Environment	Drop down box of environments available to the user.
Component Type	List of components types that this utility can export.
Select	Tick so that an XML file is created for this component. Tick again to remove the tick so that no XML file is created.
Result	The result after you click Export. Result **Pass** means the export of that component to an XML file is complete. Result **Error** means a system input/output error or other error affected the export of this item. Result **Security Error** means that the user does not have read rights to the selected component. **Click on the component row** to see details of error in the **Errors section**.
Status	The active or inactive status of that component. This column on appears for component types Logical Record, Lookup Path and View. (Display only.)
ID	This is the position of that particular component in the list of components of that type for the environment. (Display only.)
Name	The name of that particular component. (Display only.)
VF Id	ID number of the View Folder containing the View. This field only displays when the Component Type selected is "View". (Display only).

Field	Definition
View Folder Name	Name of the View Folder containing the View. This field only displays when the Component Type selected is "View". (Display only).
Location	The folder that is the starting point for storing the XML files exported. After export, **this folder has a sub-folder for each type of component exported**. The sub-folder contains all XML files of the component type exported. Overtype the default folder name, if required. If you type a folder name that does not exist, the folder is created when you click Export. Alternatively, click **Browse** to select an existing folder.

60 Fields - Errors section

Field	Definition
Error messages	The reason this metadata item did not export. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

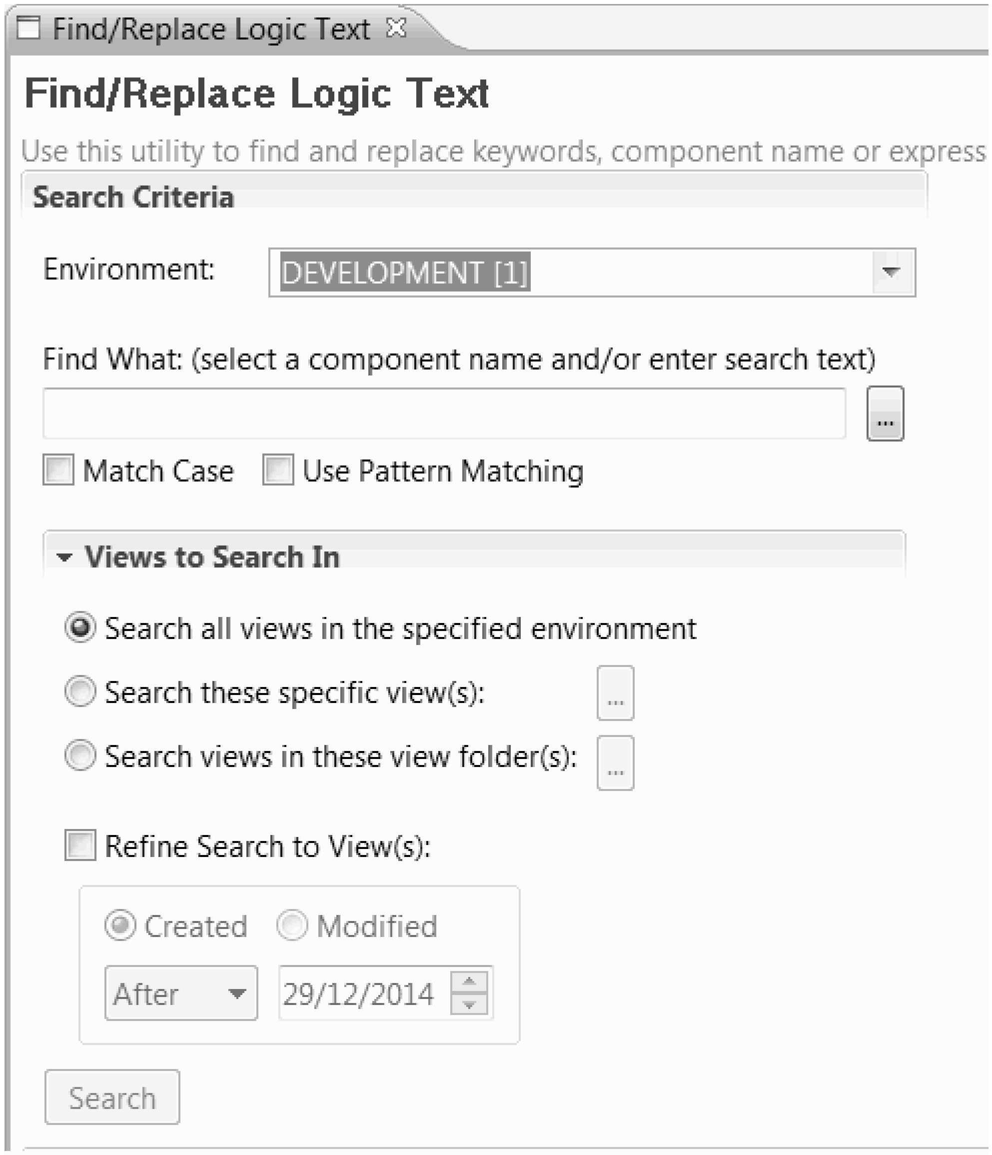
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

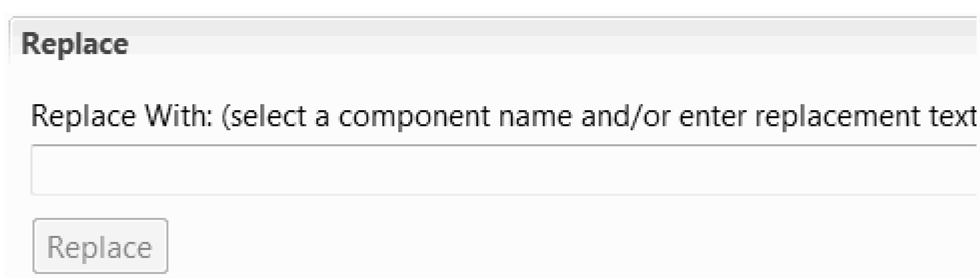
Find/Replace Logic Text screen help

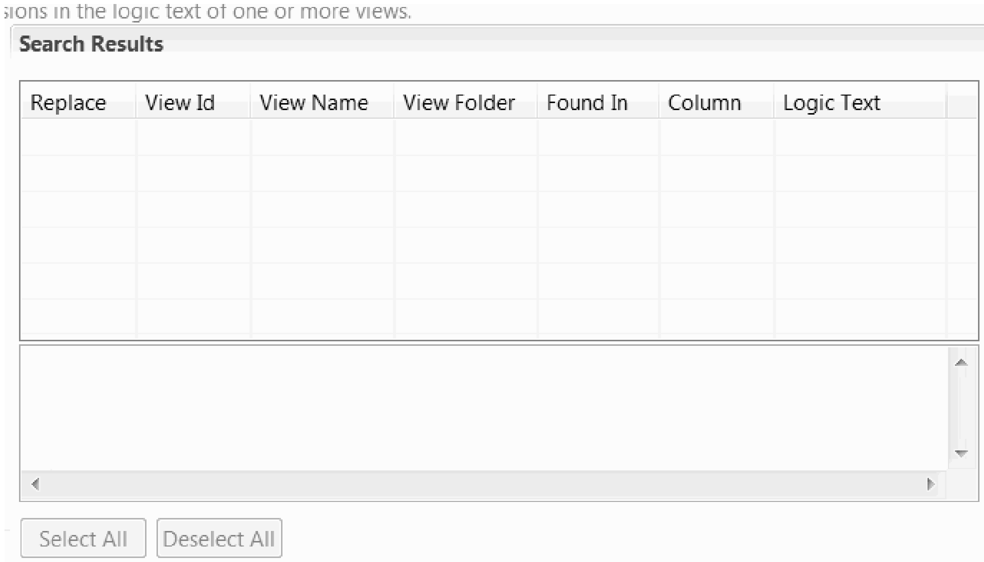
01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights







In the image above, parts of this screen are rearranged and compressed vertically for ease of printing and display.

Use this screen to update logic text by finding certain parts of existing logic text and replacing those parts.

This screen is for system and environment administrators only.

05 Errors

For messages on this screen, see topic "**Find/Replace Logic Text errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Recommended preparation before using this screen

Ensure you know the following:

- The **component to find** in existing logic text. That component may be an existing metadata item, such as a lookup path, logical file, logical record, physical file or user-exit routine. That component may be a string of text such as a specific value of a product code. You must find all the views that have logic text with that existing component.

  If the component is the name of a metadata item, a simple method to find all the affected views is to use the **Dependency Checker Report**. For details, see topic "**How do I generate a Dependency Checker Report?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
- The **replacement component** for the logic text. The replacement may be a metadata item such as a lookup path, logical file, logical record, physical file or user-exit routine. The replacement may be a string of text such as a new value of a product code.
- The appropriate **environment** and **views** to search for the logic text to be changed. The views may be selected as one of:
  - All views for that **environment**
  - **Specific views chosen** from a list of all views in that environment

– All views in one or more **view folders**

The above selection of views can be **further filtered by date of creation or modification.** For example, select views created before a certain date.

20 Overview of actions on this screen

Broadly, there are two high level actions:

1. **Search** for views that contain logic text. Search for either some metadata name in logic text, or for specific logic text that you provide. For example, the metadata name can be the name of a **lookup path, logical file, logical record, physical file or a user-exit routine**. An example of specific logic text is "**{Current_Quarter} = 01**". You can limit the views that are included in the search.
2. **Replace** the logic text found in the previous step with something else. You can further limit the views that receive the replacement logic text, so not all views and logic text found get updated.

For messages on this screen, see topic "**Find/Replace Logic Text errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Action - searching for existing logic text

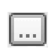
You must perform the following at least once:

1. **Select an environment** from the list in the drop down box. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

   A system administrator selects from a list of all environments. An environment administrator selects from a list where the group selected for login provides administrator access.

   Optionally, **right** click any value already in the field "**Environment**" and select "**Open Editor**". This opens the "**Edit Environment**" screen.
2. **Create a value to search for** in field "Find What". Choose one of these two methods:

   EITHER type in logic text to be replaced

   OR click  to display the window "**Select Component**". The window "**Select Component**" allows choosing a (metadata) component type and hence a (metadata) component. For component, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

   If there is no value in this field, the button "**Search**" is grey.
3. **Decide which views to search.** By default, the radio button "**Search all views in the specified environment**" is selected. See the table below for more options.

Options to decide which views are searched are as follows:

If you want to ...	then ...
Limit search to views based on **creation date**	1. Tick the field "**Refine Search to View(s)**" 2. Tick "**Created**" 3. Select a value for "When" - the field immediately below 4. Select a value for "Date" - the field to the right. The comparison reads "Created" "When" "Date", for example, "Created After 01/01/2010". This comparison further refines the views selected in the three radio buttons immediately under the heading "Views to Search In".
Limit search to views based on **modification date**	1. Tick the field "**Refine Search to View(s)**" 2. Tick "**Modified**" 3. Select a value for "When" - the field immediately below 4. Select a value for "Date" - the field to the right. The comparison reads "Modified" "When" "Date", for example, "Modified After 01/01/2010". This comparison further refines the views selected in the three radio buttons immediately under the heading "Views to Search In".
Make the search **case sensitive (or not)**	Tick "**Match Case**". Click again to remove the tick (and relax any testing of case for letters)
Search all views in the **environment**	Select the radio button for "**Search all views in the specified environment**".

If you want to ...	then ...
Select the views to search	Select radio button "**Search these specific view(s)**" and click to display the window "**Select View(s) to search in**". This window allows ticking individual views to include in the search for logic text. Click OK to close this window. The total number of views ticked is shown as "X selected" to the right of the icon. Note that selecting this radio button clears the radio buttons immediately above and below. If there is a long list in the window "**Select View(s) to search in**", then the list can be searched as follows: 1. Click inside the list. 2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar or the window. If the icon is grey, repeat the previous step and the icon should now be available. 3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**". 4. In the field "**Search text**" type either the ID or the first characters in the view name. 5. Click OK to start the search. When the view is found, tick the view and click OK to select the view in the search. For more about this searching, read task "**Searching lists of metadata**". To find this topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Select view folders where all views are searched	Select the radio button "**Search views in these view folder(s)**" and click to display the window "**Select View Folder(s) to search in**". This window allows ticking an individual view folder so that all the views in that folder are included in the search for logic text. Click OK to close the window. The total number of view folders ticked is shown as "X selected" to the right of the icon. Not that selecting this radio button clears the radio buttons immediately above. If there is a long list in the window "**Select View Folder(s) to search in**", then the list can be searched as follows: 1. Click inside the list. 2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar or the window. If the icon is grey, repeat the previous step and the icon should now be available. 3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**". 4. In the field "**Search text**" type either the ID or the first characters in the view folder name. 5. Click OK to start the search. When the view folder is found, tick the view folder and click OK so that all views in that view folder are included in the search. For more about this searching, read task "**Searching lists of metadata**". To find this topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
Use **Pattern Matching**	Tick "**Use Pattern Matching**" to allow for the "Find What" to contain a regular expression. For example, a star (*) stands for one or more of any character.

35 How can I see all the logic text in "Search Results"?

There are two ways to see all the text in column "**Logic text**" in "**Search Results**":

1. To see all the logic text **for one row** under "Search Results", **click on that row** in "Search Results". The white area below the table displays all of the logic text, possibly with a vertical scroll bar. This displays logic text of any size and is recommended.
2. To see more logic text **for the entire "Search Results" table**, click on topic "**I want to see more logic text for all rows in the Find/Replace Logic Text screen**". A link to this topic is under "**Related Reference**" at the bottom of this screen. This displays more for each row than the default layout of the table, but is not suitable for displaying logic text longer than one line in each row.

40 Action - replacing logic text

You must select (tick) at least one view listed under "**Search Results**" in order to allow replacing some text in the logic text for that view(s).

To help decide which views to tick under "Search Results", the following optional action may be useful: **right** click any row with data under "**Search Results**" and select "**Open Editor**". This opens the "**Edit View**" screen. You can see the view and the logic text contained in that view.

To replace some text inside logic text inside the views under "Search Results", perform all of the following:

1. At least one row is ticked under **"Search Results"** in the "Replace" column. If there are no values in "Search Results", see "**Action - searching for existing logic text**" above.
2. There is text in the "Replace With" field. This is the text that replaces the text in field "Find What" above. Choose one of the methods below to put values in the "Replace With" field.

   EITHER type in replacement logic text

   OR click  to display the window "**Select Component**". The window "**Select Component**" allows choosing a component type and hence a component. For component, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
3. Click the "**Replace**" button. Once pressed, a warning appears. Click OK to proceed with the replacement of the logic text, and make the status of the updated views **inactive**. Click Cancel to stop the attempted replace. If this button is grey, check the previous two points above.

For messages on this screen, see topic "**Find/Replace Logic Text errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Search Criteria

Field	Definition
Environment	Select an environment from the drop down list. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. System administrators sees a list of all environments. Environment administrators see a list of only the environments where group selected for login provides administrator access. Selecting one environment is mandatory. If you choose a different environment and click anywhere, all values in "Search Results" are cleared and all selections of views and view folders below are cleared, and the "Replace" button is grey.

Field	Definition
Find What	Choose one of the methods below to put values in this field. **EITHER** type in logic text to be replaced **OR** click  to display the window "**Select Component**". The window "**Select Component**" allows choosing a component type and hence a component. For component, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If there is no value in this field, the button "**Search**" is grey. Once text exists in this field, click "**Search**" to find existing logic text that contains the value in this field.
Match Case	Tick this box to ensure the search finds the exact case of the text in "Find What". Untick this box to relax any case testing.
Use Pattern Matching	Tick this box to allow for the "Find What" to contain a regular expression. For example, a star (*) stands for one or more of any character.

60 Fields - Views to Search In

Field	Definition
Search All Views	Select this radio button to search the logic text in all views in the environment given in the "Search Criteria" above. Selecting this radio button clears the other radio buttons immediately below. (Optional.)

Field	Definition
Search Specific Views	Select this radio button and click to display the window "**Select View(s) to search in**". (Optional.) The window "**Select View(s) to search in**" allows ticking individual views to include in the search for logic text. Click OK to close the window "**Select View(s) to search in**" and display "X selected" to the right of the icon. This shows how many views are ticked. Selecting this radio button clears the radio buttons immediately above and below. If there is a long list in the window "**Select View(s) to search in**", then the list can be searched as follows: 1. Click inside the list. 2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar or the window. If the icon is grey, repeat the previous step and the icon should now be available. 3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**". 4. In the field "**Search text**" type either the ID or the first characters in the view name. 5. Click OK to start the search. When the view is found, tick the view and click OK to select the view in the search. For more about this searching, read task "**Searching lists of metadata**". To find this topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Field	Definition
Search Specific View Folders	Select this radio button and click to display the window "**Select View Folder(s) to search in**". (Optional.) The window "**Select View Folder(s) to search in**" allows ticking an individual view folder so that all the views in that folder are included in the search for logic text. Click OK to close the window "**Select View Folder(s) to search in**" and display "X selected" to the right of the icon. This shows how many view folders are ticked. Selecting this radio button clears the radio buttons immediately above and below. If there is a long list in the window "**Select View Folder(s) to search in**", then the list can be searched as follows: 1. Click inside the list. 2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar or the window. If the icon is grey, repeat the previous step and the icon should now be available. 3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**". 4. In the field "**Search text**" type either the ID or the first characters in the view folder name. 5. Click OK to start the search. When the view folder is found, tick the view folder and click OK so that all views in that view folder are included in the search. For more about this searching, read task "**Searching lists of metadata**". To find this topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
Refine Search to Views	Tick this box to enable the fields in the box below. (Optional.) If ticked, the fields below are mandatory.
Created	Tick this radio button to refine the search using the date a view was created. When this radio button is selected, the drop down box and the date below refer to the date the view was created. (Mandatory if "Refine Search to Views" is ticked, otherwise grey.) See the Date field below for how this field is used.
Modified	Tick this radio button to refine the search using the date a view was most recently modified. When this radio button is selected, the drop down box and the date below refer to the date the view was most recently modified. (Mandatory if "Refine Search to Views" is ticked, otherwise grey.) See the Date field below for how this field is used.
When	This is a drop down box that describes a relationship between two dates. The two dates are the radio button above ("Created" or "Modified") and the date value below. See Date field below for how the relationship works. (Mandatory if "Refine Search to Views" is ticked, otherwise grey.)

Field	Definition
Date	A date value that allows a comparison, using the fields above. The comparison reads "Radio button" "When" "Date", for example, "Created After 01/01/2010". This comparison further refines the views selected in the three radio buttons immediately under the heading "Views to Search In". (Mandatory if "Refine Search to Views" is ticked, otherwise grey.)

70 Fields - Search Results

Field	Definition
Replace	A tick selects the view in this row for replacement. There must be at least one tick for a replacement to occur. Ticks can be created or removed by ticking in this box. The buttons **Select All** and **Deselect All** apply to the entire list of views and can avoid ticking or clearing a large number of rows.
View ID	The ID of a view found in the search. (Display only.)
View Name	The name of a view found in the search. (Display only.)
View Folder	The view folder for a view found in the search. (Display only.)
Found In	The type of logic text in that view that contains the "Find What" text. (Display only.)
Column	This field shows the relevant Column number in the view for logic text of type Extract Column Assignment or Format-Phase Column Calculations. This field displays "N/A" for logic text of type Extract Record Filter or Format Record Filter. (Display only.)
Logic Text	The logic text found that contains the "Find What" text. (Display only.)
Text	A larger display of the logic text for the row highlighted above. Click on any row to display the logic text for that row. (Display only).

80 Fields - Replace

Field	Definition
Replace With	Choose one of the methods below to put values in this field. **EITHER** type in text to replace the text in "Find What" **OR** click ... to display the window "**Select Component**". The window "**Select Component**" allows choosing a component type and hence a component. For component, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If there is no value in this field, the button "**Replace**" is grey. Once text exists in this field, click "**Replace**" to attempt replacement of logic text.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

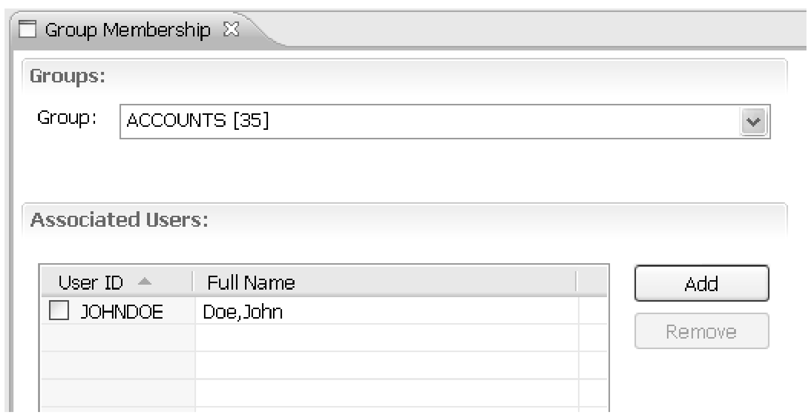
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Group Membership screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to maintain which users are members of which groups.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**Group Membership errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Select a group from the drop down box. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

Optionally, **right** click any value already in the field "**Group**" and select "**Open Editor**". This opens the "**Edit Group**" screen.

Change the membership of this group as follows:

If you want to ...	then ...
Add one or more users to the group	Click **Add** . On the screen "**Select components to be associated**", tick the relevant users and click OK. If the list of users in "Select components to be associated" is long, this list can be searched - see the section below. If the Add button is grey, select a group.
Remove one or more users from the group	Tick one or more users under **Associated Users** and click **Remove.** If the list of users in "Associated Users" is long, this list can be searched - see the section below. If the Remove button is grey, ensure at least one user has a tick.
See details of a listed **user**.	**Right** click in any existing **row** of values in the Associated Users table and select "**Open Editor**". This opens the "**Edit User**" screen.

Modify membership as shown above and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Searching in Associated Users

If there is a long list of associated users, then the list can be searched as follows:

1. Click inside the list under "**Associated Users**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the User name.
5. Click OK to start the search.

If the User is found, then you are returned to the list with that User highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Searching in "Select components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the Users available. If there is a long list of Users, then this list can be searched as follows:

1. Click inside the list under "**Select components to be associated**".

2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the User name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated Users.
7. You may search again if required. You may tick as many Users as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields

Field	Definition
Groups	Choose from a drop down list of all groups in the current environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
User ID	A User Id of a user in the group. (Display only.) If the list of users in "Associated Users" is long, this list can be searched - see the section above.
Name	The User Name for the User Id given at left. (Display only.) If the list of users in "Associated Users" is long, this list can be searched - see the section above.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

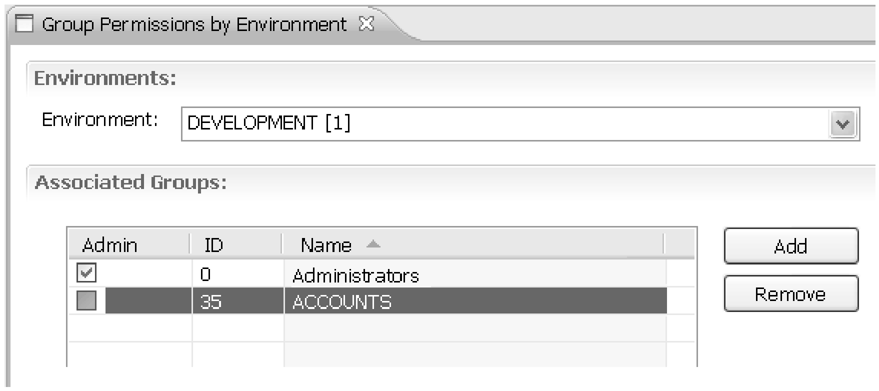
Group Permissions By Environment (Environment, Associated Groups sections) screen help

01 Summary of this topic

The sections in this topic are as follows:

- “60 Fields - Associated Groups section” on page 158
- “99 Keyboard Shortcuts” on page 158

02 Screen function and rights



This screen specifies the rights of a group to modify components of an environment.

This screen is for system and environment administrators only.

A system administrator can modify permissions for any environment and any group. An environment administrator can modify permissions only for that particular environment and any groups that already have access to that environment.

The Group Permissions By Environment screen has three sections:

Section	Notes
Environments	Select the environment to work on. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Associated Groups	Displays the groups that can access this environment. **Only system administrators can change the details of the groups** listed in this section. Environment administrators can only highlight a group in order to make changes in the Component Security section.
Component Security	Security details of the **highlighted environment** under **Associated Environments**. This section has two tabs: • "**Permissions**" tab. Allows the group to **create new components of certain types** and **run certain SAFR processes** in this environment. • "**Edit Rights**" tab. Allows the group **Read, Modify or Delete** access for **any existing component** in this environment.

05 Errors

For errors or messages on this screen, see topic "**Group Permissions By Environment messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action - Environments section

System administrators can select any environment. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

Environment administrators must have logged into the workbench using a group that provides administrator access to one or more environments. Environment administrators must select one of the environments where their login group provides administrator access.

Optionally, **right** click any environment already in the field "**Environment**" and select "**Open Editor**". This opens the "**Edit Environment**" screen.

20 Action - Associated Groups section

Only system administrators can perform actions in this section. Environment administrators can only highlight a group in order to make changes in the Component Security section.

If you want to ...	then ...
Add one or more groups to access that environment	Click **Add**. On the screen "**Select components to be associated**", tick the relevant groups and click OK. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If the list of environments in "Select components to be associated" is long, this list can be searched - see the section below. If the button **Add** is grey, ensure an environment is selected above.
Allow (or disallow) the group to have **administration rights** to this environment.	**Highlight** the group under "**Associated Groups".** **A tick in the Admin column** gives administration rights for the group in that environment. Remove the tick to disallow administration rights. The group can still have rights given in the Component Security section below.

If you want to ...	then ...
Remove one or more groups from access to that environment	Highlight the relevant group(s) and click **Remove**. You can sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If the list of groups in "Associated Groups" is long, this list can be searched - see the section below. If the button **Remove** is grey, ensure a group is highlighted. If you need to highlight more than one group, hold the Ctrl key down and click on an extra group. Hold the Ctrl key down and click on a highlighted group to remove the highlight. Hold the Shift key down to highlight all groups back to and including the last highlighted group.
See details of a listed **group**.	**Right** click in any existing **row** of values in the "Associated Groups" table and select "**Open Editor**". This opens the "**Edit Group**" screen.

When all changes are complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

30 Searching in Associated Groups

If there is a long list of associated groups, then the list can be searched as follows:

1. Click inside the list under "**Associated Groups**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the group name.
5. Click OK to start the search.

If the group is found, then you are returned to the list with that group highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

40 Searching in "Select components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the groups available. If there is a long list of groups, then this list can be searched as follows:

1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.

3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the group name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated groups.
7. You may search again if required. You may tick as many groups as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Environments section

Header	Header
Environments	Select an existing environment. If the list is long, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. System Administrators can see a list of all environments. Environment Administrators can only see the environments where they have administrator rights. When a group is selected, the fields in the Associated Groups section are populated.

60 Fields - Associated Groups section

Field	Definition
Admin	A tick gives the group administration rights to that environment, which means all members of that group are environment administrators. Remove the tick to remove these rights. (Optional.)
ID	The ID of the group. Click on the column heading **ID** to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of the group. Click on the column heading **Name** to sort the list by Name. Click repeatedly to switch between ascending and descending sort order. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

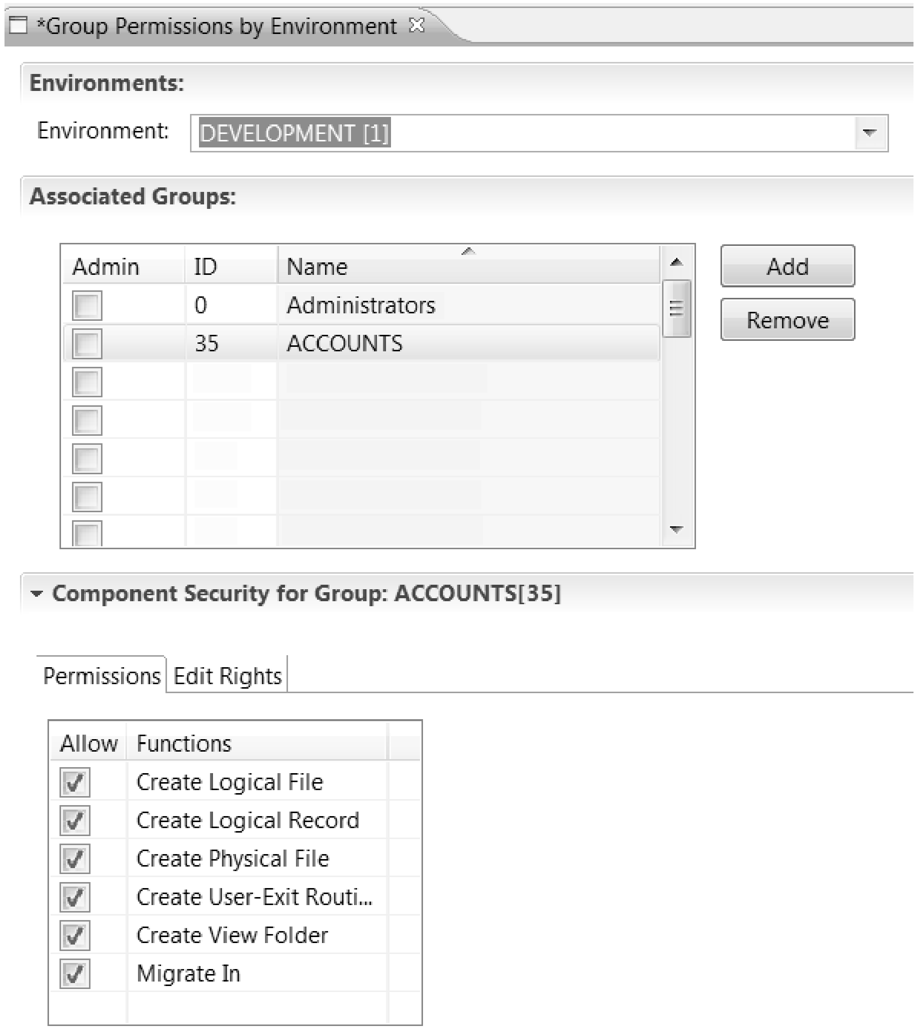
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

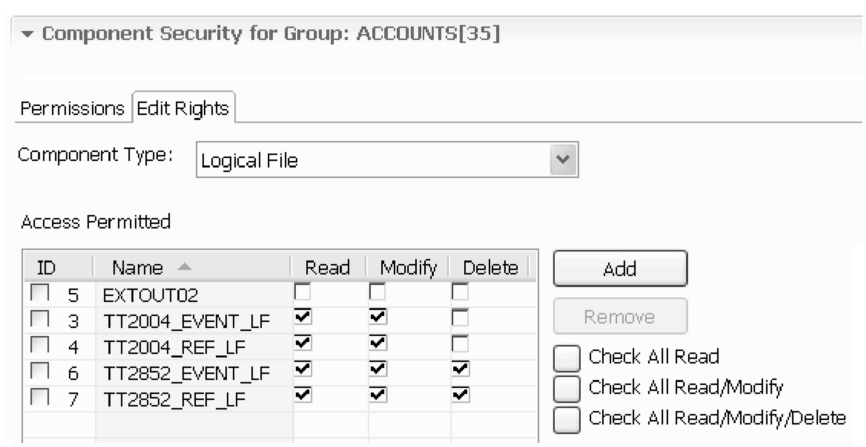
Group Permissions By Environment (Component Security section) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights





This screen specifies the rights of a group to modify components of an environment.

This screen is for system and environment administrators only.

A system administrator can modify permissions for any environment and any group. An environment administrator can modify permissions only for that particular environment and any groups that already have access to that environment.

The Group Permissions By Environment screen has three sections:

Section	Notes
Environments	Select the environment to work on. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Associated Groups	Displays the groups that can access this environment. Highlight a group in order to make changes in the Component Security section below. If more than group is highlighted, then the **first** group highlighted is the group for the steps below and all the other highlighted groups are ignored.
Component Security	This section remains collapsed until you select an environment and an associated group in the sections above. This section contains security details of the **highlighted group** under **Associated Groups**. This section has two tabs: • "**Permissions**" tab. Allows the selected group to **create new components of certain types** and **run certain SAFR processes** in this environment. • "**Edit Rights**" tab. Allows the selected group **Read, Modify or Delete** access for **any existing component** in this environment.

03 Meaning of "Component Type" and "Run Permission" in this topic

Component Type refers to any of these:
- Logical File,
- Logical Record,
- Physical File,
- User-Exit Routine,
- View Folder.

Run Permission refers to:
- **Migrate In** - this permission refers to a general user running the **Migration Utility** using this environment as target. This permission also allows a general user to run **Batch Activate Lookups** and **Batch Activate Views**Utilities in this environment.

05 Errors

For errors or messages on this screen, see topic "**Group Permissions By Environment messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action – Component Security section - "Permissions" tab

Use this section to control rights of the **group** and **environment** shown above. The group name is repeated in the heading of the Component Security section.

If you want to ...	then ...
Allow (or block) the group to create a Component Type in this environment	Ensure a **tick for that Component Type** to allow create rights. To block create rights, ensure no tick for this item. For example, ensure a **tick for Logical File** to allow the group to create Logical Files in the environment. Remove the tick to remove the right for the group.
Allow (or block) the group a Run Permission in this environment.	Ensure a **tick for that Run Permission** to give the group rights. To block run rights, ensure no tick for this item.

When all changes are complete,

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Action - Component Security section - "Edit Rights" tab

Use this section to control rights of the **group** and **environment** shown above. The group name is repeated in the heading of the Component Security section.

If you want to ...	then ...
Add component(s) of a Component Type to the list "Access Permitted".	Click **Add**. On the screen "**Select components for Edit Rights**", tick the relevant components and click OK. Click "Select All" to tick all components in the list. Click "DeSelect All" to untick all components in the list. If the list of components in "Select components for Edit Rights" is long, this list can be searched - see the section below. If the button **Add** is grey, ensure a group is selected in the Associated Groups section and ensure a Component Type is selected in the Edit Rights tab.
Change the group Read, Modify and Delete rights to a particular component in the list "Access Permitted". For example, change the group rights for a particular Logical File listed under "Access Permitted".	If required, select the relevant **Component type** from the drop down list. For example, select Logical File. **A tick** gives the group the rights for that column and all columns to the left of that tick box. To remove that right, **remove the tick**.

If you want to ...	then ...
Click "**Check All Read**"	Click this button to put a tick for all rows in column "Read" and blank out all other tick boxes. When this is complete, this button changes to "**Uncheck All Read**".
Click "**Check All Read/Modify**"	Click this button to put a tick for all rows in columns "Read" and "Modify" and blank out all tick boxes in column "Delete". When this is complete, this button changes to "**Uncheck All Modify/Delete**".
Click "**Check All Read/Modify/Delete**"	Click this button to put a tick in all tick boxes in all columns. When this is complete, this button changes to "**Uncheck All Delete**".
Click "**Uncheck All Delete**"	Click this button to blank all tick boxes in column "Delete". When this is complete, this button changes to "**Check All Read/Modify/Delete**".
Click "**Uncheck All Modify/Delete**"	Click this button to blank all tick boxes in columns "Modify" and "Delete". When this is complete, this button changes to "**Check All Read/Modify**".
Click "**Uncheck All Read**"	Click this button to blank all tick boxes. When this is complete, this button changes to "**Check All Read**".
Remove component(s) of a Component Type from the list "Access Permitted".	Tick the relevant component(s) in the column "ID" and click **Remove**. If the list of components in the "Access Permitted" list is long, this list can be searched - see the section below. If the button **Remove** is grey, tick an item in the column "ID" under the "Access Permitted" list.
See details of a listed component.	**Right** click in any existing **row** of values in the "Access Permitted" table and select "**Open Editor**". This opens the editor for that component if the component is in the same environment of your current session. The text "Open Editor" is grey if the component is not in the environment for your current session.

When all changes are complete,

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

You may see a dialog box with heading "**Edit rights**" with message "**Components will no edit rights will be removed if Save continues**". Click OK to allow the save to remove any components that have no edit rights. Otherwise, click **Cancel** and modify some or all components with no edit rights.

30 Searching in Access Permitted

If there is a long list of components, then the list can be searched as follows:

1. Click inside the list "**Access Permitted**".

2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.

If the component is found, then you are returned to the list with that component highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

40 Searching in "Select components for Edit Rights"

After clicking **Add**, the screen "**Select components for Edit Rights**" displays a list of the components available. If the list is long, search this list as follows:

1. Click inside the list.
2. Press the **F3 key**. Alternatively, click on the **search icon** on the screen above the list.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components for Edit Rights" with that component highlighted. Tick the file to include (later) in the list under "**Access Permitted**" in the "**Edit Rights**" tab.
7. You may search again if required. You may tick as many components as required.
8. When all ticks are in place, click OK to complete the add of the ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Component Security section - "Permissions" tab

Field	Definition
Allow	A tick gives the group the rights for that function. Remove the tick to remove that right. (Optional.)
Functions	For a description of each Function, see the definitions of Component Type and Run Permission shown above on this page. (Display only.)

60 Fields - Component Security section - "Edit Rights" tab

Field	Definition

Field	Definition
Components Type	Select a Component Type. See the definitions of Component Type shown above on this page.
ID	The ID of this example of the component type shown above. Click on the column heading **ID** to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of this example of the component type shown above. Click on the column heading **Name** to sort the list by name. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Read	A tick gives the group read rights for the example in that row. Remove the tick to remove read, modify and delete rights. (Optional.)
Modify	A tick gives the group modify rights for the example in that row. Modify rights implies read rights as well. Remove the tick to remove the modify and delete rights. (Optional.)
Delete	A tick gives the group delete rights to the example in that row. Delete rights implies read and modify rights as well. Remove the tick to remove delete rights. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

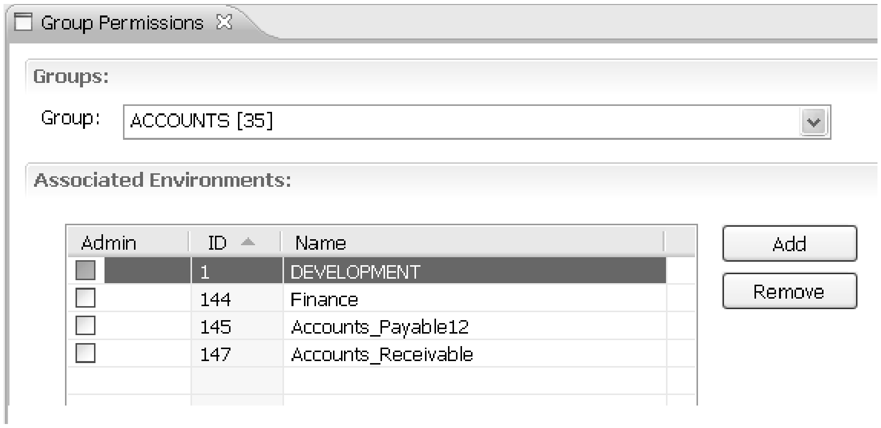
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Group Permissions (Groups, Associated Environments sections) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



This screen specifies the rights of a group to modify components of an environment.

This screen is for system administrators only.

The Group Permissions screen has three sections:

Section	Notes
Groups	Select the group to work on. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Associated Environments	Displays the environments this group can access, and allows modification to this list.
Component Security	Security details of the **highlighted environment** under **Associated Environments**. This section has two tabs: • "**Permissions**" tab. Allows the group to **create new components of certain types** and **run certain SAFR processes** in this environment. • "**Edit Rights**" tab. Allows the group **Read, Modify or Delete** access for **any existing component** in this environment.

05 Errors

For errors or messages on this screen, see topic "**Group Permissions messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action - Groups section

Select any group. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

Optionally, **right** click any group already in the field "**Group**" and select "**Open Editor**". This opens the "**Edit Group**" screen.

20 Action - Associated Environments section

If you want to ...	then ...
Add one or more environments for that group to access	Click **Add**. On the screen "**Select components to be associated**", tick the relevant environments and click OK. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If the list of environments in "Select components to be associated" is long, this list can be searched - see the section below. If the button **Add** is grey, ensure a group is selected above.
Allow (or disallow) the group to have **administration rights** to an environment.	**A tick in the Admin column** gives administration rights for the group in that environment. Remove the tick to disallow administration rights. The group can still have rights given in the Component Security section below.
Remove one or more environments from access by that group	Highlight the relevant environment(s) and click **Remove**. You can sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If the list of environments in "Associated Environments" is long, this list can be searched - see the section below. If the button **Remove** is grey, ensure an environment is highlighted. If you need to highlight more than one environment, hold the Ctrl key down and click on an extra environment. Hold the Ctrl key down and click on a highlighted environment to remove the highlight. Hold the Shift key down to highlight all environments back to and including the last highlighted environment.
See details of a listed **environment**.	**Right** click in any existing **row** of values in the Associated Environments table and select "**Open Editor**". This opens the "**Edit Environment**" screen.

When all changes are complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

30 Searching in Associated Environments

If there is a long list of associated environments, then the list can be searched as follows:

1. Click inside the list under "**Associated Environments**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".

4. In the field "**Search text**" type either the ID or the first characters in the environment name.
5. Click OK to start the search.

If the environment is found, then you are returned to the list with that environment highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

40 Searching in "Select components to be associated"

Only system administrators can reach this screen.

After clicking **Add**, the screen "**Select components to be associated**" lists the environments available. If there is a long list of environments, then this list can be searched as follows:

1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the environment name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated environments.
7. You may search again if required. You may tick as many environments as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Groups section

Field	Definition
Groups	Select an existing group. If the list is long, sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. When a group is selected, the fields in the Associated Environments section are populated.

60 Fields - Associated Environments section

Field	Definition

Field	Definition
Admin	A tick gives the group administration rights to that environment, which means all members of that group are environment administrators. Remove the tick to remove these rights. (Optional.)
ID	The ID of the environment. Click on the column heading **ID** to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of the environment. Click on the column heading **Name** to sort the list by Name. Click repeatedly to switch between ascending and descending sort order. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

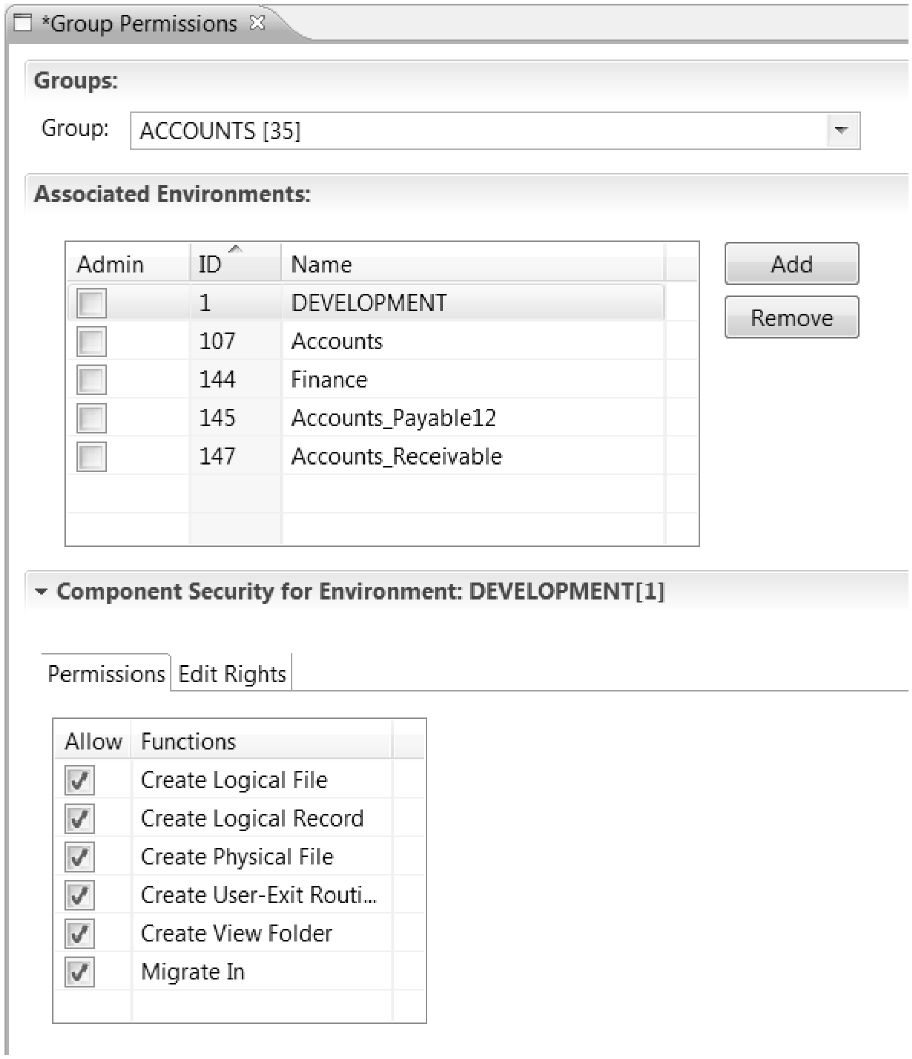
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

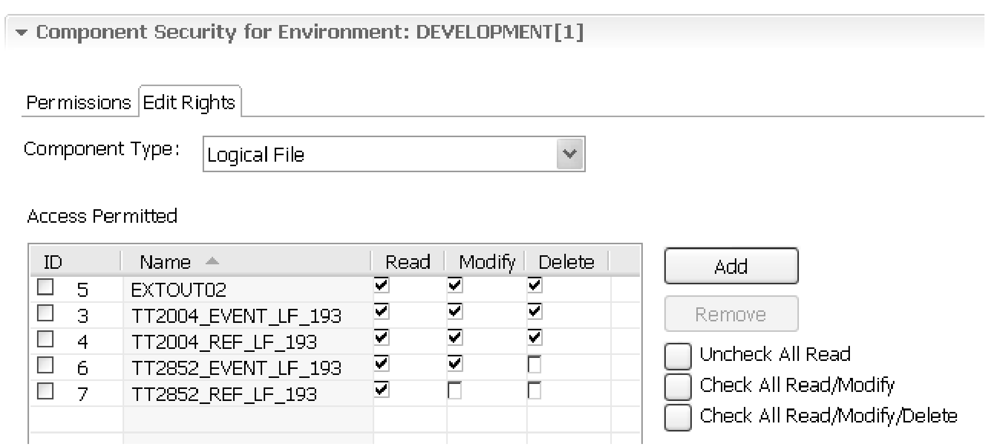
Group Permissions (Component Security section) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights





This screen specifies the rights of a group to modify components of an environment.

This screen is for system administrators only.

The Group Permissions screen has three sections:

Section	Notes
Groups	Select the group to work on. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Associated Environments	Select an environment accessed by this group. If the list is long, sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Component Security	This section remains collapsed until you select a group and an associated environment in the sections above. This section contains security details of the **highlighted environment** under **Associated Environments**. This section has two tabs: • "**Permissions**" tab. Allows the group to **create new components of certain types** and **run certain SAFR processes** in the selected environment. • "**Edit Rights**" tab. Allows the group **Read, Modify or Delete** access for **any existing component** in the selected environment.

05 Errors

For errors or messages on this screen, see topic "**Group Permissions messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Meaning of "Component Type" and "Run Permission" in this topic

Component Type refers to any of these:

- Logical File,
- Logical Record,
- Physical File,
- User-Exit Routine,
- View Folder.

Run Permission refers to:

- **Migrate In** - this permission refers to a general user running the **Migration Utility** using this environment as target. This permission also allows a general user to run **Batch Activate Lookups** and **Batch Activate Views**Utilities in this environment.

20 Action – Component Security section - "Permissions" tab

Use this section to control rights of the **group** and **environment** shown above. The environment name is repeated in the heading of the Component Security section.

If you want to ...	then ...
Allow (or block) the group to create a Component Type in this environment	Ensure a **tick for that Component Type** to allow create rights. To block create rights, ensure no tick for this item. For example, ensure a **tick for Logical File** to allow the group to create Logical Files in the environment. Remove the tick to remove the right for the group.
Allow (or block) the group a Run Permission in this environment.	Ensure a **tick for that Run Permission** to give the group rights. To block run rights, ensure no tick for this item.

When all changes are complete,

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

30 Action - Component Security section - "Edit Rights" tab

Use this section to control rights of the **group** and **environment** shown above. The environment name is repeated in the heading of the Component Security section.

If you want to ...	then ...
Add component(s) of a Component Type to the list "Access Permitted".	Click **Add**. On the screen "**Select components for Edit Rights**", tick the relevant components and click OK. Click "Select All" to tick all components in the list. Click "DeSelect All" to untick all components in the list. If the list of components in "Select components for Edit Rights" is long, this list can be searched - see the section below. If the button **Add** is grey, ensure an Environment is selected in the Associated Environments section and ensure a Component Type is selected in the Edit Rights tab.
Change the group Read, Modify and Delete rights to a particular component in the list "Access Permitted". For example, change the group rights for a particular Logical File listed under "Access Permitted".	If required, select the relevant **Component type** from the drop down list. For example, select Logical File. **A tick** gives the group the rights for that column and all columns to the left of that tick box. To remove that right, **remove the tick**.
Click "**Check All Read**"	Click this button to put a tick for all rows in column "Read" and blank out all other tick boxes. When this is complete, this button changes to "**Uncheck All Read**".

If you want to ...	then ...
Click "**Check All Read/Modify**"	Click this button to put a tick for all rows in columns "Read" and "Modify" and blank out all tick boxes in column "Delete". When this is complete, this button changes to "**Uncheck All Modify/Delete**".
Click "**Check All Read/Modify/Delete**"	Click this button to put a tick in all tick boxes in all columns. When this is complete, this button changes to "**Uncheck All Delete**".
Click "**Uncheck All Delete**"	Click this button to blank all tick boxes in column "Delete". When this is complete, this button changes to "**Check All Read/Modify/Delete**".
Click "**Uncheck All Modify/Delete**"	Click this button to blank all tick boxes in columns "Modify" and "Delete". When this is complete, this button changes to "**Check All Read/Modify**".
Click "**Uncheck All Read**"	Click this button to blank all tick boxes. When this is complete, this button changes to "**Check All Read**".
Remove component(s) of a Component Type from the list "Access Permitted".	Tick the relevant component(s) in the column "ID" and click **Remove**. If the list of components in the "Access Permitted" list is long, this list can be searched - see the section below. If the button **Remove** is grey, tick an item in the column "ID" under the "Access Permitted" list.
See details of a listed component.	**Right** click in any existing **row** of values in the "Access Permitted" table and select "**Open Editor**". This opens the editor for that component if the component is in the same environment of your current session. The text "Open Editor" is grey if the component is not in the environment for your current session.

When all changes are complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

You may see a dialog box with heading "**Edit rights**" with message "**Components will no edit rights will be removed if Save continues**". Click OK to allow the save to remove any components that have no edit rights. Otherwise, click **Cancel** and modify some or all components with no edit rights.

For errors or messages on this screen, see topic "**Group Permissions messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

40 Searching in Access Permitted

If there is a long list of components, then the list can be searched as follows:

1. Click inside the list "**Access Permitted**".

2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.

If the component is found, then you are returned to the list with that component highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

45 Searching in "Select components for Edit Rights"

After clicking **Add**, the screen "**Select components for Edit Rights**" displays a list of the components available. If the list is long, search this list as follows:

1. Click inside the list.
2. Press the **F3 key**. Alternatively, click on the **search icon** on the screen above the list.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components for Edit Rights" with that component highlighted. Tick the file to include (later) in the list under "**Access Permitted**" in the "**Edit Rights**" tab.
7. You may search again if required. You may tick as many components as required.
8. When all ticks are in place, click OK to complete the add of the ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Component Security section - "Permissions" tab

Field	Definition
Allow	A tick gives the group the rights for that function. Remove the tick to remove that right. (Optional.)
Functions	For a description of each Function, see the definitions of Component Type and Run Permission shown above on this page. (Display only.)

60 Fields - Component Security section - "Edit Rights" tab

Field	Definition

Field	Definition
Components Type	Select a Component Type. See the definitions of Component Type shown above on this page.
ID	The ID of this example of the component type shown above. Click on the column heading **ID** to sort the list by ID. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Name	The name of this example of the component type shown above. Click on the column heading **Name** to sort the list by name. Click repeatedly to switch between ascending and descending sort order. (Display only.)
Read	A tick gives the group read rights for the example in that row. Remove the tick to remove read, modify and delete rights. (Optional.)
Modify	A tick gives the group modify rights for the example in that row. Modify rights implies read rights as well. Remove the tick to remove the modify and delete rights. (Optional.)
Delete	A tick gives the group delete rights to the example in that row. Delete rights implies read and modify rights as well. Remove the tick to remove delete rights. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

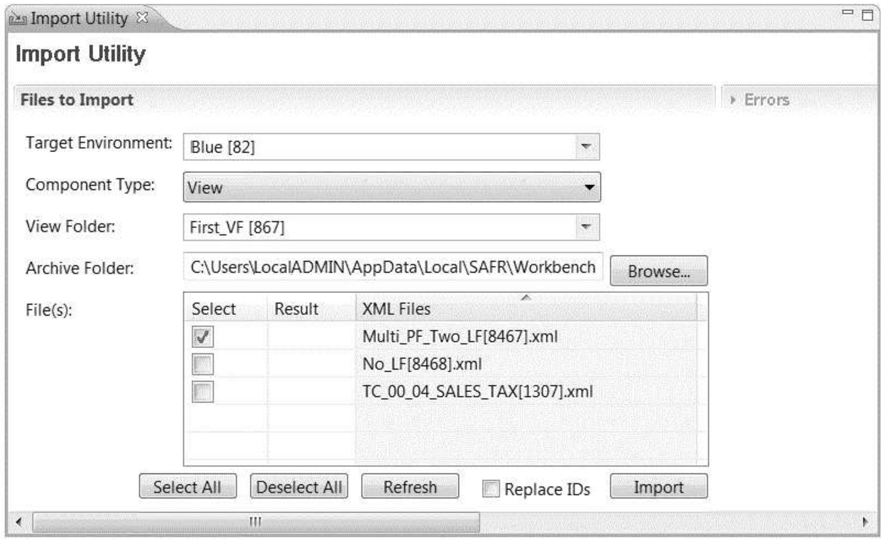
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Import Utility screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



It is essential that you read topic "**Import metadata overview**" before you perform an import. To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Use this screen to import metadata components from XML files to the SAFR Workbench. This screen reads a separate XML file for each component imported.

System and environment administrators can always use this screen. General users can display this screen but cannot select a target environment, so the screen is not functional.

05 Errors

For errors or messages on this screen, see topic "**Import Utility errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Do the following:

1. Select a **Target Environment** from the drop down box. System administrators can choose from all environments. Environment administrators can choose from those environments where the **group selected during login** has administrator access. General users can display this screen but have no target environments to select, and should avoid any actions on this screen.

   Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Environment**" screen.
2. Select a **Component Type** from the drop down box.
3. If the **Component Type** is 'View" then you must **select a View Folder** from the drop down list.

   Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit View Folder**" screen, if the view folder is in the environment for your current session. The text "Open Editor" is grey if the view folder is not in the environment for your current session.

4. If required, modify the **Archive Folder** field. Alternatively, click **Browse** to select a folder that contains relevant XML files to be imported.
5. Wait a moment. The table for **File(s)** is populated. This table lists XML files from the given Archive Folder. The XML files are named by the main item name and ID number that the file can import. Each XML file also contains details of the related items.

   If no files appear, check that you have selected the correct Archive Folder and that the folder contains XML files for components of the correct Component Type.
6. At any time, you can click the **Refresh** button to repopulate the files table with current data. This ensures that if data in the Archive Folder changes, this screen also changes as appropriate. The Refresh button also clears all data in the **Errors section** and clears all data from the **Result** column.
7. Select XML files to import as follows:
   - **Tick (or untick)** individual XML files in the Select column.

     To select a large number of XML files in sequence, select the first XML file and then **hold the Shift key down and select the last XML file**. All other XML files will be deselected when this occurs, so this should be the first action for a complex group of selections.
   - Click **Select All** or **Deselect All** as required.
   - **Tick (or untick)** the field **Replace IDs**. A tick in this field means the ID numbers in all selected XML files are ignored and the components in each XML file are assigned new ID numbers during import. This is recommended if your company is not concerned with the ID number of a component.

     No tick in this field means that the import process attempts to store the components in all selected XML files using the ID numbers given in the XML file. This is recommended if your company is concerned with the ID number of a component, for example for audit purposes.

     It is recommended to use a **blank** for field "Replace IDs" if you are following these ideal situations from the topic "**Import metadata overview**":
     - "**Ideal 'All New' - ID numbers important**"
     - "**Ideal 'All Update' - ID numbers important**"
     - "**Ideal 'All Update' - ID numbers NOT important**"

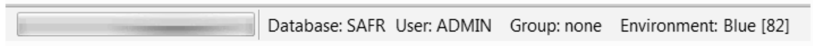
     It is recommended to use a **tick** for field "Replace IDs" if you are following "**Ideal 'All New' - ID numbers NOT important**".

     In all other situations, the correct value for field "Replace IDs" depends on your data and your objectives for the import.

     If you are unsure about using this field, see topic "**Import metadata overview**".

     To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
8. Click **Import**. If this button is grey, ensure at least one XML file above is ticked.
9. Many times during the execution of the import, you will see a window with "**Operation in progress...**" displayed. This is normal and no action is necessary. A progress bar appears at the bottom of the screen to the left of Database name.

   An example is:



10. Windows with the following headings may appear during the import process.
    - **Import existing components.**

      This window lists components from a selected XML file that already exist in the target environment. Click OK for the listed XML components to overwrite the existing components, or click cancel to stop the import.

      For more discussion on overwrite of existing components, see topic "**Import metadata overview**".
    - **Imported IDs out of range.**

      This windows lists components from a selected XML file where the ID number in the XML file is too high for the target database. Click OK for the listed XML components to receive a new ID number during the import process, or click cancel to stop the import.

      For more discussion on ID numbers and ranges, see topic "**Import metadata overview**".
    - **Imported Name Duplication.**

      This window lists components from a selected XML file where that name already exists in the target environment with a different ID number. The window lists suggested new names for those components in the XML file. You have choices on this window as follows:
      - A tick for "Use Existing" means that XML component overwrites the existing component with the same name in the target environment.
      - No tick in "Use Existing" means the XML component is renamed with the suggested new name during import, and becomes a new component in the target environment.
      - A tick in "Remember" means the import repeats the given choice for "Use Existing" if another component in the selected XML files has the same name duplication.
      - No tick in "Remember" means this window may display again if another component in the selected XML files has the same name duplication.
      - A tick for "Remember All" will tick all the "Remember" boxes.
      - Click OK to proceed with the import with your given answers, or click cancel to stop the import.

      For more discussion on rename of components during import, see topic "**Import metadata overview**".
    - **Logical record dependencies.**

      This window lists any existing views and lookup paths that use an existing logical record where an import intends to overwrite that logical record. If the import proceeds, the existing logical record is overwritten and this makes the listed views and lookup paths inactive. Click OK for the import to proceed, or click cancel to stop the import.

      For more discussion on existing components becoming inactive, see topic "**Import metadata overview**".
    - **Error on Import.**

      This window states that a database error has prevented the import from completing. See your system administrator for advice.

11. A value of "**Pass**" in the **Result** column means the import of that XML file is complete.

    A value of "**Fail**" in the Result column means an error prevented the import of that XML file. **Highlight the row for that XML file** to see any error messages in the **Errors section** on the right.

    For errors or messages on this screen, see topic "**Import Utility errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
12. The WE log file contains data about imports performed in this session.

    For an example see topic "**Import metadata overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Files to Import section

Field	Definition
Target Environment	Drop down box of environments available to the user. Sort the drop down box by clicking on a column heading. Reverse the sort order by clicking again on the same column heading. General users always have no target environments to select.
Component Type	List of components types that this utility can import.
View Folder	Drop down box of view folders available to the user. This field is enabled when the Component Type selected is "View".
Archive Folder	The folder that contains relevant XML files. Overtype the default folder name, if required. Alternatively, click **Browse** to select a different folder.
Select	Tick to select this XML file for import. Tick again to remove the tick. Import starts for ticked XML files when the "Import" button is clicked.
Result	The result after you click Import. A value of **Pass** means the import of that XML file is complete. A value of **Fail** means an error stopped import of that XML file. **Highlight the row for that XML file** to see details in the **Errors section**. (Display only.)
XML Files	Each XML file contains a main item and related items that are available for import. (Display only.)
Replace IDs	A tick in this field means the ID numbers in all selected XML files are ignored and the components in each XML file are assigned new ID numbers during import. This is recommended if your company is not concerned with the ID number of a component. No tick in this field means that the import process attempts to store the components in all selected XML files using the ID numbers given in the XML file. This is recommended if your company is concerned with the ID number of a component, for example for audit purposes. If you are unsure about using this field, see topic "**Import metadata overview**" . To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

60 Fields - Errors section

Field	Definition
Error messages	The reason this XML file did not import. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

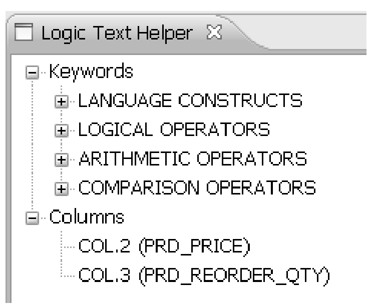
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Logic Text Helper screen help

01 Summary of this topic

The sections in this topic are as follows:
- "02 Screen function and rights"
- "05 Errors"
- "10 Action on this screen"
- "50 Fields" on page 181
- "99 Keyboard Shortcuts" on page 181

02 Screen function and rights



Use this screen as part of create or update of logic text.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Logic Text Helper errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Expand any relevant plus + sign to expose keywords. **Double click keywords for the text to automatically be copied** to the screen where you are working on logic text. **Click any minus - sign** to collapse any structures not required.

Optionally, **right** click a value listed under heading "**Fields**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen and highlights the field that you selected for the right click.

Optionally, **right** click a value listed under heading "**Lookup Paths**" and select "**Open Editor**". This opens the "**Edit Lookup Path**" screen.

Optionally, **right** click a value listed under heading "**Procedures**" under "**Write Parameters**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen that contains the procedure (executable) you selected.

Optionally, **right** click a value listed under heading "**User-Exit Routines**" under "**Write Parameters**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

Optionally, **right** click a value listed under heading "**Files**" under "**Write Parameters**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Optionally, **right** click a value listed under heading "**Lookup Path Symbols**" and select "**Open Editor**". This opens the "**Edit Lookup Path**" screen.

50 Fields

There are no input fields - there is only text that can be expanded by clicking a plus + sign.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

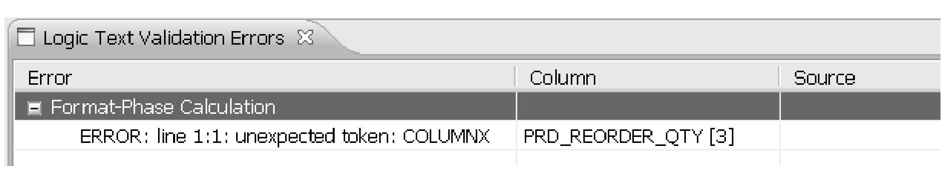
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Logic Text Validation Errors screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

This screen is read-only and shows error messages describing why the logic text is not valid.

This screen is available to all users of the workbench.

05 Errors

To understand error messages on this screen, see topic "**Logic Text Validation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Click any plus sign + to expand headings to show error messages.

The heading line has the words **Error, Col** and **Source** with vertical bars between the words. Place your cursor over a vertical bar in the heading line and drag to change the width of columns.

50 Fields (read only)

Field	Definition
Error	Error messages, with headings that can be expanded by clicking on plus +.
Column	The heading of the column in the View Editor [column number].
Source	Logical record name [logical record Id number].logical file name [logical file Id number]

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**80 Shortcuts: Logic Text screens**".

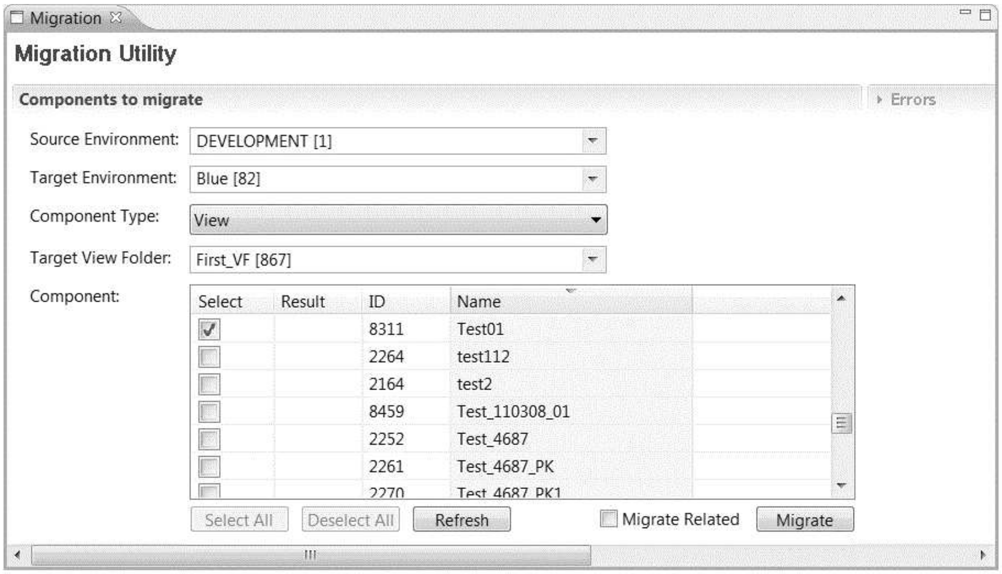
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Migration Utility screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



It is essential that you read topic "**Migrate metadata overview**" before you perform a migration. To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Use this screen to copy metadata items from a source environment to a target environment in the same SAFR Database.

You need appropriate security authority in both environments to use this screen.

- In the source environment you need:
  - EITHER read rights to all the metadata to be copied. This is necessary for general users.
  - OR administrator rights to that environment.
- In the target environment you need:
  - EITHER the "Migrate In" run permission. The is provided by the group selected during login for general users.
  - OR administrator rights to that environment.

See your system administrator if you require more rights.

05 Errors

For more details about messages on this screen, see topic "**Migration Utility messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

It is recommended to backup in the target environment the red item(s) on the "Confirm Migration" screen. On that screen you need to note the item types, names and ID numbers of the red items, click Cancel and perform the backups. When the backups are complete, repeat the migration and click OK on the same Confirm Migration screen.

One way to backup is using topic "**Exporting metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Do the following:

1. Select a **Source Environment** from the drop down box. System administrators can choose from all environments. Environment administrators and general users choose from the environments where the login group has access.

   Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Environment**" screen.
2. Select a **Target Environment** from the drop down box. System administrators can choose from all environments. Environment administrators choose from the environments where the login group has administrator access. General users choose from the environments where the login group has the "Run Migrate In" utility permission. If the drop down box is grey, ensure a source environment is selected. If so, press the Tab key.

   Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit Environment**" screen.
3. Select a **Component Type** from the drop down box. If the drop down box is grey, ensure the fields above are selected. If so, press the Tab key.
4. You may **sort** the list of "**Component**" by clicking on any of the column headings. **Reverse the sort order** by clicking again on that heading.
5. Wait a moment. The table for **Component** is populated. System and environment administrators can see all the components of the selected type in that environment. For general users, the only components listed are where the group has read or modify or delete rights.

   You must select one component to migrate to the target environment. You may optionally select **more than one** component if the field Migrate Related is blank and the **Component Type** is one of Control Record, Global Field, User-Exit Routine, Physical File, Logical File or Logical Record.

   If the above conditions are met, you may optionally click **Select All** or **Deselect All** as required to tick or untick all components listed.

   To select a large number of components in sequence, select the first component and then **hold the Shift key down and select the last component**. All other components will be deselected when this occurs, so this should be the first action for a complex group of selections.

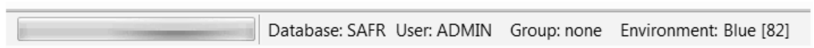
   Optionally, **right** click any row of data in the "Component" table and select "**Open Editor**". This opens the editor screen for that component if that component is in the environment for your current session. The text "Open Editor" is grey if the component in the "Component" table is not in the environment for your current session.
6. If the component selected is a view, you must select a view folder in the drop down box for **Target View Folder**. If the component selected is a view folder, you can optionally select a view folder in the drop down box for **Target View Folder**.

   Optionally, **right** click any value already in this field and select "**Open Editor**". This opens the "**Edit View Folder**" screen if the view folder is in the same environment for your current session. The text "Open Editor" is grey if the view folder is not in the environment for your current session.

7. At any time, you can click the **Refresh** button to repopulate the **Component** table with current data. This ensures that if data in the source environment changes, this screen also changes as appropriate.
8. Tick or untick the box for **Migrate Related**. If the box is grey, then that Component Type does not permit use of the Migrate Related field. If the box **Migrate Related** is ticked then the migration includes both the selected component (the "main" item) and the "related" items. This type of migration can be called a maximum migration. If the box **Migrate Related** is not ticked, then the migration is only for the selected component (the "main" item). This type of migration can be called a minimum migration.

   For more details, see topic "**Migrate metadata overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
9. Click **Migrate**. If this button is grey, ensure at least one component above is ticked.
10. Many times during the execution of the migration, you will see a window with "**Operation in progress...**". This is normal. There are two displays that indicate progress of the migration.

    Firstly, a progress bar appears at the bottom of the screen to the left of Database name. An example is:

    Secondly, text displays to the far left of the progress bar:

11. The following messages may appear:

Message	Notes
Confirm Migration. The following component(s) will be migrated. Red items marked with * exist in the target environment and will be overwritten.	It is recommended to backup in the target environment the red item(s) on this screen before proceeding with the migration. You need to note the items, cancel this migration, take the backup and then return to this migration.
Migration Complete. See the result column.	The result column will indicate either Pass, Cancel or Fail.

    For more details about messages on this screen, see topic "**Migration Utility messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
12. A value of "**Pass**" in the **Result** column means the migration of that component is complete.

A value of "**Cancel**" in the Result column means you clicked Cancel for a message window displayed during the migration.

A value of "**Fail**" in the Result column means an error prevented the migration of that component.

Highlight the row for that component to see any messages in the **Errors section** on the right. These messages give extra information about the Cancel or Fail result.

For information on the messages in the Errors section, see topic "**Migration Utility messages**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

13. The WE log file contains data about migrations performed in this session.

    For an example see topic "**Migrate metadata overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

20 Searching in "Components"

If there is a long list of components, then the list can be searched as follows:

1. Click inside the list for "**Components**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the component name.
5. Click OK to start the search.

If the component is found, then you are returned to the list with that component highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields

Field	Definition
Source Environment	Drop down box of environments available to the user.
Target Environment	Drop down box of environments available to the user.
Component Type	List of components types that this utility can migrate.
Target View Folder	This field is only active if a view or view folder is selected in field "Component" above. This field is a drop down box of view folders in the target environments available to the user.
Component	Table of components available for migration.
Select	Tick to select this component for migration. Tick again to remove the tick. Ensure you have made a choice for the "Migrate Related" field below. Migration starts for ticked components when the "Migration" button is clicked.

Field	Definition
Result	A value of "**Pass**" in the **Result** column means the migration of that component is complete. A value of "**Cancel**" means you clicked Cancel for a message window displayed during the migration. A value of "**Fail**" means an error prevented the migration of that component. **Highlight the row for that component** to see any messages in the **Errors section** on the right. These messages give extra information about the Cancel or Fail result. For information on the messages in the Errors section, see topic "**Migration Utility messages**"
ID	This is the position of that particular component in the list of components of that type for the environment. (Display only.)
Name	The name of that particular component. (Display only.)
Migrate Related	Tick or untick the box for **Migrate Related**. If the box is grey, then that Component Type does not permit use of the Migrate Related field. If the box **Migrate Related** is ticked then the migration includes both the selected component (the "main" item) and the "related" items. This type of migration can be called a maximum migration. If the box **Migrate Related** is not ticked, then the migration is only for the selected component (the "main" item). This type of migration can be called a minimum migration. For more details, see topic "**Migrate metadata overview**".

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

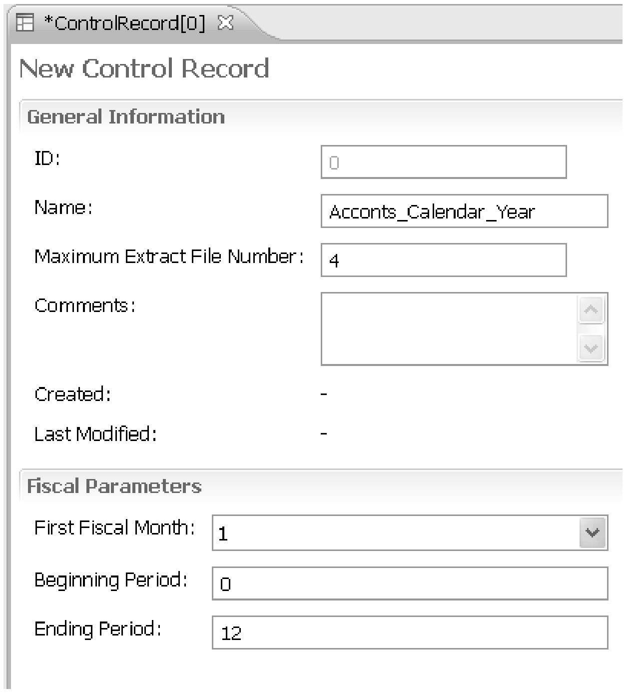
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Control Record screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to create a new control record.

This screen is for system and environment administrators only.

05 Errors

For errors or messages on this screen, see topic "**New Control Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	**Definition**
ID	The position in the list of all control records. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique among control record names in this environment. Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Maximum Extract File Number	The maximum number of extract files that can be created in the Extract Phase. Must be greater than zero and up to nine digits.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)
First Fiscal Month	Mandatory: the calendar month in which the fiscal year starts. A number in the range one to 12, representing the months January to December.
Beginning Period	A month numbered from zero to 11. This is an alternative to First Fiscal Month which is from one to 12. (Optional.)
Ending Period	A month numbered from zero to 11. Must be larger than Beginning Period, if set. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

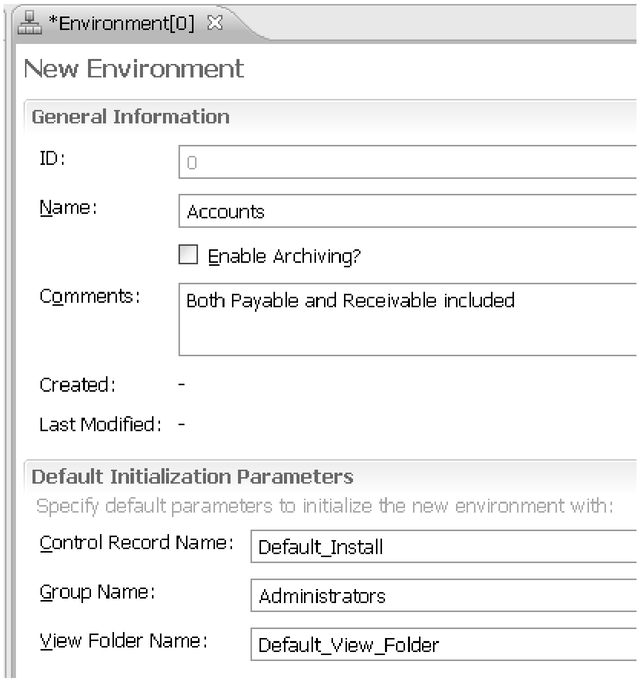
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Environment screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create a new environment record.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**New Environment errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - General Information section

Field	**Definition**
ID	The position in the list of all environments. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among environment names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Enable Archiving?	Tick if this environment might be a target of the Migration Utility. Once ticked, the Migration Utility archives data to an XML file before overwriting this environment. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - Default Initialization Parameters section

Field	Definition
Control Record Name	This field names the first control record for the new environment. A default name is given which you can change. Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing spacebar automatically creates an underscore in this field.
Group Name	General users in this group can access the new environment. If you give an existing group, SAFR uses that group. If you give a new group, SAFR creates that new group. Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing spacebar automatically creates an underscore in this field.
View Folder Name	This field names the first view folder name for the new environment. A default name is given which you can change. A string of up to 32 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing spacebar automatically creates an underscore in this field.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

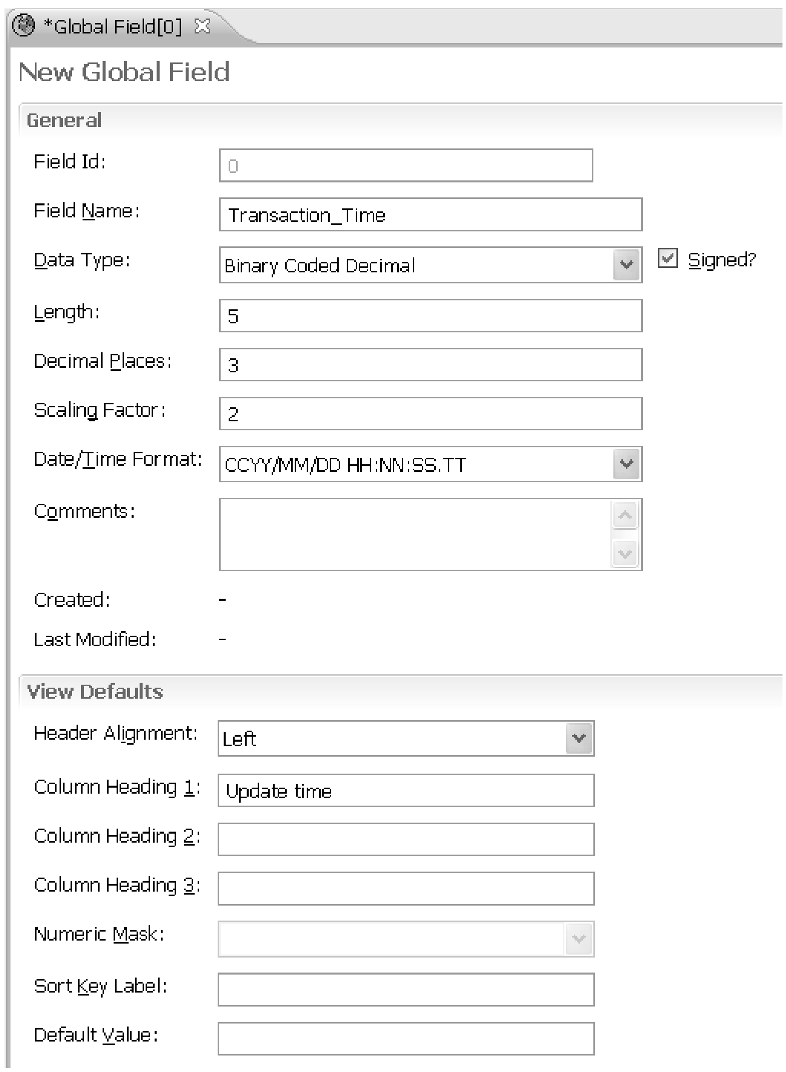
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Global Field screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to create a new global field record.

This screen is for system and environment administrators only.

05 Errors

For errors or messages on this screen, see topic "**New Global Field errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - General section

Field	**Definition**
Field ID	The position in the list of all global fields. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among global field names in this environment). Examples of permitted names: • Adjustment_Parameter_2009 • Company_Number These names are not permitted: • 2009_Report_Code (doesn't start with a letter) • Growth factor (must not include spaces) • USA/Canada.Region.Code (must not include "/" or fullstop)
Data Type	Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal. If the choice is Masked Numeric, then a Numeric Mask is mandatory in the section "Fields - view defaults" below.
Signed	Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is **Alphanumeric**. This field is also disabled if the field Data Type is **Binary** and you have selected a value in the field Date/Time Format below. (Optional.)
Length	The length of this global field. A number up to five digits. • Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.** • Values 1-16 for data types **packed, packed sortable, and zoned decimal.** • Values 1, 2, 4, or 8 for data types **binary and binary sortable.** • Values 1-10 for data type **binary coded decimal**.

Field	Definition
Decimal Places	The number of decimal places for this global field. Must be a value between 0 and 9 inclusive. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Scaling Factor	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - View Defaults section

Field	Definition
Header Alignment	The position of the header on that line. (Optional.)
Column Heading 1	Up to 254 characters. (Optional.)
Column Heading 2	Up to 254 characters. (Optional.)
Column Heading 3	Up to 254 characters. (Optional.)
Numeric Mask	Controls the display of numeric values. Mandatory for a data type of "Masked Numeric", otherwise optional.
Sort key label	Up to 48 characters. (Optional.)
Default value	Up to 254 characters. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

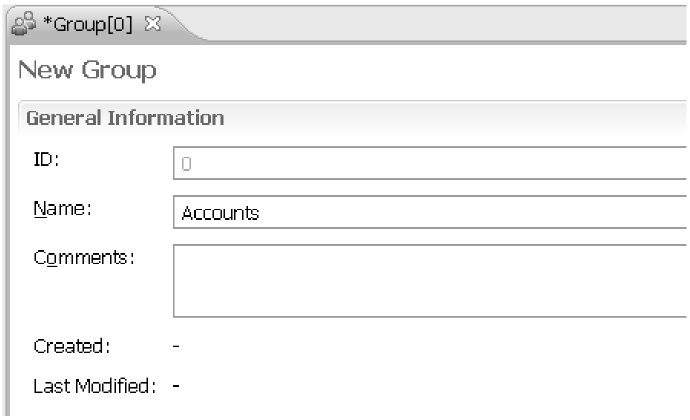
New Group screen help

01 Summary of this topic

The sections in this topic are as follows:

- “10 Action on this screen”
- “50 Fields”
- “99 Keyboard Shortcuts” on page 196

02 Screen function and rights



Use this screen to create a new group record.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**New Group errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all group records. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among group names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

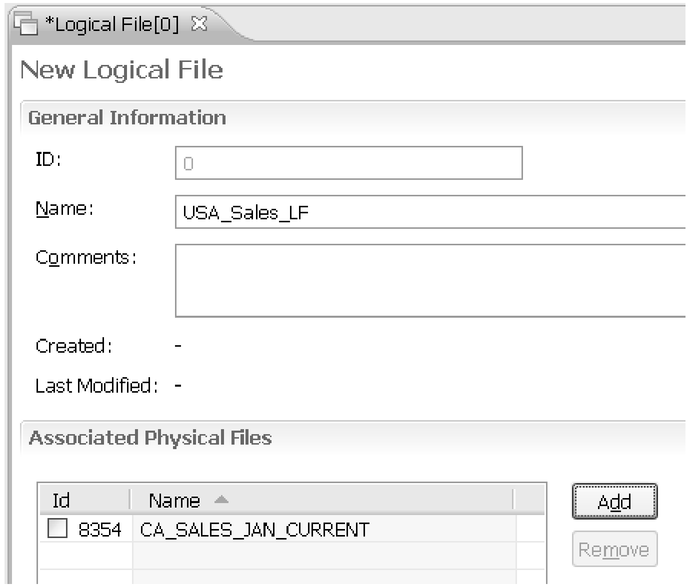
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Logical File screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to create new logical file records.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create Logical File** right in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**New Logical File errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values.

Optionally, **right** click any associated physical file already listed in this table and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

To add an associated physical file, do the following:

1. Click **Add**. The "**Select components to be associated**" dialog box appears.
2. If the list on this screen is long, this list can be searched - see the section on this below.
3. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.
4. Click **Select All** or **Deselect All** as required.

5. Click **OK**.

To remove an associated physical file, do the following:

1. If the list under "**Associated Physical Files**" is long, this list can be searched - see the section on this below.
2. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.
3. Click **Remove**. If the button **Remove** is grey, ensure there is at least one tick for a physical file to allow the button to be used.

When the logical file is complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Searching in Associated Physical Files

If there is a long list of associated physical files, then the list can be searched as follows:

1. Click inside the list under "**Associated Physical Files**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the physical file name.
5. Click OK to start the search.

If the physical file is found, then you are returned to the list with that physical file highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Searching in "Select components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the physical files available. If there is a long list of physical files, then this list can be searched as follows:

1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the physical file name.

5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated physical files.
7. You may search again if required. You may tick as many physical files as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - General Information section

Field	Definition
ID	The position in the list of all logical files. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among logical file names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - Associated Physical Files section

Field	Definition
ID	The position in the list of all associated physical files records for this logical file. (Display only.)
Name	The name of a Physical File associated with this Logical File. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

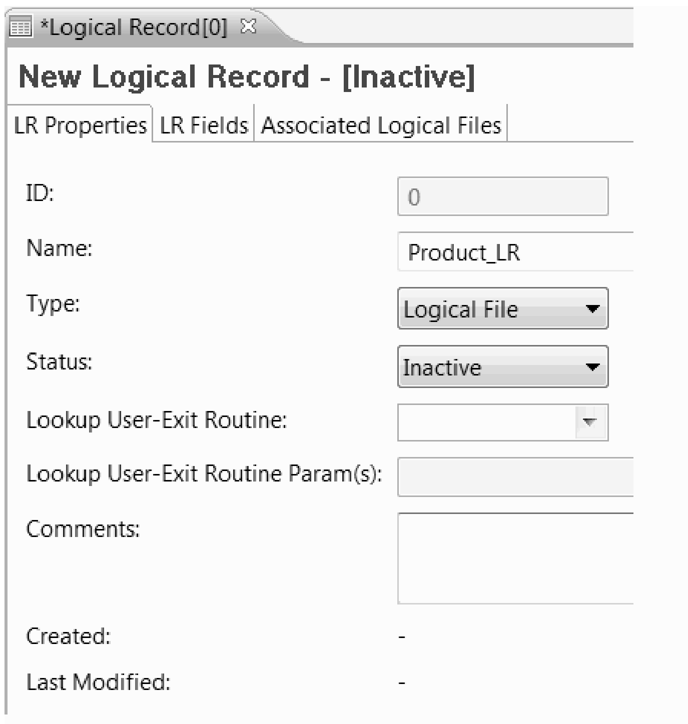
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Logical Record (LR Properties tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to add a name and some basic data to a new logical record.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create Logical Record** right in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**New Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values as required.

Optionally, **right** click any value already in the field "**Lookup User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When work on this screen is complete, either select another tab or save as follows:

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - LR Properties tab

Field	**Definition**
ID	The position in the list of all logical records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among logical record names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Type	Indicates the whether the record describes the logical file or describes a structure specific to a view.
Status	Indicates the status of the logical record as a whole.
Lookup User-Exit Routine	Specify a routine with type Lookup. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Lookup due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Lookup User-Exit Routine Parameters	Up to 32 characters. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

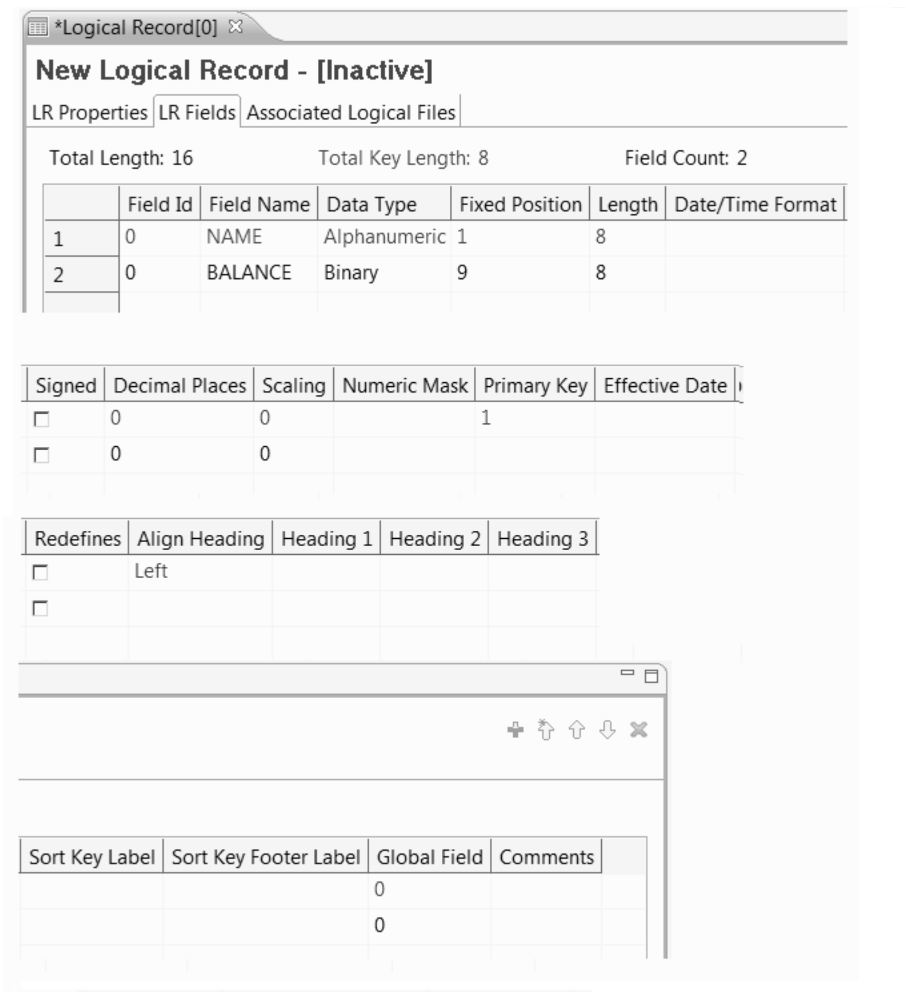
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Logical Record (LR Fields tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been split and compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to enter the field data for a logical record.

The **Edit** menu only appears when the "**LR Fields**" tab is displayed.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create Logical Record** right in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**New Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Each row on the screen describes one field in the logical record. Each row that represents a primary key field is displayed in red.

When everything is finished,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

The table below contains the actions for this screen.

If you want to ...	then ...
Assign a **global field** to an existing row	1. Click or navigate to the **Global Field** cell in that row, 2. Select from the drop down list. For keyboard instructions, see "**Edit** a cell" below in this table.
Add a blank row at the bottom	• **EITHER** click (Add field) • **OR right** click in any cell in any row and select **Add field** • **OR** select **Edit, Add Field** • **OR** click **Alt+Insert** • **OR** 1. Navigate to the last row, 2. Ensure the row has a value for **Field Name**, 3. Press the **Arrow Down** key. • **OR** 1. Navigate to the last row, 2. Navigate to the rightmost cell by pressing the **End** key 3. Press the **Arrow Right** key.

If you want to ...	then ...
Auto-Calculate	To turn this feature on • **EITHER right** click in any cell in any row and select **Set Auto-Calculate ON**. If you see a choice of "**Set Auto-Calculate OFF**" then this feature is already on. • **OR** select **Edit** menu and item **Set Auto-Calculate ON**. If the Edit menu has an item "**Set Auto-Calculate OFF**" then this feature is already on. When this feature is on, the values for **Fixed Position** adjust automatically after these actions (described in this table): • "**Add a blank row** at the bottom" • "**Delete** a row" • "**Edit** a cell" (either Length or Fixed Position) • "**Insert a row** above an existing row" • "Move a row **up**" • "Move a row **down**" If this feature is off, you can still manually recalculate the values of Length and Fixed Position - see "**Recalculate**" in this table.
Copy a row	1. **Highlight** the relevant row or **navigate** to the **Field Id cell** in that row, 2. Choose from the following: • **EITHER** select **Edit, Copy** • **OR right** click and select **Copy** • **OR** press **Ctrl+C**
Delete a row	1. Perform "**Highlight one or more rows**" below in this table 2. Do the following: • **EITHER** click (delete field) • **OR right** click and select **Delete** • **OR** select **Edit, Delete** • **OR** press the **Delete** key. 3. You are prompted to confirm the delete(s). 4. The workbench checks for any views or lookup paths that depend on this row. If these dependencies exist, the workbench displays these and refuses the delete. 5. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	then ...
Edit a cell	1. For **editing mode** • **EITHER** click in the cell for **editing mode** • **OR** navigate to the cell and press **Spacebar** 2. While in editing mode, **type** new characters or press **Delete** to remove characters. For a **drop down list** • **EITHER** click to select a value, • **OR** press **Arrow Up** or **Arrow Down** to select a value. 3. To **undo a change** while still in that cell • **EITHER** press **Escape**, • **OR right** click and select **Undo**. 4. To **commit** the changes in that cell • **EITHER** click in a different cell, • **OR** press **Enter**. 5. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Ensure accurate values for all rows	The values for **Fixed Position** must adjust after these actions: • "**Add a blank row** at the bottom" • "**Delete** a row" • "**Edit** a cell" (either Length or Fixed Position) • "**Insert a row** above an existing row" • "Move a row **up**" • "Move a row **down**" If the **Auto-Calculate** feature is turned on, then these values automatically adjust. For more on this, see "**Auto-Calculate**" in this table. If the Auto-Calculate feature is off, you can still keep these values accurate - see "**Recalculate**" in this table.
Find a field	1. Do the following: • **EITHER** click **Edit, Find Field** • **OR** press **Ctrl+F** • **OR right** click and select **Find Field** 2. Enter the **first few letters of the name** of the field, and press OK. This finds the first occurrence of that name in the logical record.

If you want to ...	then ...
Highlight one or more rows	• To highlight <u>**one**</u> **row** – **EITHER** click on the **row number** in the first (grey) column, – **OR** navigate to the **Field Id cell** in that row. • To highlight <u>**adjacent**</u> **rows** – **EITHER** 1. Click on the **row number** for Row X in the first (grey) column, 2. Hold the **Control key**, 3. Click on the **row number** for Row X+1 or Row X-1 in the first (grey) column, 4. **UNDO** by repeating steps 2 and 3. – **OR** 1. Navigate to the **Field Id cell** in Row X. 2. Hold the **Shift key**, 3. Press **Arrow Up** or **Arrow Down**. 4. **UNDO** by repeating steps 2 and 3. • To highlight **rows that are** <u>**not adjacent**</u> 1. Click on the **row number** for Row X in the first (grey) column, 2. Hold the **Control key**, 3. Click on the **row number** for Row Y in the first (grey) column 4. **UNDO** by repeating steps 2 and 3. No keyboard method is available for rows that are not adjacent.
Insert a row above an existing row	1. Highlight one row using "**Highlight one or more rows**" above in this table 2. Do the following: • **EITHER** click (Insert field). If the button is grey, ensure only one row is selected. • **OR** click the **Insert** key. • **OR** select **Edit, Insert field** • **OR right** click and select **Insert field**. 3. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	**then ...**
Keyboard navigation	Editing mode is discussed under **Spacebar** in the dot points below, and in "**Edit** a cell" above in this table. Use the following keys: • **Arrow Down** has several uses. In **editing mode** in a cell, this key selects a new value form a drop down list. When **not in editing mode**, this key moves the cursor to the row below. In the last row, if that row has a Field Name value then this key creates a new row underneath. • **Arrow Left** has several uses. In **editing mode** in a cell, this key moves the cursor one character left in the value. When **not in editing mode**, this key moves the cursor to the cell to the left. In the leftmost cell of a row, this key moves to the rightmost cell in the row above. In the leftmost cell in the first row, this key has no effect. • **Arrow Right** has several uses. In **editing mode** in a cell, this key moves the cursor one character right in the value. When **not in editing mode**, this key move the cursor to the cell to the right. In the rightmost cell of a row, this key moves to the leftmost cell in the row below. In the rightmost cell in the last row, if that row has a Field Name value then this key creates a new row underneath. • **Arrow Up** has several uses. In **editing mode** in a cell, this key selects a new value form a drop down list. When **not in editing mode**, this key moves the cursor to the row above. In the first row, this key has no effect. • **Delete** removes the highlighted row(s). You are prompted to confirm the delete(s). The workbench then checks for any views or lookup paths that depend on this row. If these dependencies exist, the workbench displays these and refuses the delete. • **End** moves the cursor to the rightmost cell in the current row. • **Enter** commits any changes made to the current cell, and exits editing mode. To resume editing mode, press Spacebar. • **Escape** restores the original value in a cell before the current editing mode started. The current cell must be in editing mode for this key to have any effect. • **Home** moves the cursor to the leftmost cell in the current row. • **Insert** creates a new row above the current row. • **Spacebar** places the current cell in editing mode. Make changes to the value in the cell. Press Enter to commit the changes and exit editing mode. Press Escape while still in editing more to undo all changes to that cell.

Move a row **up**	1. Perform "**Highlight one or more rows**" above in this table
	2. Do the following:
	  • **EITHER** click ⇧ (Move field up).
	  • **OR** press **Alt+Up**
	  • **OR** select **Edit, Move field up**
	  • **OR right** click and select **Move field up**
	3. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	then ...
Move a row **down**	1. Perform "**Highlight one or more rows**" above in this table 2. Do the following: • **EITHER** click ⇩ (Move field down). • **OR** press **Alt+Down** • **OR** select **Edit, Move field down** • **OR right** click and select **Move field down** 3. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Paste above a row	1. Perform '**Copy a row**" above in this table. 2. Locate the relevant row for the "paste above" action. Highlight this row using "**Highlight one or more rows**" above in this table. 3. Do the following: • **EITHER** click **Edit, Paste Above** • **OR** press **Ctrl+V** • **OR right** click and select **Paste Above** 4. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.
Paste below a row	1. Perform '**Copy a row**" above in this table. 2. Locate the relevant row for the "paste below" action. Highlight this row using "**Highlight one or more rows**" above in this table. 3. Do the following: • **EITHER** click **Edit, Paste Below** • **OR** press **Ctrl+Shift+V** • **OR right** click and select **Paste Below** 4. If relevant, see "**Ensure accurate values for all rows**" in this table for possible further action.

If you want to ...	then ...
Recalculate	The values for **Fixed Position** need recalculation after these actions described in this help table: • "**Add a blank row** at the bottom" • "**Delete** a row" • "**Edit** a cell" (either Length or Fixed Position) • "**Insert a row** above an existing row" • "Move a row **up**" • "Move a row **down**" If the Auto-Calculate feature is on, then the recalculation is done automatically - see "**Auto-Calculate**" in this table. If the Auto-Calculate feature is off, you can recalculate manually as follows: 1. Do the following: • **EITHER** click **Edit, Recalculate**, • **OR right** click on any row and select **Recalculate**. 2. Choose one of **All Rows**, **From Highlighted Row** and **Only Highlighted Row**. The selection **From Highlighted Row** means the recalculate starts from the highlighted row and continues for all rows below that.
Save all changes	• **EITHER** click  (the save icon) • **OR** select **File, Save**, • **OR** click **Ctrl+S**.
Undo a change	You must be in editing mode in a cell. Do the following: • **EITHER** press **Escape** • **OR right** click and select **Undo**. This (right click) cannot undo change to a drop down list.

50 Fields - "LR Fields" tab

Field	Definition
Total Length	The total length of all the fields in the logical record. (Display only.)
Total Key Length	The total length of all the primary key fields in the logical record. (Display only.)
Field Count	The total number of fields (rows) in the logical record. (Display only.)
Field ID	The position in the list of all global fields. (Display only.)

Field	Definition
Field Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among field names in this logical record). Examples of permitted names: • Adjustment_Parameter_2009 • Company_Number These names are not permitted: • 2009_Report_Code (doesn't start with a letter) • Growth factor (must not include spaces) • USA/Canada.Region.Code (must not include "/" or fullstop)
Data Type	Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal. If the choice is Masked Numeric, then a value is mandatory in the Numeric Mask field below.
Fixed Position	The starting position of this field. Automatically generated by the system, but you can modify the value. Maximum length 9 digits. If you enter zero in this field and attempt to save the logical record, an error message displays and the logical record is saved as inactive.
Length	The length of this field. A number up to five digits. • Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.** • Values 1-16 for data types **packed, packed sortable, and zoned decimal.** • Values 1, 2, 4, or 8 for data types **binary and binary sortable.** • Values 1-10 for data type **binary coded decimal**.
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Signed	Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is Alphanumeric. This field is also disabled if the field Data Type is Binary and you have selected a value in the field Date/Time Format. (Optional.)
Decimal Places	The number of decimal places for this field, up to value nine. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Scaling	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Numeric Mask	This field specifies the mask to be used on column output. Choose one of the options from the drop down list. Mandatory for a data type of "Masked Numeric", otherwise optional.

Field	Definition
Primary Key	The sequence number of this field in the primary key. Choose from the drop down list of sequence numbers. If a sequence number is selected, then the entire field (row) is displayed in red. For each field, you can set Primary Key or Effective Date but not both. To remove this field from the primary key, select blank from the drop down list. (Optional.)
Effective Date	The type of date in this field. Choose either Start Date or End Date from the drop down list. The entire logical record can have only one field where you select Start Date in this field, and only one row where you select End Date in this field. For any field, you can set Primary Key or Effective Date but not both. If you want to create a key based on a date then create a Primary Key (and do not use this field). (Optional.)
Redefines	Indicates this field redefines another field occupying the same position in the logical record. If this checkbox is selected, the fixed position of this field is set to that of the previous field. (Optional.)
Align Heading	Aligns the View column heading. (Optional.)
Heading 1	The text for the first line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Heading 2	The text for the second line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Heading 3	The text for the third line of the column heading for Hardcopy view output. Up to 254 characters. (Optional.)
Sort Key Label	Specifies the label for this field when used as a sort key in a view. Up to 48 characters. (Optional.)
Sort Key Footer Label	Up to 48 characters. (Optional.)
Global Field	The global field associated with this row. Choose from a drop down list of all global fields in this environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and
- "**20 Shortcuts: New/Edit Logical Record screen (LR Fields tab)**".

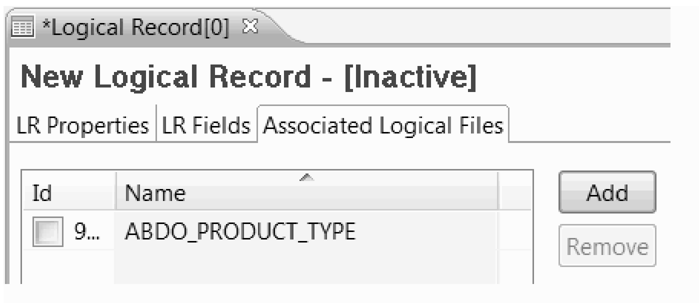
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Logical Record (Assoc. Log. Files tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



This screen links this logical record to one or more logical files. There must be at least one associated logical file.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create Logical Record** right in that environment. See your system administrator if you require more rights.

05 Errors

For messages on this screen, see topic "**New Logical Record errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Optionally, **right** click any value already in the table and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

To add an associated logical file, do the following:

1. Click **Add**. The "**Select components to be associated**" dialog box appears.
2. If the list on this screen is long, this list can be searched - see the section on this below.
3. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.

4. Click **Select All** or **Deselect All** as required.
5. Click **OK**.

To remove an associated logical file, do the following:

1. If the list under "**Associated Logical Files**" is long, this list can be searched - see the section on this below.
2. **Tick or untick** the relevant files. To select a large number of files in sequence, select the first file and then **hold the Shift key down and select the last file**. All other files will be deselected when this occurs, so this should be the first action for a complex group of selections.
3. Click **Remove**. If the button **Remove** is grey, ensure there is at least one tick for a logical file to allow the button to be used.

When all changes complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

20 Searching in Associated Logical Files

If there is a long list of associated logical files, then the list can be searched as follows:

1. Click inside the list under "**Associated Logical Files**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".
4. In the field "**Search text**" type either the ID or the first characters in the logical file name.
5. Click OK to start the search.

If the logical file is found, then you are returned to the list with that logical file highlighted.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

30 Searching in "Select components to be associated"

After clicking **Add**, the screen "**Select components to be associated**" lists the logical files available. If there is a long list of logical files, then this list can be searched as follows:

1. Click inside the list under "**Select components to be associated**".
2. Press the **F3 key**. Alternatively, click on the **search icon** in the Workbench toolbar. If the icon is grey, repeat the previous step and the icon should now be available.
3. The screen "**Search Metadata Component**" appears. Choose the type of search you require: either "**By ID**" or "**By Name**".

4. In the field "**Search text**" type either the ID or the first characters in the logical file name.
5. Click OK to start the search.
6. If the component is found, then you are returned to the screen "Select components to be associated" with that component highlighted. Tick the file to include (later) in the list of associated logical files.
7. You may search again if required. You may tick as many logical files as required.
8. When all ticks are in place, click OK to complete the add of ticked files.

For more about this searching, read task "**Searching lists of metadata**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Associated Logical Files tab

Field	Definition
ID	Each file has an automatic number in the list. Click on the column heading 'ID' to sort the list by ID. Clicking it repeatedly toggles the list sort sequence between numeric ascending and descending. (Display only.)
Name	The name of the associated logical file. Click on the column heading 'Name' to sort the list by Name. Clicking it repeatedly toggles the list sort sequence between alphanumeric ascending and descending. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

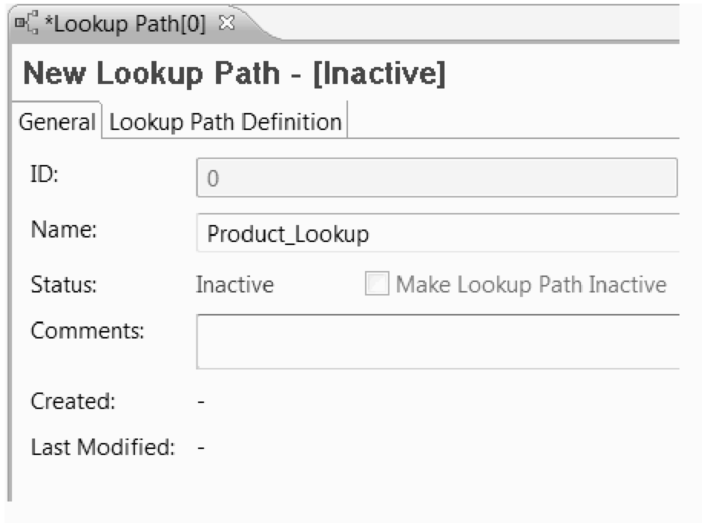
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Lookup Path (General tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to give a lookup path a name and to define few other fields.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**New Lookup Path errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - General tab

Field	Definition
ID	The position in the list of all lookup paths. (Display only.)

Field	Definition
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among lookup path names in that environment). Examples of permitted names: • Lookup_Dept_Mgr • Company_type_code_lookup These names are not permitted: • 2009_Lookup (doesn't start with a letter) • Head Office Codes Lookup (must not include spaces) • USA/Canada Lookup 1.1 (must not include "/" or fullstop)
Status	Indicates the status of this Lookup Path. A new Lookup Path starts with Inactive by default. (Display only.)
Make Lookup Path Inactive	Tick to explicitly set the status of this lookup path to inactive. This field is disabled if the status is already inactive.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

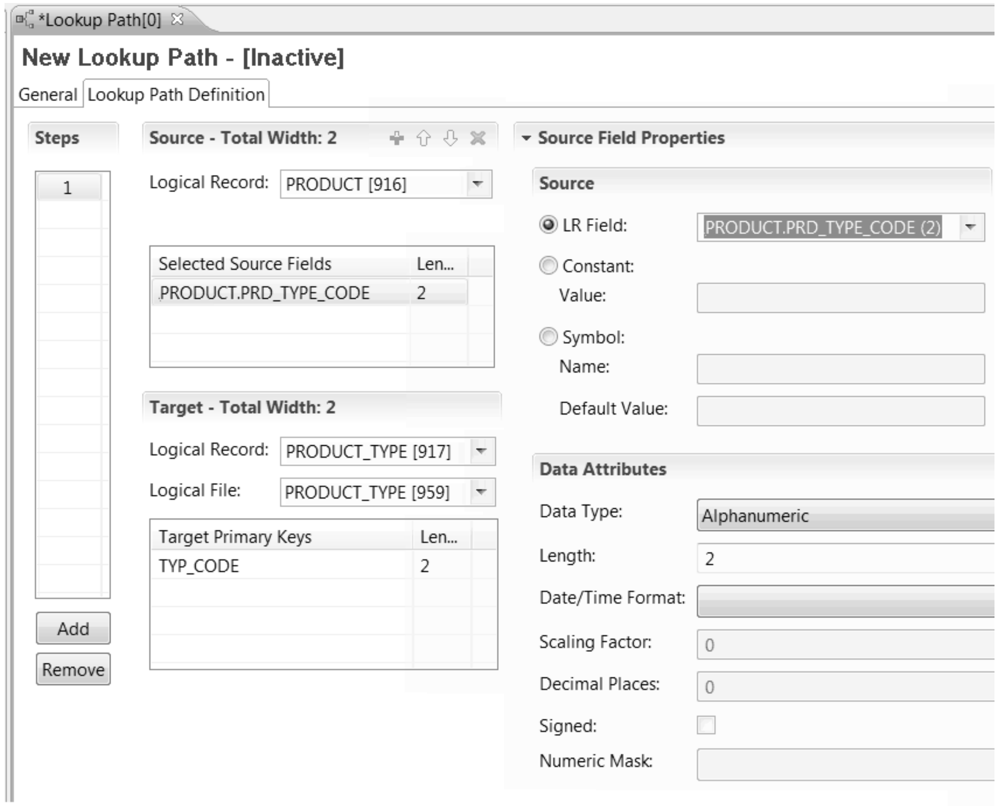
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New Lookup Path (Lookup Path Definition tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to describe the steps in a new lookup path.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**New Lookup Path errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files"**.

10 Action - Lookup Path Definition tab

A lookup path allows data from a source file to access a target file. The data from the source file is optionally combined with constants and symbols to create a key. That key consists of selected source fields and must match the primary key of the target file.

For an introduction to constants and symbols, see topic "**Lookup Path overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

A lookup path consists of one or more steps, where each step defines a key that accesses a target file. The color of the step number indicates that status of that step:

- **Black** means an **active** step.
- **Red** means an **inactive** step.
- **Blue** means an **incomplete** step.

Use the recommended actions in the table below.

Recommended actions	Notes
1. Under **Source**, select a **Logical Record**	Makes all fields in the source file available for inclusion in the Selected Source Fields. Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
2. Under **Target**, select a **Logical Record**	Once selected, the heading for the Target section changes to **Target - Total Width: ?** This defines the length of the primary key of the target file. Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
3. Under **Target**, select a **Logical File**	Optionally, **right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical File**" screen.
4. Go to section **04 Action - detail a step** below.	This details one particular step.
5. For an extra step, see section **06 Action - two or more steps** below.	This creates (or removes) an extra step(s).
6. Save the lookup path.	**EITHER:** • click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. To save a copy of the lookup path with a different name: 1. **EITHER:** • select **File, Save As**, • **OR** press **Ctrl+Shift+S** 2. Type a new name 3. Click **Save** or press **Enter**.

20 Action - detail a step

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

To complete a step in the lookup path, inside that step the **Source - Total Width** must be equal to **Target - Total Width**. The **Source - Total Width** is the total length of the list of **Selected Source Fields**. The **Target - Total Width** is the length of the primary key for the target logical record.

If you want to ...	**then ...**
Add a field	1. **EITHER:** • click (Add a source field), • **OR** select **Edit, Add a source field**, • **OR right** click and select **Add Source Field**, • **OR** click **Alt+Shift+Insert**. 2. **Right** click the value set in this field and select "**Open Editor**". This opens the "**Edit Logical Record**" screen that contains the field. 3. Go to the row in this help table for "Configure a **Source field**".
Change the order of the field list	**EITHER:** • click (Move source field up) or (Move source field down). See note below when one or both icons are grey. • **OR** select **Edit** and then **Move source field up** or **Move source field down**. See note below when one or both menu items are grey. • **OR right** click and select **Move source field up** or **Move source field down**. See note below when one or both menu items are grey. • **OR** click **Alt+Shift+Up** (Move source field up) or **Alt+Shift+Down** (Move source field down). See note below if nothing happens. If any of the following are true: • The icon is grey, • **OR** the menu item is grey, • **OR** pressing the given keys does nothing then this means the one of the following is true: • A row is not highlighted. You must ensure one row is highlighted. • **OR** the action is impossible, • **OR** you do not have enough rights to perform this action. You need modify rights to this lookup path to perform this action.
Change the Source Logical Record	This is only permitted in Step 1. Under **Source** click on the drop down box for **Logical Record**. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical record is selected.
Change the Source Logical File	This field does not display for Step 1. For all steps after that, to change this field you must change the target logical file in the previous step.
Change the Target Logical Record	Under **Target** click on the drop down box for **Logical Record**. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical record is selected.

If you want to ...	then ...
Change the Target Logical File	Under **Target** click on the drop down box for **Logical File**. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. Ensure a logical file is selected.
Configure a **Source field**	Under **Source Field Properties** and **Source**, do the following: 1. Ensure the **radio button** for **LR Field** is selected. 2. Select a field from the drop down list. 3. Go to the row in this help table for **Set Data Attributes**.
Configure a **Constant**	Under **Source Field Properties** and **Source**, do the following: 1. Ensure the **radio button** for **Constant Value** is selected. 2. Type data for **Value**. 3. Go to the row in this help table for **Set Data Attributes**.
Configure a **Symbol**	Under **Source Field Properties** and **Source**, do the following: 1. Ensure the **radio button** for **Symbol Name** is selected. 2. Type in the symbol name in the field to the right. In logic text, the syntax requires "**$**" (a dollar sign) before the symbol name, but the symbol name here starts with a letter. 3. Type data for **Default Value**. 4. Go to the row in this help table for **Set Data Attributes**.
Create a **extra step**	See section **06 Action - two or more steps** below.
Delete a field	1. Highlight the relevant row in **Selected Source Fields**. 2. **EITHER:** • click (Delete source field). See note below if icon is grey. • **OR** select **Edit, Delete source field**. See note below if menu item is grey. • **OR right** click and select **Delete**. See note below if menu item is grey. • **OR** click **Delete**. See note below if nothing happens. If any of the following are true: • The icon is grey, • **OR** the Delete menu item is grey, • **OR** pressing Delete does nothing then this means the one of the following is true: • A row is not highlighted. You must ensure one row is highlighted. • **OR** you do not have enough rights to perform this action. You need modify rights to this lookup path to perform this action.

If you want to ...	then ...
Delete a step	See section **06 Action - two or more steps** below.
Edit or review the **source logical record**	**EITHER:** • **Right** click the value in field "**Logical Record**" under "**Source**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen. • **OR** **Right** click the value in field "**LR Field**" under "**Source Field Properties**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.
Modify a field	1. Ensure the row is highlighted. 2. Choose one of these rows in this help table: • **Change the order**. • Configure a **Source field**. • Configure a **Constant**. • Configure a **Symbol**.
Reorder the field list	See row **Change the order** in this help table.
Save the lookup path	**EITHER:** • click  (the save icon) • **OR** select **File -> Save** • **OR** click **Ctrl+S**. To save a copy of the lookup path with a different name: 1. **EITHER:** • select **File, Save As**, • **OR** press **Ctrl+Shift+S** 2. Type a new name 3. Click **Save** or press **Enter**.
Set Data Attributes for a field	Ensure the field is highlighted. Select or type values as appropriate under **Data Attributes**. For more on each field, see heading **Fields - Source Field Properties - Data Attributes section** below. When the Data Attributes are correct, then this field in "Selected Source Fields" is finally complete.

30 Action - two or more steps

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

If you want to ...	then ...
Modify an existing step	Do the following: 1. Click on the step number. After a short pause, the details of that step display. 2. Go to section **04 Action - detail a step** above.

If you want to ...	then ...
Add a **new last step**	Do the following: 1. **Highlight the current last step** 2. Ensure selections for **Source Logical Record, Target Logical Record** and **Target Logical File.** 3. Underneath the list of steps, click **Add**. 4. Under **Target**, select a **Logical Record**. 5. Under **Target**, select a **Logical File**. 6. Go to section **04 Action - detail a step** above.
Remove a step and **all steps below that**	Do the following: 1. **Highlight the step** number and click **Remove**. An alternative to the Remove button is to hit the **Delete** key. 2. A message appears that provides the option to cancel the action.

Save the lookup path	**EITHER:**
	• click  (the save icon)
	• **OR** select **File -> Save**
	• **OR** click **Ctrl+S**.
	
	To save a copy of the lookup path with a different name:
	1. **EITHER:**
	  • select **File, Save As**,
	  • **OR** press **Ctrl+Shift+S**
	2. Type a new name
	3. Click **Save** or press **Enter**.

50 Fields - Source section

Field	Definition
Logical Record	The source logical record. Step 1 must have a logical record selected from this box. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. For all steps after that, this field is the target logical record of the previous step and is display only.
Logical File	One of the logical files associated with the logical record above. This field is not required for Step 1. For all steps after that, this field is the target logical file of the previous step. (Display only.)
Selected Source Fields	The names of the selected source fields. The fields may be a logical record field that was selected from the logical record above, or may be a constant or symbol defined for this lookup. Double click on a field to highlight the relevant entries in the Source Field Properties section.
Length	The length of the Selected Source Field in that row. (Display only.)

60 Fields - Source Field Properties - Source section

Field	Definition
LR Field	A field in the source logical record for this step of the lookup. Click this radio button and select a logical record field from the drop down box. If the radio button is not selected, the drop down field is disabled.
Constant	Click this radio button to define a constant value. Use the Value field for the actual value itself.
Value	The value of a constant. The Constant radio button must be selected to enter a value in this field.
Symbol	Click this radio button to define a symbol. A symbol is a variable that is controlled by logic text in the view. In logic text, the syntax requires "**$**" (a dollar sign) before the symbol name, but the actual symbol name starts with a letter. The field Default Value below applies to this symbol.
Name	The name of this symbol (required if the radio button for symbol is selected). Up to 254 characters.
Default Value	The default value of this symbol (required if the radio button for symbol is selected). Up to 254 characters.

70 Fields - Source Field Properties - Data Attributes section

Field	Definition
Data Type	Choose one of Alphanumeric, Binary, Binary Coded Decimal, Binary Sortable, Edited Numeric, Masked Numeric, Packed, Packed Sortable or Zoned Decimal.
Length	The length of this field. A number up to five digits. • Values 1-256 for data types **alphanumeric, edited numeric and masked numeric.** • Values 1-16 for data types **packed, packed sortable, and zoned decimal.** • Values 1, 2, 4, or 8 for data types **binary and binary sortable.** • Values 1-10 for data type **binary coded decimal**. For a **constant**, set the length based on the Value field of the **Source Field Properties Source** section
Date/Time Format	Choose one of the formats from the drop down list. If the data type is Edited Numeric this field is automatically set to blank and is display only. (Optional.)
Scaling Factor	This field is used for rounding off the values. A number between -9 to +9. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)
Decimal Places	The number of decimal places for this field, up to value nine. If the data type is Alphanumeric this field is automatically set to zero and is display only. (Optional.)

Field	Definition
Signed	Check this box if your data values could be both positive and negative. This field is disabled if the Data Type field is Alphanumeric. This field is also disabled if the field Data Type is Binary and you have selected a value in the field Date/Time Format. (Optional.)
Numeric Mask	This field specifies the mask to be used on column output. Choose one of the options from the drop down list. (Optional.)

80 Fields - Target section

Field	Definition
Logical Record	The target logical record, which must have a primary key defined, and must be in the current environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Logical File	The target logical file which must associated with the target logical record in the current environment. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Target Primary Keys	The names of the target logical record fields that are primary keys. (Display only).
Length	The length of the Target Primary Key in that row. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

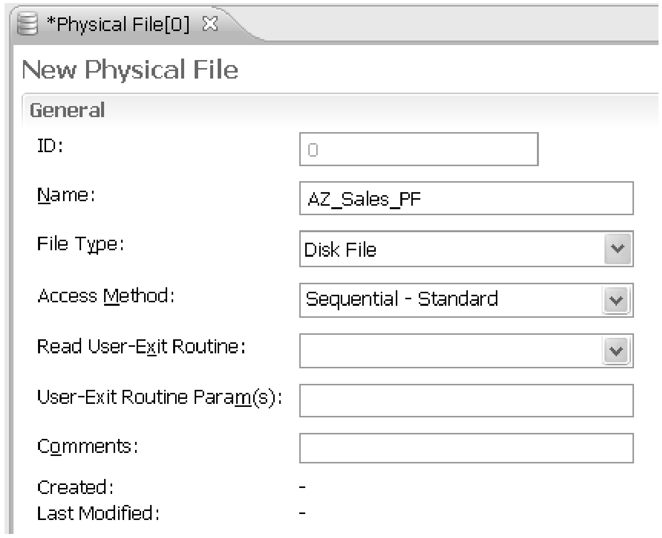
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

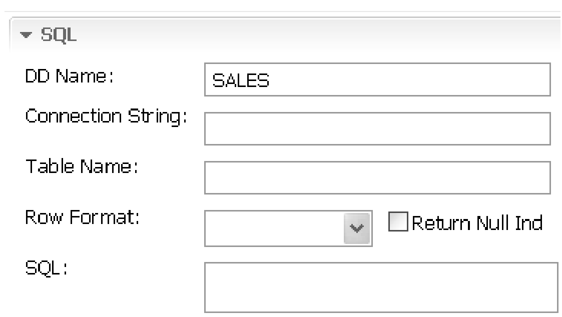
New Physical File screen help

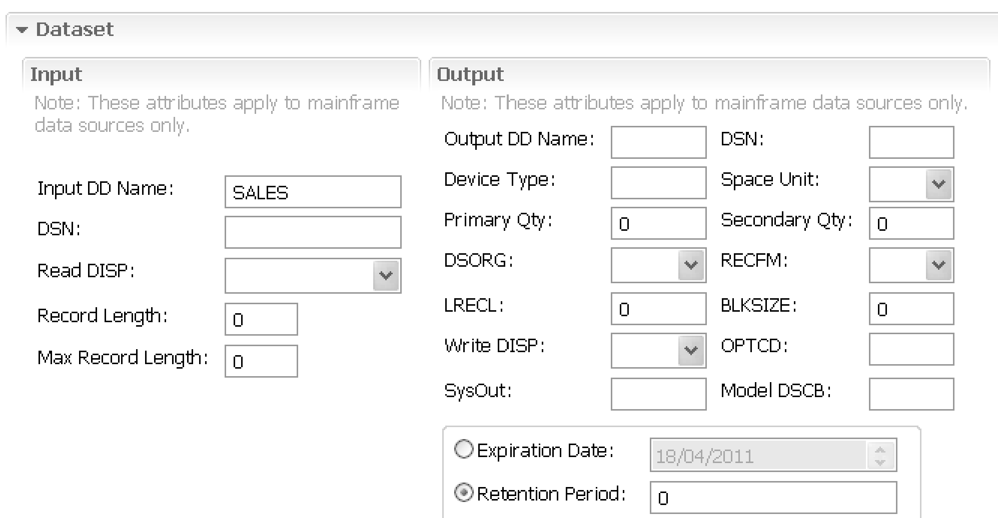
01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights







The above screen images have been compressed horizontally and vertically for ease of printing and display. Some fields are wider and taller than shown.

Use this screen to create a new physical file record.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create Physical File** right in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**New Physical File errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

This screen has three sections:

1. **General section** - mandatory for a new physical file.
2. **SQL section** - opens automatically for **DB2 via SQL access**. Enter any SQL parameters.
3. **Dataset section** - is relevant for **sequential access**. Enter any relevant **Input** and **Output** parameters.

Enter any relevant parameters in the above sections.

Optionally, **right** click any non blank value in the field "**Read User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When work on this Physical File is complete,

- **EITHER** click  (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields - General section

Field	**Definition**
ID	The position in the list of all physical files. (Display only.)
Name	The name of this file inside SAFR (which may not be the same as the file name on the mainframe). This SAFR name is part of the metadata of SAFR. For the actual name of this file on the mainframe, see the DSN fields under the Input and Output screens below. Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among physical file names). Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
File Type	Choose one of: Disk File, Pipe, Tape File, Token.

Field	Definition
Access Method	The method to access the physical file. Choose one of: DB2 via SQL, DB2 via VSAM, Sequential-Cylinder Read, Sequential-Standard, VSAM-ordered, VSAM-unordered. If you choose **DB2 via SQL**, then the SQL section opens automatically. If you choose any of the other values, then proceed to the Dataset section.
Read User-Exit Routine	Choose from a list of User-Exit Routines that are all type Read. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. If you cannot find the selection you require, see your system administrator. In rare cases, the User-Exit Routine named in this field may no longer be type Read due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
User-Exit Routine Parameters	The data parameters or arguments passed to the User-Exit Routine selected above. Up to 32 characters. (Optional.)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - SQL section

Field	Definition
DD Name	A symbolic name used by the SAFR performance engine to refer to this SQL physical file definition. Similar to a DD name in JCL and has the same syntax. Up to eight characters. This field is always the same as the Input DD Name field under the Dataset Input section. (Optional.)
Connection String	The information required by the SAFR performance engine to connect to the database containing the event data (i.e. the target of the SQL). For example, for a mainframe DB2 environment, this field is the four-byte DB2 subsystem on which the DB2 table exists. Up to 48 characters. (Optional.)
Table Name	The name of the DB2 table that is the target of the SQL. Up to 48 characters. (Optional.)
Row Format	Choose SQL Standard or DB2 Internal. If your Access Method in the first screen is **DB2 via SQL**, this field is **'SQL Standard'** and is display only.
Return Null Indicator	Tick this field to display a null indicator value in the output data where relevant. The default is not to display any null indicators. (Optional.)

Field	Definition
SQL	The SQL statement to retrieve the event data rows. Up to 1280 characters. (Optional.)

70 Fields - Dataset section - Input

Field	Definition
Input DD Name	The Data Definition (DD) name - a symbolic name used by the SAFR performance engine to refer to this input file in the JCL. Up to eight characters. This field is always the same as the DD Name field under the SQL section. (Optional.)
DSN	DSN means dataset name on your mainframe. Up to 44 characters. (Optional.)
Read Disposition	The data set disposition (DISP) parameter value to the SAFR Performance Engine in the event that it is dynamically allocated. (Optional.)
Record Length	The length of a record. Used for datasets with fixed length records. Up to 15 digits. (Optional.)
Max Record Length	The maximum length of a record. Used for datasets with variable length records. Up to 15 digits. (Optional

80 Fields - Dataset section - Output

Field	Definition
Output DD Name	The Data Definition (DD) name - a symbolic name used by the SAFR performance engine to refer to this output file in the JCL. Up to eight characters. (Optional.)
DSN	DSN means dataset name on your mainframe. Up to 44 characters. (Optional.)
Device Type	The mainframe storage device type. Up to eight characters. (Optional.)
Space Unit	The space unit on the storage device. Choose one of Blocks, Cylinders, Tracks. (Optional.)
Primary Quantity	The primary quantity of space units to be allocated for this dataset. Up to nine digits. (Optional.)
Secondary Quantity	The secondary quantity of space units to be allocated for this dataset if the primary quantity is used up. Up to nine digits. (Optional.)
DSORG	The dataset organization. Choose one of Direct Access, Partitioned, Physical Sequential or VSAM or blank. (Optional.)
RECFM	The record format. Choose one of FB (fixed block), FBA (fixed block with print attribute), VB (variable block) or VBA (variable block with print attribute) or blank. (Optional.)

Field	Definition
LRECL	The logical record length. Up to nine digits. (Optional.)
BLKSIZE	The block size. Up to nine digits. (Optional.)
Write Disposition	The data set disposition (DISP) parameter value to the SAFR Performance Engine in the event that it is dynamically allocated. (Optional.)
OPTCD	A sub-parameter of IEBGENER, which is a mainframe utility that converts to and from EBCDIC and ASCII. OPTCD is a sub-parameter of the DCB parameter for the JCL of this utility. OPTCD refers to optional services in conversion of data. Up to nine characters. (Optional.)
Sysout	The message class for the output of the JCL for the SAFR Performance Engine. Up to 48 characters. (Optional.)
Model DSCB	The name of a dataset control block to use as a model for this dataset. Up to 48 characters. (Optional.)
Expiration Date	The expiration date of the file, given by a radio button with a date selection to the right. Select this option and provide a date during the create of a new physical file. SAFR selects this button automatically when you edit an existing physical file that already has an expiration date. You can modify the expiration date in this situation. (Optional.)
Retention Period	The retention period for the file (in days) given by a radio button with a text area to the right. If relevant, select this option. Up to nine digits. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

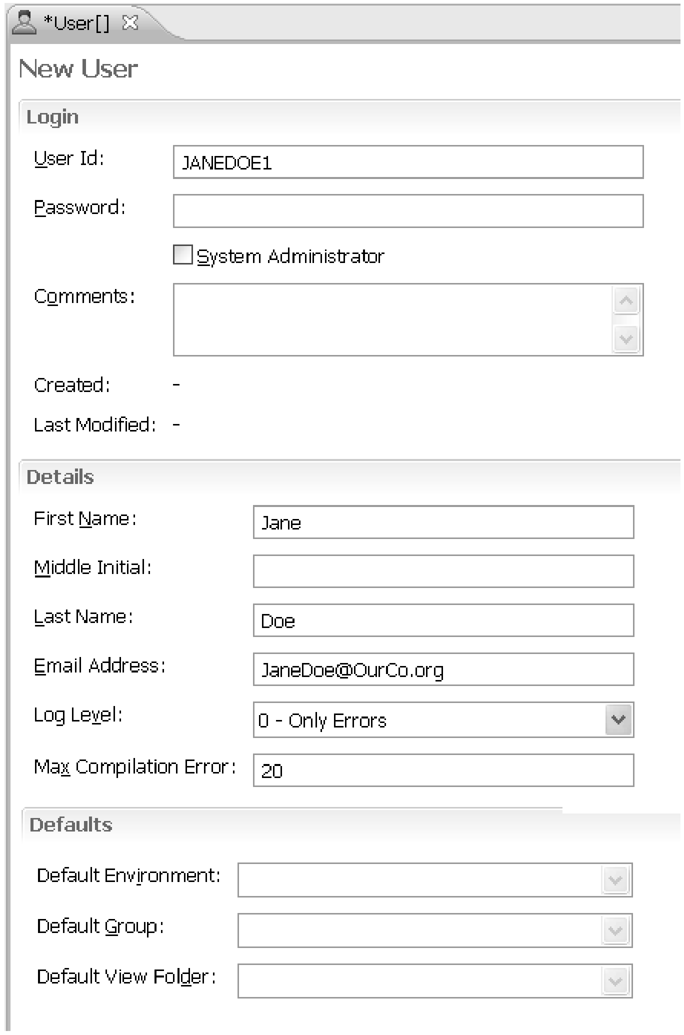
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New User screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to create new user records.

This screen is for system administrators only.

05 Errors

For errors or messages on this screen, see topic "**New User errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values on this screen.

Optionally, **right** click any value already in the field "**Default Environment**" and select "**Open Editor**". This opens the "**Edit Environment**" screen.

Optionally, **right** click any value already in the field "**Default Group**" and select "**Open Editor**". This opens the "**Edit Group**" screen.

Optionally, **right** click any value already in the field "**Default View Folder**" and select "**Open Editor**". This opens the "**Edit View Folder**" screen if the view folder is in the environment of your current session. The words "Open Editor" are grey if the view folder is not in the environment of your current session.

When required, save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

Immediately afterwards, make the user a member of their default group or at least one group using topic "**Modifying group membership**". To change the permissions in the group, see topics "**Modifying group permissions by group**" and "**Modifying group permissions by environment**".

To find these topics in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields - Login section

Field	Definition
User ID	A unique identifier for this user. Type 4 to 8 characters, composed of letters, numbers, and special characters ! @ # $ % ^ & * and the underscore (_). Must be unique among user names in this SAFR database.
Password	As you type the screen shows only asterisks. A string of up to 20 characters. (Optional.)
Comments	Useful notes, up to 200 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

60 Fields - Details section

Field	Definition
System Administrator	If ticked, the user has system administrator rights. If not ticked, this is a general user. Note that a general user can become an environment administrator with the help of group rights which are not configured here. (Optional.)
First Name	A string of up to 50 characters. (Optional.)
Middle Initial	Any single character. (Optional.)
Last Name	A string of up to 50 characters. (Optional.)

Field	Definition
Log Level	Choose from 0-Errors Only, 1-High Level, 2-Detail Level. (Optional.) Log level 0 - the error log contains only error messages. Log level 1 - the error log contains error messages and various events like buttons clicked. Log level 2 - the error log contains all log level 1 data with database data such as SQL statements and procedure calls.
Max Compilation error	The maximum number of errors SAFR displays when compiling a view before it stops. A number up to four digits. Zero is allowed. The default value is 20.

70 Fields - Default section

Field	Definition
Default Environment	Choose an environment from the drop down list. This environment is the first environment that the user sees during login to SAFR. The user can choose a different environment during login. The only environments the user can select during login are those environments where the user has access rights. For an existing General User, this drop down list consists of all Environments associated with any Group that the user is a member of. For an existing system administrator, this drop down list consists of all environments. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Default View Folder	Choose from a drop down list of view folders. All views created by the user are stored in this view folder, unless the user explicitly chooses a different view folder for that view. The only view folders the user can select are those folders where the user has access to that environment. The Default Environment field must have a value to set this field. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)
Default Group	Choose from a drop down list of groups. Set this field only for a general user (not a system administrator). This group is the first group that the user sees during login to SAFR. The user can choose a different group during login. The only groups the user can select during login are those groups where the user is a member. The Default Environment field must have a value to set this field, and the default group must have access to the default environment chosen. A value in this field does not make the user a member of that default group - use the Group Membership screen to do this. Sort the drop down list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. (Optional.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

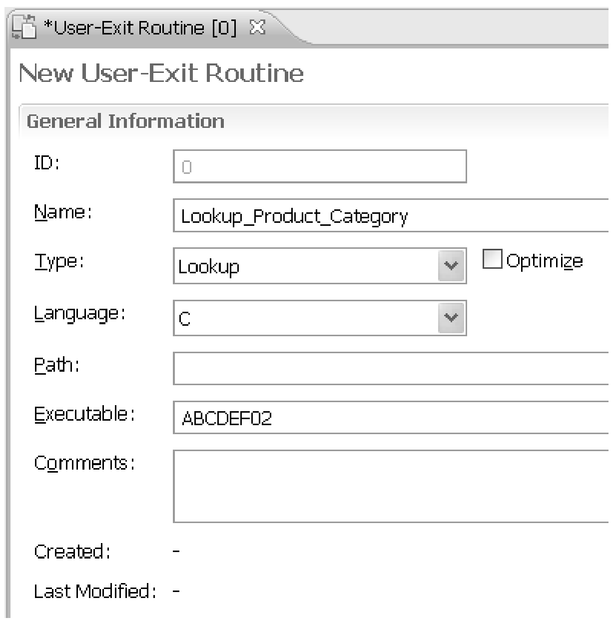
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New User-Exit Routine screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create new user-exit routine records.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has **Create User-Exit Routine** right in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**New User-Exit Routine errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),

- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

50 Fields

Field	Definition
ID	The position in the list of all user-exit routines. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among user-exit routine names in this environment). Examples of permitted names: • Accounts_Format_401 • Read_Special_Fields These names are not permitted: • 2009_Write_Routine (doesn't start with a letter) • Special Lookup (must not include spaces) • USA/Canada Format 1.1 (must not include "/" or fullstop)
Type	The function of the user-exit routine.
Optimize	This tells SAFR to avoid an unnecessary read. Check this field to tell SAFR to reuse previously read lookup values if the record keys/value have not changed. (Optional.)
Language	The language of the user-exit routine.
Path	The path to the user-exit routine. Up to 1016 characters. (Optional.)
Executable	The executable name must be unique within an environment. Up to 18 characters, consisting of letters (both cases), numbers, #, $, and the underscore (_).
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

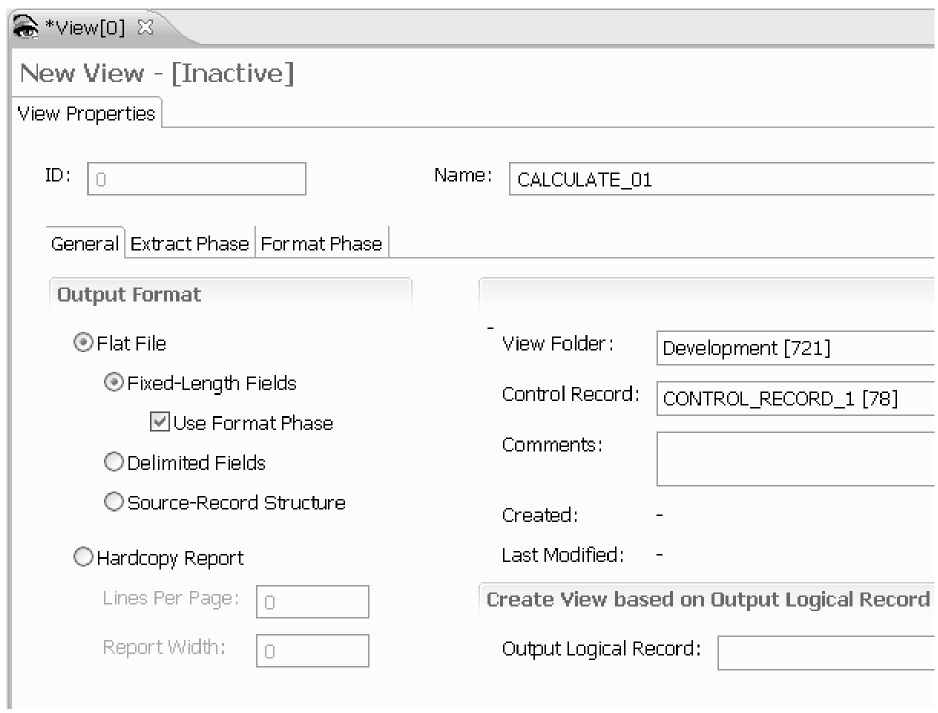
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New View (View Properties, General tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.
  - **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
  - **Format Phase sub-tab**

    This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.
  - **Header/ Footer sub-tab**

    This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

  The "**View Properties**" tab can also be called the "**Properties**" tab.
- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button  or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**New View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Properties, General" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, General**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**View Folder**" and select "**Open Editor**". This opens the "**Edit View Folder**" screen.

Optionally, **right** click any value already in the field "**Control Record**" and select "**Open Editor**". This opens the "**Edit Control Record**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - above the General sub-tab

Field	Definition

Field	Definition
ID	The position in the list of all logical records. (Display only.)
Name	Up to 48 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique (among view names in this environment). Examples of permitted names: • Report_CA_SF_Accounts_Receivable_2009 • Update_Sales_DivisionC76 These names are not permitted: • 2009_Expenses_Report (doesn't start with a letter) • New York Sales Update (must not include spaces) • USA/Canada Summary Report 1.1 (must not include "/" or fullstop)

60 Fields - General sub-tab

Field	Definition
Flat File	Select this button to indicate that the output of this view is a flat file. By default selecting this button also selects Fixed Length Fields and Use Format Phase, although these defaults can be changed. (Optional).
Fixed Length Fields	Select this button to indicate that the fields in the output flat file are of fixed length. (Optional.)
Use Format Phase	Tick this box to include a format phase for this view. (Optional.)
Delimited Fields	Select this button to indicate that the fields in the output file are delimited. A format phase is mandatory if this button is selected. See the Delimiters section in the Format Phase sub-tab to choose the delimiting characters. (Optional.)
Source-Record Structure	Select this button to indicate that the output flat file has the same structure as the source record. A format phase is not possible if this button is selected. (Optional.)
Hardcopy Report	Select this button to indicate the output of the view is a hardcopy report. If this field is selected, the Lines Per Page field and the Report Width field display (Optional.)
Lines Per Page	The number of lines per page for the output hardcopy report. An integer between 0 and 999999999. This field is 60 by default and can be changed. This field is required if the Hardcopy Report button is selected.
Report Width	The width of the output hardcopy report. This field is 132 by default and can be changed to any integer between 0 and 999999999. (Optional).

Field	Definition
View Folder	Select the view folder to store this view. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. The only view folders available to choose are those view folders where you have access rights.
Control Record	Select a control record for this view. Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.)
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

70 Fields - Create View based on Output Logical Record

Field	Definition
Output Logical Record	The output logical record that defines the columns in this view. This means the fields in this logical record are the columns in the "View Editor" tab. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

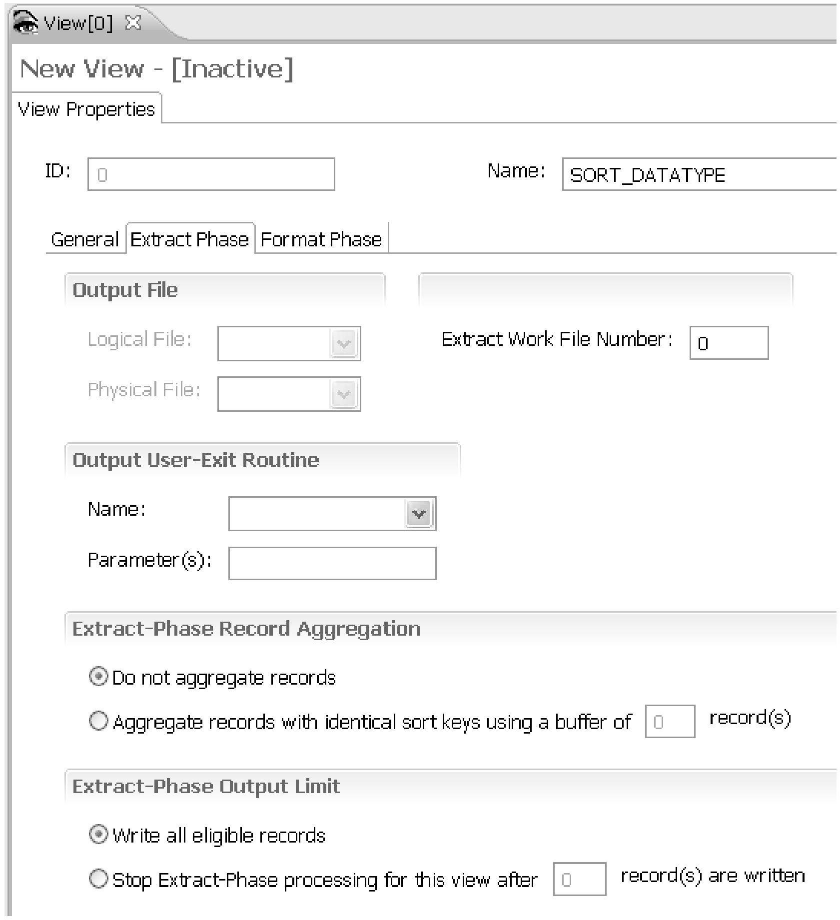
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New View (View Properties, Extract Phase tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

- **Extract Phase sub-tab**

  This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
- **Format Phase sub-tab**

  This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.
- **Header/ Footer sub-tab**

  This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button  or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:
- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**New View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Properties, Extract Phase" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, Extract Phase**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**Logical File**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Optionally, **right** click any value already in the field "**Physical File**" and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

Optionally, **right** click any value already in the field "**Name**" for "**Output User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - Output File section

Field	Definition
Logical File	Select an output logical file for this view. Click the drop down arrow to see a list of logical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

Field	Definition
Physical File	Select a physical file that matches the given logical file in the field above. This drop down field lists the relevant physical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

60 Fields - Output User-Exit Routine section

Field	Definition
Name	Select a User-Exit Routine from the drop down list. All the routines are of type Write. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Write due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Parameters	Input data for the user-exit routine, up to 32 characters. (Optional.)

70 Fields - Extract-Phase Record Aggregation section

Field	Definition
Do not aggregate records	Select this button to stop aggregation of output records. (Optional.)
Aggregate records with identical sort keys using a buffer of ? records	Select this button to aggregate records with identical sort keys using a buffer with a limit of the ? field. The ? value is a positive integer up to 9 digits. The default for the ? value is 4000. (Optional.)

80 Fields - Extract-Phase Output Limit section

Field	Definition
Write all eligible records	Select this button to ensure that all eligible records are output. This button is selected by default. (Optional.)
Stop Extract-Phase processing for this view after ? records are written	Select this field to stop the processing of this view after ? records are written. The ? value is a positive integer up to 9 digits. The default for the ? value is 100. (Optional.)
Extract Work File Number	The sequence number of the Work File passing data from the Extract Phase to the Format Phase. This field can only be used if a Format Phase is enabled for this view. The value is a positive integer up to 9 digits. The default value of this field is 1. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:

- "**10 Shortcuts: All workbench screens**" and

- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

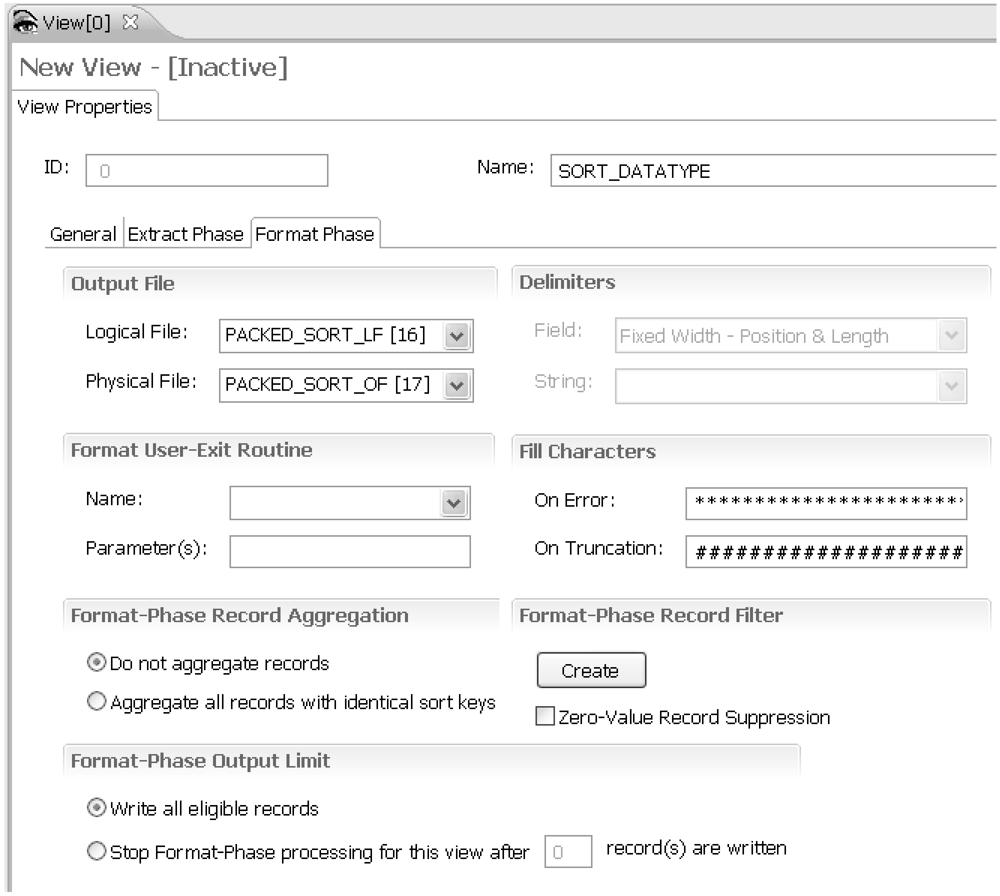
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New View (View Properties, Format Phase tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:
- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

– **Extract Phase sub-tab**

This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.

– **Format Phase sub-tab**

This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

– **Header/ Footer sub-tab**

This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button  or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**New View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

07 Calculation Test (CT) fields

A **Calculation Test** field is either a numeric aggregate field or a field involved in a column calculation. For example, consider a view with 3 columns:
- Column 1 - Product Number - Alphanumeric (source file field)
- Column 2 - Total Amount - Packed (source file field)
- Column 3 - Rebate Amount - Packed (source file field)

At the moment, none of these fields are CT fields.

Add **Column 4 - Net Amount** with a Column Source Type of "Formula" and Data Type of "Packed". Give this field the format-phase calculation logic text of :
COLUMN = COL.2 - COL.3

Now columns 2, 3, and 4 are CT columns. If these three columns are zero, and the field **Zero-Value Record Suppression** is ticked, then this record is not output.

10 Action on the "View Properties, Format Phase" tab

Remember to switch between the large tabs "**View Editor**" (which has a grid for the columns) and "**View Properties**" by clicking (the **Show Grid / Properties** button) or press F9 or select **Edit -> Show Grid / Properties**.

Enter or modify values on the "**View Properties, Format Phase**" tab. See the sections below for help on the fields on this screen.

Optionally, **right** click any value already in the field "**Logical File**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

Optionally, **right** click any value already in the field "**Physical File**" and select "**Open Editor**". This opens the "**Edit Physical File**" screen.

Optionally, **right** click any value already in the field "**Name**" for "**Format User-Exit Routine**" and select "**Open Editor**". This opens the "**Edit User-Exit Routine**" screen.

When required,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

When you save, there are **validations** of the values, and any validation error prevents the save. For example, there must be a unique view name. Once these validation errors are fixed, clicking save is successful.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields - Output File section

Field	Definition
Logical File	Select an output logical file for this view. Click the drop down arrow to see a list of logical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.
Physical File	Select a physical file that matches the given logical file in the field above. This drop down field lists the relevant physical files where you have access rights. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header.

55 Fields - Format User-Exit Routine section

Field	Definition
Name	Select a User-Exit Routine from the drop down list. All the routines are of type Format. (Optional.) Sort the list by clicking on "id" or "name" in the header of the list. Reverse the sort order by clicking again on "id" or "name" in the header. In rare cases, the User-Exit Routine named in this field may no longer be type Format due to some external update. If this occurs, the existing name is not shown in the drop down list, and you must select a new name from the drop down list.
Parameters	Input data for the user-exit routine, up to 32 characters. (Optional.)

60 Fields - Format-Phase Record Aggregation section

Field	Definition
Do not aggregate records	Select this button to stop aggregation of output records. (Optional.)
Aggregate records with identical sort keys	Select this button to aggregate records with identical sort keys. (Optional.)

65 Fields - Format-Phase Output Limit section

Field	Definition
Write all eligible records	Select this button to ensure that all eligible records are output. This button is selected by default. (Optional.)

Field	Definition
Stop Format-Phase processing for this view after ? records are written	Select this field to stop the processing of this view after ? records are written. The ? value is a positive integer up to 9 digits. The default for the ? value is 100. (Optional.)

70 Fields - Delimiters section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition
Field	The method to delimit the fields in the output record. A delimiter of comma can be used, for example, for output files that can be imported into Excel spreadsheets. Choose from one of the following: • Back Slash • Colon • Comma • Ctrl-A • Fixed Width-Position & Length This field is optional.
String	The method to indicate a string value. Choose from one of the following: • Double Quote • No String Delimiter • Single Quote This field is optional.

75 Fields - Fill Characters section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition
On Error	The fill character(s) to display when an error has occurred. Any character up to 64 characters. The default value is asterisk *. (Optional).
On Truncation	The fill character(s) to display when a value is truncated. Any character up to 64 characters. The default value is the Number sign #. (Optional).

80 Fields - Format-Phase Record Filter section

This section is enabled only if the output format of the view is Flat File and the structure is delimited.

Field	Definition

Field	Definition
Create	Click this button to open the Create New Format-Phase Record Filter screen, and the Logic Text Helper screen.
Zero-Value Record Suppression	Tick this box to avoid output of records with zero in numeric **CT (Calculation Test)** fields. (This field is optional.) For more discussion, see section "**Calculation Test (CT) fields**" above.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

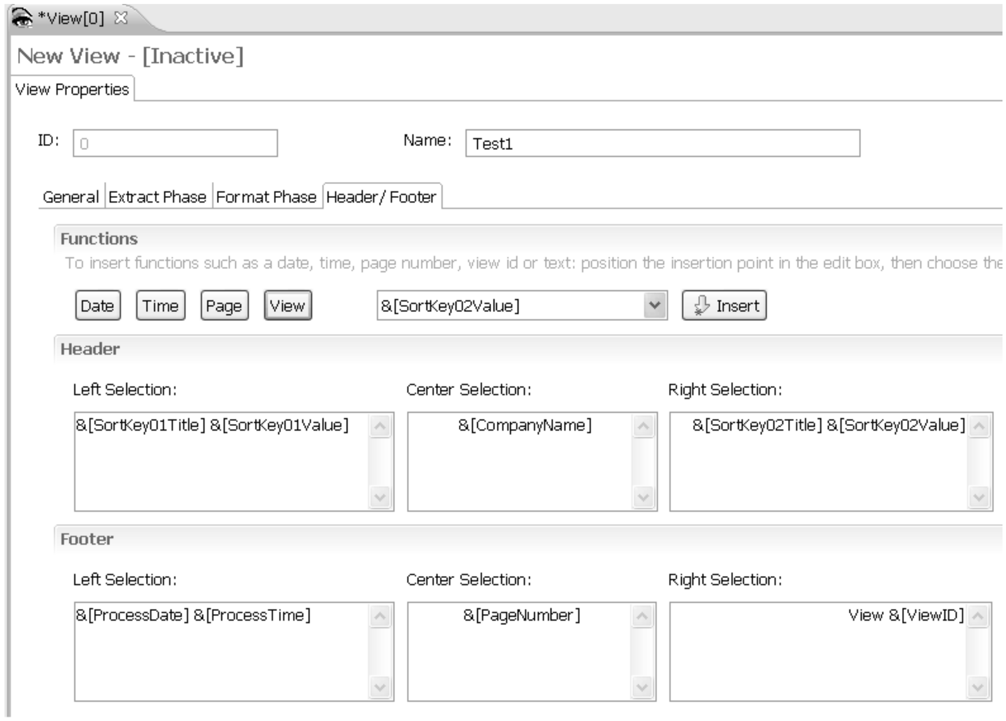
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New View (View Properties, Header/ Footer tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.
  - **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.
  - **Format Phase sub-tab**

This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

  – **Header/ Footer sub-tab**

    This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

  The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:
- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**New View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The header or footer are both split into three selections: **Left**, **Center** and **Right**.

Headers and footers typically contain useful information for long hardcopy reports such as page numbers, dates, and sort keys. This screen allows creating a header and footer specifically for this view (this hardcopy report).

A header or footer selection area can use a function by using text such as **&[PageNumber]** for the page number. If this text is changed in some way, then the function no longer works, and the literal text is used. For example, if the page number text is changed to **&[PPPageNNNumber]** then these actual characters are printed in the header or footer, rather than the page number. The text for functions must not be changed, although text or spaces can be placed before and after that function text.

Make changes to the Header and Footer as follows:

If you want to ...	then ...
Add your own text (such as "Accounts Report").	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Type in the text you require.
Delete existing text in a header or footer.	1. **Highlight any existing text** in one of the header or footer selection areas. 2. Press the **Delete** key.
Insert function text for the **Date**, **Time**, **Page** number or **View** number in a header or footer.	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Press the relevant button: 
Insert function text from the **drop down box under "Functions"** into a header or footer.	1. **Place your cursor** in the appropriate place in a header or footer selection area. If you highlight any existing text in that area, then that highlighted text is replaced. 2. Select the function text from the drop down box under section "**Functions**". 3. Press 
Save changes to the view	• **EITHER** click  (the save icon), • **OR** select **File, Save**, • **OR** press **Ctrl+S**.

Activation is explained in topics "**New View (View Editor tab) screen help**" and "**Edit View (View Editor tab) screen help**" because activation is normally performed on the "View Editor" tab.

50 Fields

Field	Definition
Functions (drop down)	Provides a list of function text. Add to a header or footer selection area as described in "Action on this screen" above. (Optional.)
Header Left Selection	Area for text for the left hand side of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Header Center Selection	Area for text for the center of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Header Right Selection	Area for text for the right hand side of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Left Selection	Area for text for the left hand side of the footer. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Center Selection	Area for text for the center of the header. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)
Footer Right Selection	Area for text for the right hand side of the footer. Type any text. Use the buttons above to copy in function text. These approaches can be combined in any way. (Optional.)

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**32 Shortcuts: New/Edit View screen (View Properties tab)**".

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

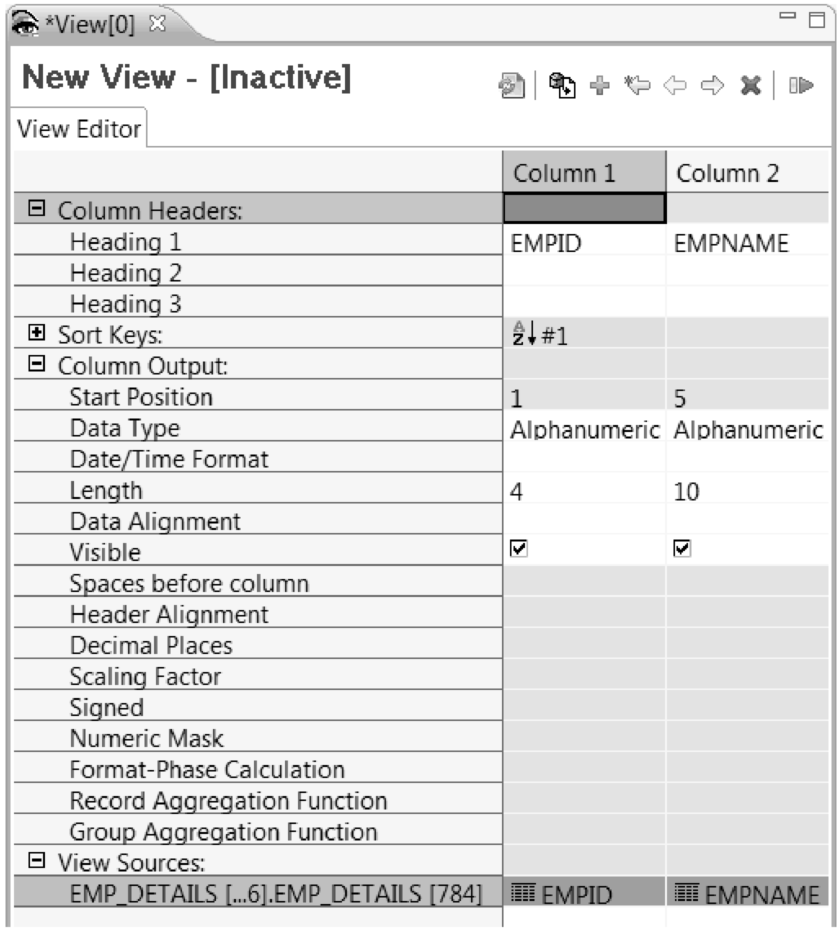
New View (View Editor tab) screen help

01 Summary of this topic

The sections in this topic are as follows:

- “99 Keyboard Shortcuts” on page 270

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to define the given fields in a view.

This screen is available to all users of the workbench. General users can save a view if the group selected during login has at least the modify right to the relevant view folder that contains the view. See your system administrator if you require more rights.

03 Summary of how to prepare a view

The main focus of preparing a view is preparing the **columns**. Each column is a field in the logical record for the output file of the view.

A view is displayed in two large tabs:

- The first large tab is the "**View Properties**" tab, which has sub-tabs:
  - **General sub-tab**

    This sub-tab names the view, the view folder and the control record. This sub-tab also defines the type of output of the view as a whole and whether a format phase is required.

  – **Extract Phase sub-tab**

    This sub-tab defines some parameters of the extract phase processing in the Performance Engine. An output logical file and physical file for the extract phase are only defined if this view has no format phase. Other parameters are available regardless of the existence or not of a format phase.

  – **Format Phase sub-tab**

    This sub-tab only exists if the **General sub-tab** has a tick for format phase. This sub-tab defines some parameters of the format phase processing in the Performance Engine.

  – **Header/ Footer sub-tab**

    This tab only exists if the **General sub-tab** has **Hardcopy Report** selected, which ensures a format phase. This sub-tab defines a Header and Footer for the report.

  The "**View Properties**" tab can also be called the "**Properties**" tab.

- The second large tab is the "**View Editor**" tab.

  This tab describes the columns in the output logical file. Most of the action on this screen is about the columns each headed with "Column X".

  Normally the first action on the 'View Editor" tab is to define at least one **view source file**, which is an input logical record and logical file for the view.

  You can save the view without a view source. To activate a view there must be at least one view source.

  The "**View Editor**" tab can also be called the "**Grid**" tab because of the display of the columns.

Only one large tab is displayed at a time. To switch between the large tabs click the **Show Grid / Properties** button or press F9 or select **Edit -> Show Grid / Properties**.

The objective of all the tabs is an **active** view, because only active views can produce results in the SAFR Performance Engine.

A high level overview of reaching the objective is as follows:

- Enter or modify values you require in the tabs.
- **Save the values** in the view. When you save, the workbench performs validation checks and any validation error prevents the save. For example, there must be a unique view name. Fix any validation errors and repeat the save until successful.
- **Activate the view** to change the status to "Active".

  When the view is first created the screen heading says "**New View - [Inactive]**". After successful activation, the screen heading becomes "**New View - [Active]**" or "**Edit View - [Active]**".

  If you modify any value in an existing "Active" view, when you click or tab away from the modified field the screen heading changes to "**Edit View - [Inactive]**". This means it is necessary to activate the view again.

  When you attempt to activate a view, the workbench performs activation checks. Any activation errors keep the status as "Inactive". For example, a view must have at least one sort key and at least one view source, even though a view can be saved without these items. Fix any activation errors and repeat the attempt to activate until successful.

General users need to be aware of help topic "**What metadata do I want to see?**" To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

When creating or editing a view, if you open a list and cannot see the required items such as logical records or logical files, see your system or environment administrator.

05 Errors

For error messages on the 'View Activation Errors" screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

For all other messages on this screen, see topic "**New View errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on the "View Editor" tab

The first action for a view is usually about the input files which are called **view source files**. To define these, see "Add a **view source**" in the table below.

Once defined, the view source files are listed as light blue rows under "**View Sources**" in the column immediately under "View Editor". If present, double click on the plus + sign to the left of "View Sources" to expand the list of view source files.

Note that in general, in any column **double click on any plus + sign** on the left to expand the rows, and **double click on any minus - sign** to collapse rows.

Most of the action on the "View Editor" tab focuses on the **columns** each with heading "Column X". Each column describes a field in the logical record of the output file. Each column has a "**Column Source Type**" to classify the processing for that column. The Column Source Type can be:
- EITHER a **field** from a view source file,
- OR a **constant**,
- OR a **formula** which is logic text,
- OR a **lookup field** which uses a lookup path.

To configure a particular column as one of these choices, see "**Define a Column Source Type**" in the table below. This is the most important action in the table below.

Remember that to switch between the "**View Editor**" tab and the "**View Properties**" tab click  (the **Show Grid / Properties** button) or press F9 or select **Edit, Show Grid / Properties**.

Remember to **right click** on any cell in the grid for a choice of actions, all described in the table below.

Overall, the actions on this screen are as follows:

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Activate the view</td><td>The current screen heading must contain the text [Inactive]. If the heading contains the text [Active] then the view is already activated and the view is ready to run in the SAFR Performance Engine.
1. To activate,
• EITHER click ,
• OR press F5,
• OR click Action, Activate / Inactivate View.
2. If activation is unsuccessful you see the screen View Activation Errors.
For help with that screen see topic "View Activation Errors screen help". That topic is elsewhere in this PDF - see the table of contents.
3. After a successful activation, the heading displays [Active].

Once the view is "Active", repeating step 1 inactivates the view - see "Inactivate the view" below in this table.</td></tr>
<tr><td>Add a column at left of existing column</td><td>See "Insert a column to left of existing column" below in this table.</td></tr>
<tr><td>Add a column at right hand end</td><td>To add a column at the right hand end (or to create the first column),
• EITHER click (Add column).
• OR right click anywhere in the grid and select Add column,
• OR click Alt-Insert ,
• OR click Edit, Add column.

To modify cells in the new column see "Define a Column Source Type" and "Edit a cell" below in this table.

As a comparison, see "Insert a column to left of existing column" below in this table.</td></tr>
<tr><td>Add a view source</td><td>To add a view source, do the following:
1. Launch the "Add View Source" window as follows:
• EITHER click ,
• OR right click anywhere in the grid and select Add view source,
• OR click Shift-Insert,
• OR click Edit, Add view source.
2. The "Add View Source" screen appears. Select a logical record and logical file and click OK.
3. Once you have clicked OK, a light blue cell appears under View Sources.</td></tr>
</table>

If you want to ...	then ...
Copy a column	1. Click on any grey area in the relevant column so that the cell is highlighted. 2. Do the following: • **EITHER right** click and select **Copy**, • **OR** press Ctrl+C, • **OR** click **Edit, Copy**. This is usually in preparation for "**Paste left** of a column" or "**Paste right** of a column" below in this table.
Create **Extract Record Filter** logic text	This logic text applies to a view source file. 1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**View Source Properties**" screen appears. Double click in the field to the right of "**Record Filter**". 3. Click ... to display the **Create New Extract Record Filter** screen. Use that screen to create Extract Record Filter logic text.
Create **Extract Column Assignment** logic text for a column	1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, select "**Formula**". 3. Double click in the field to the right of "**Column Source Value**". 4. Click ... to display the **Create New Extract Column Assignment** screen or the **Edit Extract Column Assignment** screen. Use either screen to create Extract Column Assignment logic text for this column.
Create **Format-Phase Calculations** logic text for a column	This logic text can also be called **Format Column Calculation** logic text. The view must have a format phase. In the relevant column in the row marked **Format-Phase Calculation**, a grey cell means that column cannot have a Format-Phase Calculation logic text applied. In this row, only columns that are numeric and are not part of a sort key have a cell with a white or blue background which indicates this logic text is permitted. 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click ... to display the **Create New Format-Phase Calculation** screen or the **Edit Format-Phase Calculation** screen. Use that screen to create Format-Phase Calculation logic text for this column.

If you want to ...	then ...
Create **Format Record Filter** logic text	1. Your view must have a format phase. If you need help configuring a format phase, see screen help for the "**View Properties, General**" tab on the "New View" or "Edit View" screen. 2. When you have a format phase, go to the "**View Properties, Format Phase**" tab and see screen help for details on creating Format Record Filter logic text.
Deactivate the view	See "**Inactivate** the view" below in this table.
Define a Column Source Type	The relevant column to define (or redefine) must already exist. If you need to create a new column, see these rows in this table: • "**Add a column** at right hand end" • "**Insert a column** to left of existing column" To define (or redefine) the "Column Source Type" for a column, see one of the following rows in this table: • "Define a **field** from a view source file" • "Define a **constant**" • "Define a **formula**" • "Define a **lookup field**" Once a "Column X" is defined, you can optionally perform "Make **sort** key" below in the table. For any defined "Column X", change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.
Define a **constant**	You require a column to be a constant value. Do the following: 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, ensure you have selected "**Constant**". 3. Double click in the field to the right of "**Column Source Value**". 4. Type the value for this constant. When complete, press Enter. 5. Change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Define a field from a view source file</td><td>You require a column to be a field in a view source file. Do the following:
1. <u>Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file</u>. The cursor changes to a magnifying glass. Click in this cell.
2. The "Column Source Properties" screen appears. Double click in the field to the right of "Column Source Type". In the drop down box, ensure you have selected "Source File Field".
3. Double click in the field to the right of "Column Source Value". In the drop down box, select the source file field for this column.
4. Optionally perform "Make sort key" below in the table.</td></tr>
<tr><td>Define a formula</td><td>You require a column to be a calculated from a formula.

<u>All formulas for columns must use logic text</u>. The two choices are as follows:
• For <u>Format-Phase Calculations</u> logic text, see "Create Format-Phase Calculations logic text for a column" above in this table.
• For <u>Extract Column Assignment</u> logic text, do the following
1. <u>Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file</u>. The cursor changes to a magnifying glass. Click in this cell.
2. The "Column Source Properties" screen appears. Double click in the field to the right of "Column Source Type". In the drop down box, select "Formula".
3. Double click in the field to the right of "Column Source Value".
4. Click to display the Create New Extract Column Assignment screen or the Edit Extract Column Assignment screen. Use either screen to create Extract Column Assignment logic text for this column.

Once a "Column X" is defined, you can optionally perform "Make sort key" below in the table.

Change cells in the "Column X" by using "Edit a cell" below in this table. Particularly important is the row for "Data Type" - see "Data Type" under section "Fields" below.</td></tr>
</table>

If you want to ...	then ...
Define a **lookup field**	You require a column to be a lookup field. Do the following: 1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, ensure you have selected "**Lookup Field**". 3. Double click in the field to the right of "**Lookup LR**". In the drop down box, select a logical record that is the target of the lookup path you require. See your system administrator if you cannot see the lookup record you require. 4. Double click in the field to the right of "**Lookup Path**". In the drop down box, select the lookup path you require. See your system administrator if you cannot see the lookup path you require. 5. Double click in the field to the right of "**Lookup Field**". In the drop down box, select the lookup field you require. See your system administrator if you cannot see the lookup field you require. 6. Press Enter. 7. Optionally perform "Make **sort** key" below in the table. 8. Change cells in the column by using "**Edit** a cell" below in this table. Particularly important is the row for "**Data Type**" - see "Data Type" under section "**Fields**" below.
Define a **sort key**	See "Make **sort** key" below in this table.
Define a **source file field**	See "Define a **field** from a view source file" above in this table.
Define a **view source**	See "Add a **view source**" above in this table.
Delete a column(s)	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To highlight more than one column, hold down the Control key and click on any grey area in another column. This creates a group of highlighted columns. To remove a column from that group, keep the Control key pressed and click on that grey highlighted cell again. There are now one or more highlighted columns. 3. To delete, • **EITHER** click (Delete), • **OR right** click and select **Delete**, • **OR** click the **Delete** key, • **OR** click **Edit, Delete**. 4. A window named "**Delete Columns**" appears. If the window is named "**Delete View Source**" then press **Cancel** and return to step 1 to ensure you have highlighted the relevant column(s). If the window is named "**Delete Columns**", then press **OK** to delete or **Cancel** to retain the column(s).

If you want to ...	then ...
Delete a sort key	See "Make **non-sort** key" below in this table.
Delete a view source	1. Ensure the relevant **view source cell** (light blue in color) under **View Sources** is highlighted (becomes darker blue). 2. To delete, • **EITHER** click (Delete), • **OR right** click and select **Delete**, • **OR** click the **Delete** key, • **OR** click **Edit, Delete**. 3. A window named "**Delete View Source**" appears. If the window is named "**Delete Columns**" then press **Cancel** and return to step 1 to ensure you have highlighted the relevant view source cell. If the window is named "**Delete View Source**", then press **OK** to delete or **Cancel** to retain the view source.
Edit a cell	1. To **change** the value in a cell, • **EITHER** click in the cell, • **OR** arrow to the cell and press **Enter**. 2. Make your changes. 3. To **undo a change** in that cell immediately after making the change, press **Escape**. 4. To **commit** the changes in that cell, press **Enter**.
Inactivate the view	The current screen heading must contain the text **[Active]**. If the heading contains the text **[Inactive]** then the view is already inactivated. 1. To inactivate the view • **EITHER** click , • **OR** press **F5**, • **OR** click **Action, Activate/Inactivate View**. 2. A message appears: **Are you sure you want to make the current view Inactive?** If you click **Cancel**, then no action is taken. If you click **OK**, the heading displays the text **[Inactive]**. Once the view is inactive, repeating step 1 attempts to activate the view - see "**Activate** the view" above in this table.
Insert a column to left of existing column	1. Click on any grey area in the relevant column so that the cell is highlighted. 2. To insert a column to the left • **EITHER** click (Insert column), • **OR right** click and select **Insert column**, • **OR** click the **Insert** key, • **OR** click **Edit, Insert column**. As a comparison, see "**Add column** at right hand end" above in this table. To modify cells in the new "Column X" see "**Define a Column Source Type**" and "**Edit** a cell" below in this table.

<table>
<tr><th>If you want to ...</th><th>then ...</th></tr>
<tr><td>Insert a column at <u>right</u> hand end</td><td>See "Add a column to <u>right</u> hand end" above in this table.</td></tr>
<tr><td>Insert a view source</td><td>See "Add a view source" above in this table.</td></tr>
<tr><td>Logic text</td><td>See these rows in this table:

"Create Extract Record Filter logic text"
"Create Extract Column Assignment logic text for a column"
"Create Format-Phase Calculations logic text for a column"
"Create Format Record Filter logic text"
"Modify or delete Extract Record Filter logic text"
"Modify or delete Extract Column Assignment logic text for a column"
"Modify or delete Format-Phase Calculations logic text for a column"
"Modify or delete Format Record Filter logic text"
</td></tr>
<tr><td>Make non-sort key</td><td>This applies to a column or a selected group of columns each headed "Column X".

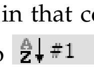
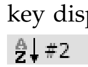
In the relevant "Column X" or the highlighted group of columns

EITHER right click and select Make non-sort key,
OR click Ctrl-K,
OR select Edit, Make non-sort key.

The sort key icon for this column disappears.
If you repeat step 1, "Make non-sort key" becomes 'Make sort key". For one column, the action in step 1 toggles between the two alternatives
</td></tr>
<tr><td>Make sort key</td><td>This applies to a column or a selected group of columns each headed "Column X".

In the relevant "Column X" or the highlighted group of columns

EITHER right click and select Make sort key,
OR click Ctrl-K,
OR select Edit, Make sort key.

The cell in that column in this row changes to a symbol similar to  . Repeating this action removes the column from the sort key. The first column to join the sort key displays the icon above. The second column displays  and so on.
If you repeat step 1, "Make sort key" becomes 'Make non-sort key". For one column, the action in step 1 toggles between the two alternatives.

See also "Modify a sort key" lower in this table.
The data type needs to be carefully selected for a sort key. For more, see field "Data Type" under section "Fields" below. </td></tr>
<tr><td>Modify a cell</td><td>See "Edit a cell" above in this table.</td></tr>
</table>

If you want to ...	then ...
Modify a **column**	To modify cells in a "Column X" see "**Define a Column Source Type**" and "**Edit** a cell" above in this table.
Modify a **sort key**	1. Click on the cell in the grid with an icon similar to . 2. The **Sort Key Properties** screen appears, and sometimes the **Sort Key Titles** screen. Modify fields as appropriate. The "Sort Key Titles" screen is not displayed if the output format of the view is Flat File. This "Sort Key Titles" screen is also not displayed if the output format is Hardcopy and the Display Mode of the Sort Key is As Data. If you wish to remove this column from the sort key, see "Make **non-sort** key" above in this table.
Modify a **view source logical record**	See "**Delete a view source**" and "Add a **view source**" in this table.
Modify a **view source logical file**	1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. Double click on the field to the right of "Logical File". Select a new value from the drop down box. If you cannot see the required logical file in the list, see your system administrator.
Modify or delete **Extract Record Filter** logic text	This logic text applies to a view source file. 1. Pass the cursor over the cell for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**View Source Properties**" screen appears. Double click in the field to the right of "**Record Filter**". 3. Click to display the **Edit Extract Record Filter** screen. Use that screen to modify or delete Extract Record Filter logic text. To delete, simply highlight logic text and press the delete key.
Modify or delete **Extract Column Assignment** logic text for a column	1. Pass the cursor over the cell at the intersection of the relevant "Column X" and the row for the relevant view source file. The cursor changes to a magnifying glass. Click in this cell. 2. The "**Column Source Properties**" screen appears. Double click in the field to the right of "**Column Source Type**". In the drop down box, select "**Formula**". 3. Double click in the field to the right of "**Column Source Value**". 4. Click to display the **Edit Extract Column Assignment** screen. Use that screen to create Extract Column Assignment logic text for this column. To delete, highlight the logic text and press the delete key.

If you want to ...	then ...
Modify or delete **Format-Phase Calculations** logic text for a column	This logic text can also be called **Format Column Calculation** logic text. The view must have a format phase. In the relevant column in the row marked **Format-Phase Calculation**, a grey cell means that column cannot have a Format-Phase Calculation logic text applied. In this row, only columns that are numeric and are not part of a sort key have a cell with a white or blue background which indicates this logic text is permitted. 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click to display the **Edit Format-Phase Calculation** screen. Use that screen to modify or delete Format-Phase Calculation logic text. for this column To delete, simply highlight logic text and press the delete key.
Modify or delete **Format Record Filter** logic text	Go to the "**View Properties, Format Phase**" tab and see screen help for details on modifying or deleting Format Record Filter logic text.
Move column **left**	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To move the column • **EITHER** click (Move column left) , • **OR right** click anywhere in the column and select **Move column left**, • **OR** press **Alt-Left arrow**, • **OR** select **Edit, Move column left**.
Move column **right**	1. Click on any grey area in the relevant "Column X" so that the cell is highlighted. 2. To move the column • **EITHER** click (Move column right), • **OR right** click anywhere in the column and select **Move column right**, • **OR** press **Alt+Right arrow**, • **OR** select **Edit, Move column right**.
Paste left of a column	1. You must first have copied a column - see "**Copy** a column" above in this table. 2. Click on any grey area in the relevant "Column Y" so that the cell is highlighted. 3. To paste • **EITHER right** click and select **Paste Left**, • **OR** press **Ctrl+V**, • **OR** click **Edit, Paste Left**.

If you want to ...	then ...
Paste right of a column	1. You must first have copied a column - see "**Copy** a column" above in this table. 2. Click on any grey area in the relevant "Column Y" so that the cell is highlighted. 3. To paste • **EITHER right** click and select **Paste Right**, • **OR** press **Ctrl+Shift+V**, • **OR** click **Edit, Paste Right**.
Remove a column(s)	See "**Delete a column(s)**" above in this table.
Remove a **sort key**	See "Make **non-sort** key" above in this table.
Remove a view source	See "**Delete a view source**" above in this table.
Save changes to the view	• **EITHER** click (the save icon), • **OR** select **File, Save**, • **OR** press **Ctrl+S**. If the options above are grey, you only have the read right to the view folder. See your administrator to obtain the modify right to the view folder, which allows saving of the view.

50 Fields

Field	Definition
Column Headers	A plus + sign indicates that "**Column Headers**" only displays the Heading 1 value and that rows for Heading 1, 2 and 3 are hidden (collapsed). A minus - sign appears when this is expanded to display rows for Heading 1, 2 and 3. Double click on the plus + sign to expand this row to show rows for Heading 1, 2 and 3. Double click the minus - sign to collapse back to just the row for "**Column Headers**" field showing the Heading 1 value. The row "**Column Headers**" itself is a read-only field.
Heading 1	The text for the first line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)
Heading 2	The text for the second line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)
Heading 3	The text for the third line of the column heading for hardcopy output. Any characters up to 254 characters. (Optional.)

Field	Definition
Sort Keys	**Pass the cursor over the symbol**  to change the cursor to a magnifying glass. Click on the magnifying glass to display the **Sort Key Properties** screen and possibly the **Sort Key Titles** screen. A plus sign to the left of "**Sort Keys**" indicates the sort key fields are **collapsed** into one row. A minus sign to the left of "**Sort Keys**" means the sort key fields are **expanded** into rows underneath. Double click the plus sign to expand the sort keys as rows. Double click the minus sign to collapse the sort key rows. The cell with the heading "Sort Keys" is a read-only field.
Column Output	A plus + sign indicates that rows giving output properties of the columns are hidden (collapsed). Double click on the plus + sign to expand to show many other rows. Double click on the minus - sign to collapse all the rows into one row showing the Start Position only. The cells in row "Column Output" are always display only.
Start Position	The starting position of this field in the view logical record. (Display only.)
Data Type	The data type of this field. Click to select a value from the drop down list. The types "**Binary Sortable**" and "**Packed Sortable**" are provided only to allow for negative values in the sort data. If the data is always positive or zero, then other data types can be used, and this results in faster performance for sorting.
Date/Time Format	The format of dates or times in this field. Click to select a value from the drop down list. (Optional.) This field is disabled if the data type is "Edited Numeric" or "Masked Numeric".
Length	The length of this field. A positive integer with a maximum of five digits. The lengths must satisfy the following constraints according to the data types specified for the fields: • **Zoned Decimal** must have minimum length of 1 and maximum length of 16 (inclusive). • **Alphanumeric / Masked Numeric / Edited Numeric** must have length between 1 and 256 (inclusive). • **BCD** must have minimum length of 1 and maximum length of 10. • **Packed / Packed Sortable** must have length between 1 and 16. • **Binary / Binary Sortable** must have length 1, 2, 4 or 8 only.
Data Alignment	The alignment of the data in this field. (Optional.) This field is disabled if the screen "View Properties, General" tab specifies Output Format as a Flat File with Delimited Fields.
Visible	This field controls if this column is displayed in the final output of this view. (Optional.) This field is disabled if there is no format phase for this view.
Spaces before column	The number of spaces before this output field in a Hardcopy report (Optional.) A positive number up to a maximum of 5 digits. This field is disabled if the "View Properties, General" tab specifies Output Format that is something other than a Hardcopy Report.

Field	Definition
Header Alignment	The alignment of the heading for this field. (Optional.) This field is disabled if the "View Properties, General" tab specifies Output Format as Flat File.
Decimal Places	The number of physical bytes to be occupied by decimal values in this field. (Optional.) This field is disabled if the data type is "Alphanumeric".
Scaling Factor	This field is used for rounding values. (Optional.) An integer from -9 to +9. This field is disabled if the data type is "Alphanumeric".
Signed	This field indicates whether the numeric data in this field is signed or not. (Optional.) This field is disabled and unchecked if Data Type = Alphanumeric OR Data Type = BCD. This field is disabled and checked if Data Type selected is 'Edited Numeric'.
Numeric Mask	The mask to be used on column output. (Optional.) Select a value from the drop down list. This field is disabled if the data type is something other than 'Masked Numeric'.
Format Phase Calculation	Cells that have a white or blue background in this row can have a format-phase calculation logic text applied. Grey cells mean this column cannot have logic text. Cells for this row are grey if there is no format phase, or if the data type is "Alphanumeric", or if the column is a sort key. To create / modify / delete logic text, do the following: 1. At the intersection of the relevant "Column X" and the row **Format-Phase Calculation**, check there is a cell with a white or blue background. If present, double click on this cell. 2. Click  to display the **Create New Format-Phase Calculation** screen or the **Edit Format-Phase Calculation** screen. Use either of those screens (and the screen help topics) to create / modify / delete Format-Phase Calculation logic text. for this column. To delete, simply highlight logic text and press the delete key.
Record Aggregation Function	Drop down list containing a list of record aggregation function codes. (Optional.) This field gets disabled if there is no format phase, or if the data type of column is "Alphanumeric" or if the column is a sort key or if the "View Properties, Format Phase" tab selects "Do not aggregate records".
Group Aggregation Function	Drop down list containing a list of group aggregation function codes. This field gets disabled if there is no format phase, or if the data type of column is "Alphanumeric" or if the column is a sort key or if the "View Properties, Format Phase" tab selects "Do not aggregate records". If the Record Aggregation Function selected above is something other than "SUM" then the Group Aggregation Function field is set to the same value and cannot be changed. Only when the Record Aggregation Function is "SUM" does this field offer a drop down list. The value "SUM" is selected by default and can be changed. (Optional.)

Field	Definition
View Sources	To create a view source, see "Add a **view source**" in the table under section **Action on the "View Editor" tab** above. To delete a view source, see "**Delete a view source**" in the table under section **Action on the "View Editor" tab** above. A plus + sign to the left of "View Sources" indicates that the rows giving the view source files are collapsed. Double click on the plus + sign to expand this row to show a row for each view source. Double click on the minus - sign to collapse all the view source rows into one row. The cells in this row "View Sources" are always display only.**Pass the cursor over a light blue cell with text under "View Sources"** to change the cursor to a magnifying glass. Click on the magnifying glass to display the screen **View Source Properties**.

99 Keyboard Shortcuts

Go to topic "**What are the keyboard shortcuts?**" and read these sections:
- "**10 Shortcuts: All workbench screens**" and
- "**30 Shortcuts: New/Edit View screen (View Editor tab)**".

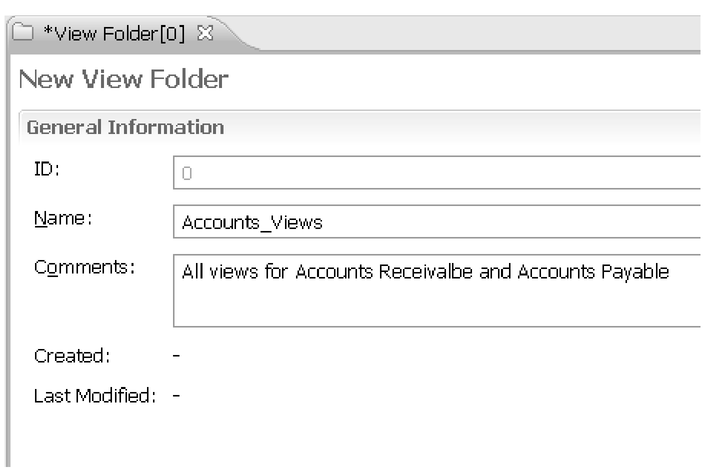
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

New View Folder screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to create new view folder names.

System and environment administrators can always use this screen. General users can use this screen if the **group selected during login** has the **Create View Folders** right in that environment. See your system administrator if you require more rights.

05 Errors

For errors or messages on this screen, see topic "**New View Folder errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values and save as follows:

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

The Refresh Navigator icon is used to ensure the View Folder list in the Navigator contains current data. If this icon is grey, dick on the "**View Folders**" node in the Navigator to activate this icon. When active, click on this icon or press F4 to refresh the Navigator with current view folder data. Alternatively, double click on "**View Folders**" to refresh the Navigator in one action.

50 Fields

Field	**Definition**
ID	The position in the list of all view folders for that environment. (Display only.)
Name	Up to 32 characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). Pressing the spacebar automatically creates an underscore in this field. Must be unique among view folder names. Examples of permitted names: • CA_SF_Accounts_Receivable_2009 • Sales_DivisionC76 These names are not permitted: • 2009_Expenses (doesn't start with a letter) • New York Sales (must not include spaces) • USA/Canada Summary 1.1 (must not include "/" or fullstop)
Comments	Useful notes, up to 254 characters. (Optional.)
Created	The person who created this record, and the date and time of creation. (Display only.
Last Modified	The last person who modified this record, and the date and time of the change. (Display only.)

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

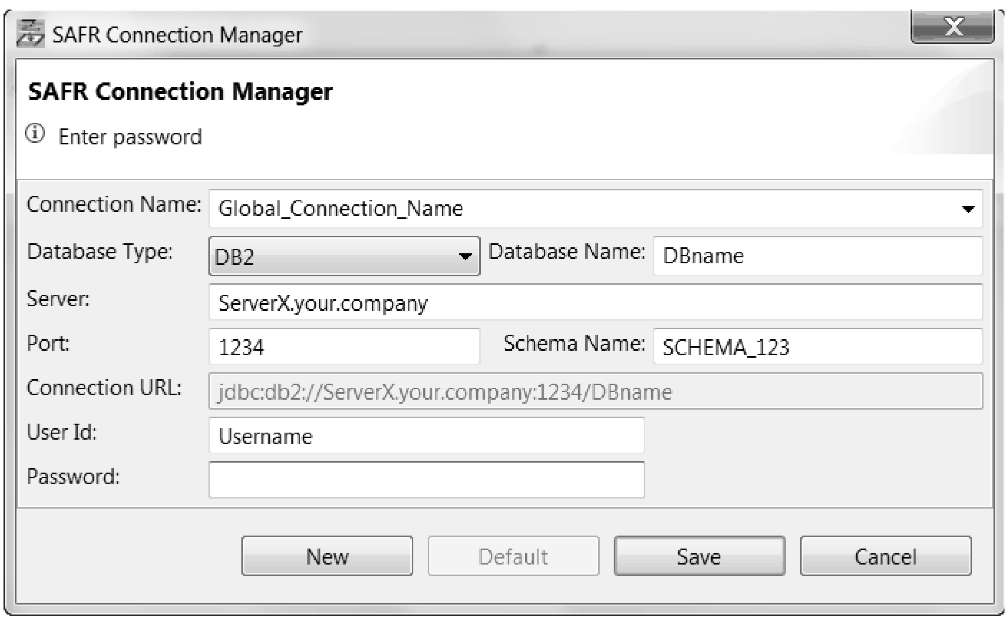
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

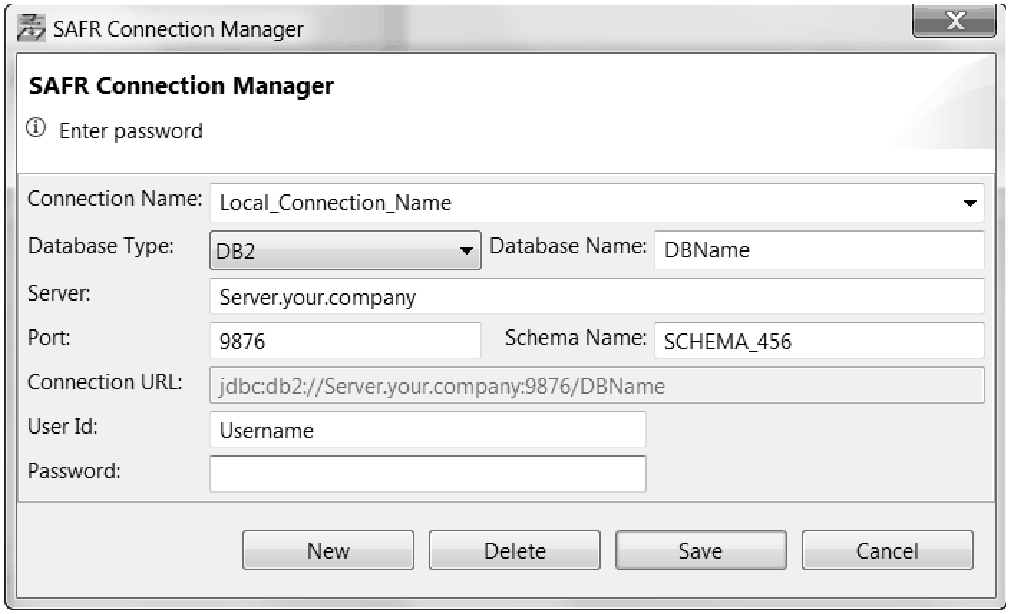
SAFR Connection Manager screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights





Use this screen to manage database connection names. At least one database connection name must exist to allow login to the SAFR workbench.

A database connection name provides the access to a SAFR Database where the SAFR workbench stores data. There are two types of database connection name: **global** and **local:**

- A global connection is provided by your system administrator and already exists when you login to the workbench. Only a system administrator can create or delete a global connection. These connections are called "global" because these connections can apply to many or all workbench users.

  If required, you can modify a global connection. If you modify a global connection, the workbench allows you to click the "Default" button that removes your modifications and returns that global connection to the original data.
- A local connection is a database connection name that you create and modify and is available only to you. Any user can create. delete and modify their own local connections. Local connections are only necessary if you require some special access to a SAFR Database.

As you can see above, a global connection has a "**Default**" button, whereas a local connection has a "**Delete**" button. This shows an important difference between a global and a local connection.

This screen is available for all users of the workbench.

System administrators must read the topic "**Workbench overview**" and read the section on "Virtualization for the workbench". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

05 Errors

For errors or messages on this screen, see topic "**SAFR Connection Manager errors**". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

10 Is a connection global or local?

Select that connection name from the drop down box for "**Connection Name**". If the screen has a "**Default**" button, then this is a **global** connection (even if the button is grey). If the screen has a "**Delete**" button, then this is a **local** connection.

It is recommended to include the word "local" in the name of any local connections created. This makes the local connections easy to identify.

20 Action on this screen

If you want to ...	then ...
Add a new local connection	Do you want to save any changes to the connection currently displayed? If yes, click **Save** and then select any connection. Click **New**. The SAFR Connection Manager screen displays with empty fields. **Enter values** for all fields on the screen. Note that the User ID and password are for the SAFR Database. It is recommended to include the word "local" in the name of any local connections created. This makes the local connections easy to identify. When complete, click **Save**. The SAFR Login screen displays.
Cancel all changes on this screen	Click **Cancel**. The SAFR Login screen displays.
Default a global connection	This action removes any changes you have previously made to a global connection, and returns the values to the original data. If required, select the global connection from the drop down box for **Connection Name**. Click **Default** and then click **Save**. The SAFR Login screen displays and the values of the global connection are returned to default values. If **Delete** is present instead of **Default**, then this is a local connection and you must make any changes to the values yourself - see the row for **Modify** in this table.
Delete a local connection	If required, select the local connection from the drop down box for **Connection Name**. Click **Delete** and then click **Cancel**. The SAFR Login screen displays and the local connection is no longer listed in the drop down box for Connection Name. If **Default** is present instead of **Delete**, then this is a global connection and you cannot delete this connection name.
Exit this screen	Click **Cancel**. The SAFR Login screen displays.

If you want to ...	then ...
Modify a global or local connection	If required, select the connection from the drop down box for **Connection Name**. If you are trying to remove modifications to a global connection, see the row for **Default** in this table. **Enter values** for all fields on the screen. You can modify global and local connections. If you change the name of a global connection, you have created a new local connection that has that new name and the values of the global connection (which you may change). You can modify this new local connection. You can also delete this new local connection. Any actions on this new local connection do not affect the original global connection. Click **Save** to save the changes. The SAFR Login screen displays.
New local connection	Do you want to save any changes to the connection currently displayed? If yes, click **Save** and then select any connection. Click **New**. The SAFR Connection Manager screen displays with empty fields. **Enter values** for all fields on the screen. Note that the User ID and password are for the SAFR Database. It is recommended to include the word "local" in the name of any local connections created. This makes the local connections easy to identify. When complete, click **Save**. The SAFR Login screen displays.
Return to the SAFR Login screen	Click **Cancel**. The SAFR Login screen displays.
Save changes to a global or local connection	Click **Save**. The SAFR Login screen displays.

50 Fields

Field	Definition
Connection Name	A string of characters, starting with a letter, and composed of letters, numbers, the Number sign (#) and the underscore (_). When creating a Connection name, pressing the spacebar automatically creates an underscore in this field. Must be unique among connection names for this user. It is recommended to include the word "local" in the name of any local connections created. This makes the local connections easy to identify. Examples of permitted names: • Company_Inventory_Local • Local_Accounts_SAFR_Database

Field	Definition
Database Type	The only supported value is DB2 (currently).
Database Name	Any number of characters.
Server	The DNS name or IP address of the database server.
Port	The IP port number on the server used to access the database. Numbers only.
Schema Name	This is used in SQL statements to qualify table names. Any number of characters.
Connection URL	As you type data in the first four fields above, this field progressively displays the JDBC connection URL derived from those values. (Display only.)
User Id	This is the User Id required to access the SAFR Database. On mainframe systems, this is normally a RACF User Id. A string of any number of characters.
Password	The password to the User Id above. A string of any number of characters

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

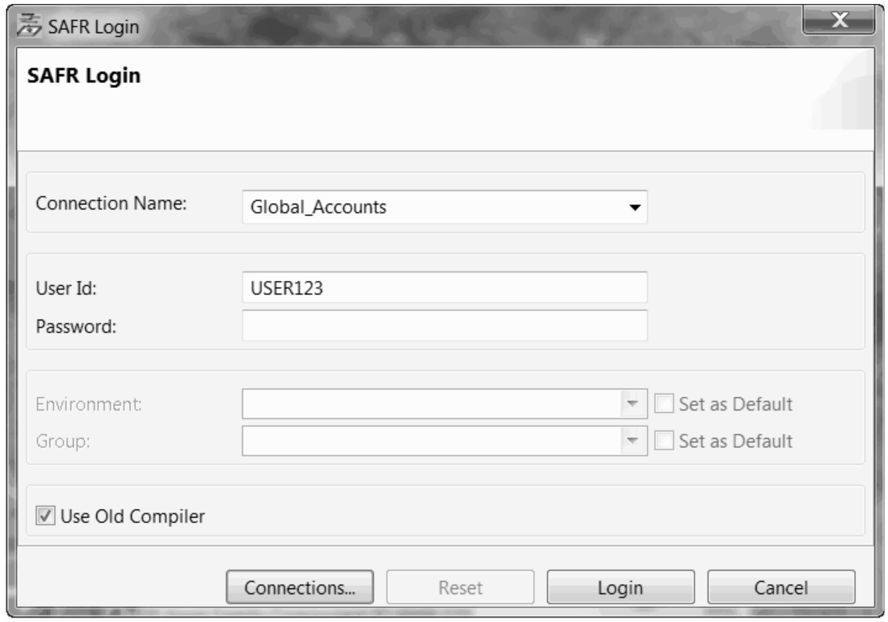
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

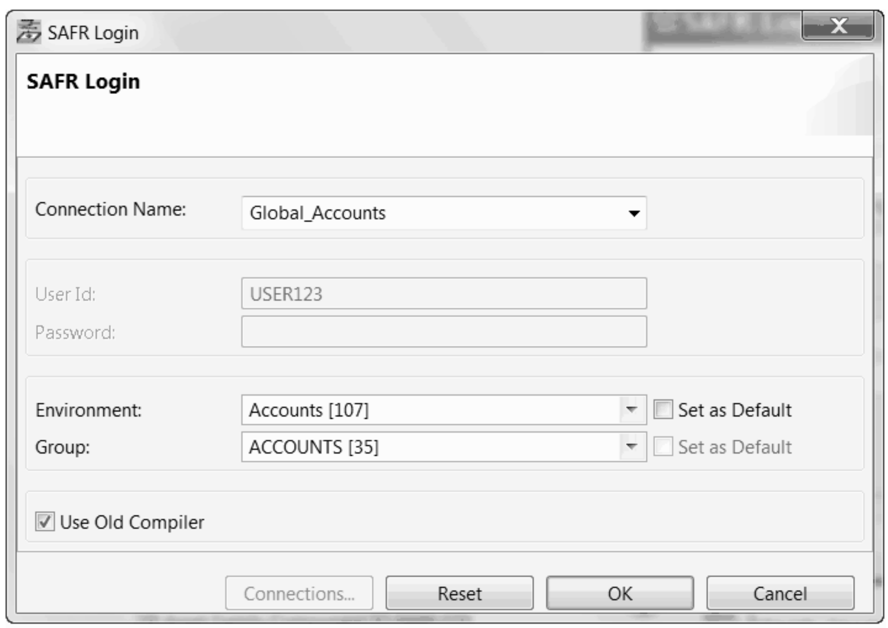
SAFR Login screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights





A database connection name provides the access to a SAFR Database where the SAFR workbench stores data. There are two types of database connection name: **global** and **local:**

- A global connection is provided by your system administrator and already exists when you login to the workbench. Only a system administrator can create or delete a global connection. These connections are called "global" because these connections can apply to many or all workbench users.

If required, you can modify a global connection. If you modify a global connection, the workbench allows you to click the "Default" button that removes your modifications and returns that global connection to the original data.

- A local connection is a database connection name that you create and modify and is available only to you. Any user can create. delete and modify their own local connections. Local connections are only necessary if you require some special access to a SAFR Database.

This screen allows login to the SAFR workbench using a database connection name.

This screen is available to all users of the workbench.

System administrators must read the topic "**Workbench overview**" and read the section on "Virtualization for the workbench". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

05 Errors

For errors or messages on this screen, see topic "**SAFR Login errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

1. Select from the field **Connection Name**. If there are no selection or you cannot find the selection you require, then click **Connections...** and use the SAFR Connection Manager screen to create the connection name you require. If the **Connections...** button is grey, click **Cancel** and restart the SAFR Workbench - the **Connections...** button is now available.

   For help to create a connection name see topic "**SAFR Connection Manager screen help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".
2. Type your SAFR Workbench **User Id** (if required), or change the value given.
3. Type your SAFR Workbench **password**.
4. Either tick or untick the box for "**Use Old Compiler**". Alternatively, this can be done later in step 8.

   The workbench always starts by displaying your choice from your last session, which you can change.

   See your system administrator or your IBM representative if you require more information on the SAFR compilers installed in your company.
5. Click **Login**.
6. Select an **environment** (if there is a choice).

   Once an environment is selected, click **Set as Default** to ensure this environment displays first for your next login.

   If there is a list of environments, sort the list by clicking on "name" or "id" in the header of the list. Reverse the sort order by clicking again on "name" or "id" in the header.
7. Select a **group** (if there is a choice).

   Once a group is selected and the environment above already has a tick for 'Set as Default", then for this group you can click **Set as Default** to ensure this group displays first for your next login.

If there is a list of groups, sort the list by clicking on "name" or "id" in the header of the list. Reverse the sort order by clicking again on "name" or "id" in the header.

If you are a system administrator, the groups field is grey and no action is necessary.

8. Either tick or untick the box for "**Use Old Compiler**". This may have been done earlier in step 4.
9. Click **OK**. Alternatively, click **Reset** to restart the login process in step 1.

If you selected "**Use Old Compiler**" during login, this is displayed at right:

The version of the compiler for your workbench session is displayed in the WE log file - see topic "**WE log file overview**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

50 Fields: Connection Name

Field	Definition
Connection Name	Select this value from the drop down box. The values in the drop down box are setup by the SAFR Connection Manager screen. To maintain these values, click **Connections...** and see topic "**SAFR Connection Manager screen help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

60 Fields: User Id & Password

Field	Definition
User ID	Your SAFR Workbench User ID. The screen provides the value from your last workbench session, which you can change if necessary. See your system administrator to obtain this value. The maximum length of a User Id is 8 characters. Note: The User ID for the SAFR Workbench is likely to be different from your User ID for the SAFR Database.
Password	Any characters, up to a maximum of is 20 and case sensitive. This field is optional. If you type an invalid password, you see "Password not valid", and you can retry any number of times.

70 Fields: Environment & Group

Field	Definition

Field	Definition
Environment	Select from the drop down list. The environment selected applies to this session. Once an environment is selected, click **Set as Default** to ensure this environment displays first for your next login. If you cannot see the environment you require, see your system administrator. If there is a list of environments, sort the list by clicking on "name" or "id" in the header of the list. Reverse the sort order by clicking again on "name" or "id" in the header.
Group	General users select a group from the drop down list. The group selected applies to this session. Once a group is selected and the environment above already has a tick for 'Set as Default", then for this group you can click **Set as Default** to ensure this group displays first for your next login. If there is a list of groups, sort the list by clicking on "name" or "id" in the header of the list. Reverse the sort order by clicking again on "name" or "id" in the header. If you are a system administrator, the groups field is grey.

80 Fields: Use Old Compiler

Field	Definition
Use Old Compiler	Tick this box if you require this session to use the old compiler, otherwise the current compiler is used. The workbench always starts by displaying your choice from your last session, which you can change. See your system administrator or your IBM representative if you require more information on the SAFR compilers installed in your company.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

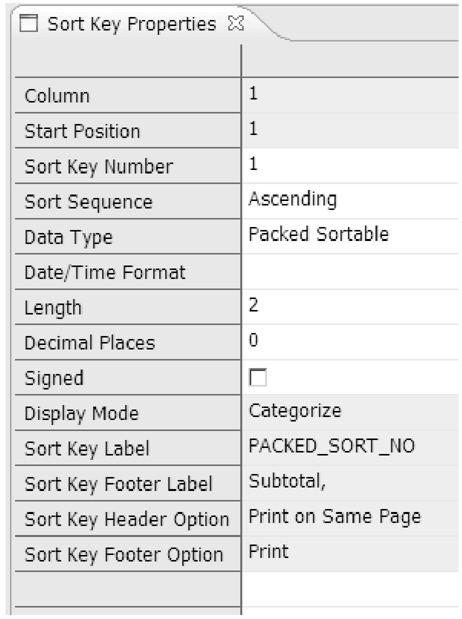
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Sort Key Properties screen help

01 Summary of this topic

The sections in this topic are as follows:

02 Screen function and rights



Use this screen to view and update sort key data for a column in a view.

This screen is available for all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Sort Key Properties errors**". To find that topic in a PDF, see chapter "Cross reference of topics and PDF files".

10 Action on this screen

Enter or modify values in cells where the background is white (not grey). When that is complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

Switch to other screens to complete other areas of this view.

50 Fields

Field	**Definition**
Column	The column number in the view. (Display only.)
Start Position	The start position of the sort key. (Display only.)
Sort Key Number	The position of this sort key in the entire sort sequence. Click in this field to display a drop down box, and select a different position.

Field	Definition
Sort Sequence	Click in this field to display a drop down box to select Ascending or Descending.
Data Type	Click in this field to display a drop down box to select a data type.
Date/Time Format	Click in this field to display a drop down box to select a format. (Optional.) This field is disabled if the data type is Edited Numeric or Masked Numeric.
Length	The length of this field. Type a positive integer up to a maximum of 5 digits.
Decimal Places	The number of physical bytes for decimal values in this field. Type a positive integer of 1 digit up to a maximum value of 9. (Optional.) If the data type is "Alphanumeric" then this field is disabled.
Signed	Check or uncheck this box to signal if the value has a sign or not. (Optional.) This field is disabled and cleared for data types "Alphanumeric" or "BCD". This field is disabled and checked for data type "Edited Numeric".
Display Mode	Select "As Data" or "Categorized". (Optional.) This field is disabled if the output format for the view is "Flat File".
Sort Key Label	The header of the column for this sort key. Defaults to Sort Key Label of the column source field. If that is empty, defaults to the column "Heading 1" value. For Display Mode of "Categorize" or blank, this field can be changed - type any character up to a maximum of 48 characters. (Optional.) This field is disabled if the output format of the view is "Flat File". This field is also disabled if the output format of the view is "Hardcopy" and the Display Mode field above is "As Data".
Sort Key Footer Label	The footer of the column for this sort key. Defaults to Sort Key Footer Label of the column source field. If that is empty, defaults to "Subtotal". For Display Mode of "Categorize" or blank, this field can be changed - type` any character up to a maximum of 48 characters. (Optional.) This field is disabled if the output format of the view is "Flat File". This field is also disabled if the output format of the view is "Hardcopy" and the Display Mode field above is "As Data".
Sort Key Header Option	The option to print the header on a new page, print the header on the same page (default), or to suppress printing of the header. (Optional.) This field is disabled if the output format of the view is "Flat File". This field is also disabled if the output format of the view is "Hardcopy" and the Display Mode field above is "As Data".

Field	Definition
Sort Key Footer Option	The option to print the footer (default), or to suppress printing of the footer. (Optional.) This field is disabled if the output format of the view is "Flat File". This field is also disabled if the output format of the view is "Hardcopy" and the Display Mode field above is "As Data". If the following are all true: • The output format of the view is "**Hardcopy**" • AND the display mode is "**Categorized**" or blank, • AND this is the **last sort key** (i.e. the sort key with the highest number) then this field must be set to "**Print**".

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

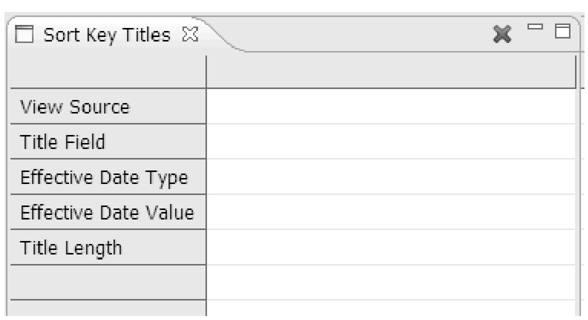
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Sort Key Titles screen help

01 Summary of this topic

The sections in this topic are as follows:
- “02 Screen function and rights”
- “05 Errors” on page 284
- “10 Action on this screen” on page 284
- “50 Fields” on page 284
- “99 Keyboard Shortcuts” on page 284

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to create or update the sort key title for a view.

This screen does not appear if the output format for a view is **Flat File**. This screen also does not appear if the output format is either **Hardcopy** and the display mode of the sort key is **As Data**.

This screen is available for all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**Sort Key Titles errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Enter or modify values in cells where the background is white (not grey). When complete,

- **EITHER** click (the save icon),
- **OR** select **File, Save**,
- **OR** press **Ctrl+S**.

Alternatively, click to effectively clear the sort key title fields. This button does not work for a new sort key field.

50 Fields

Field	Definition
View Source	Click in this field to display a drop down list of logical record and logical file pairs available. Ensure one choice is selected.
Title Field	Click in this field to display a drop down list of available combinations of logical record, lookup path and logical record field name. Ensure one choice is selected.
Effective Date Type	Select a value to determine the type of effective date for the lookup path.
Effective Date Value	If the value in the previous field is Run Date, then no value is required for this field. If the previous field is CCYYMMDD then type a date in that format. If the previous field is Source File Field, then select a logical record field from the list given.
Title Length	The length of the title field. A positive integer greater than zero and up to a maximum of four digits. Must not be greater than the actual length of the logical record field selected in Title Field.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

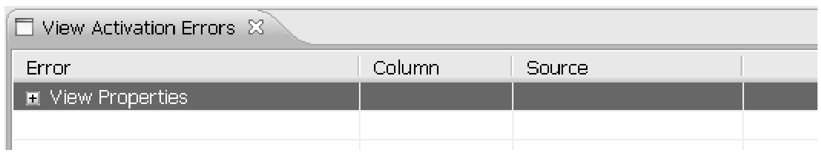
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

View Activation Errors screen help

01 Summary of this topic

The sections in this topic are as follows:
- "02 Screen function and rights"
- "05 Errors"
- "10 Action on this screen"
- "50 Fields (read only)"
- "99 Keyboard Shortcuts" on page 286

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

This screen is read-only and shows error messages describing why this view cannot be activated. Fix the problems described by the errors on this screen before attempting to reactivate the view again.

This screen is available to all users of the workbench.

05 Errors

To understand error messages on this screen, see topic "**View Activation Errors message help**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

Click any plus sign + to expand headings to show error messages.

The heading line has the words Error Column Source. Place your cursor over a vertical bar in the heading line and drag to change the width of columns.

50 Fields (read only)

Field	**Definition**
Error	Error messages, with headings that can be expanded by clicking on plus +.
Column	The heading of the column in the View Editor [column number].
Source	Logical record name [logical record Id number].logical file name [logical file Id number]

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

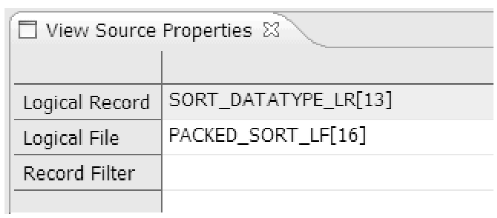
To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

View Source Properties screen help

01 Summary of this topic

The sections in this topic are as follows:
- "02 Screen function and rights"
- "05 Errors"
- "10 Action on this screen"
- "50 Fields" on page 287
- "99 Keyboard Shortcuts" on page 287

02 Screen function and rights



The above screen image has been compressed horizontally for ease of printing and display. Some fields are wider than shown.

Use this screen to modify a source logical file or to create / modify / remove Extract Record Filter logic text.

This screen is available to all users of the workbench.

05 Errors

For errors or messages on this screen, see topic "**View Source Properties errors**". To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

10 Action on this screen

The logical record displayed cannot be changed on this screen. If this field is incorrect, the entire view source must be deleted and a new view source added.

Optionally, **right** click any value already in the field "**Logical Record**" and select "**Open Editor**". This opens the "**Edit Logical Record**" screen.

Optionally, **right** click any value already in the field "**Logical File**" and select "**Open Editor**". This opens the "**Edit Logical File**" screen.

If required, **click on the selection for Logical File** and make a new selection from the drop down list.

If required click in the field for **Record Filter**. Click on ... to display either the **Create New Extract Record Filter** screen or the **Edit Extract Record Filter** screen. Use these screens to create, modify or remove Extract Record Filter logic text for this view source file.

50 Fields

Field	**Definition**
Logical Record	The logical record for this view source file. (Display only.)
Logical File	The logical file for the logical record given above. Click in this field and select a logical file from the drop down list.
Record Filter	Displays the start of any existing Extract Record Filter logic text (if it exists). Click in this field to display ... . Click on that button to display either the **Create New Extract Record Filter** screen or the **Edit Extract Record Filter** screen. Use these screens to create, modify or remove Extract Record Filter logic text for this view source file.

99 Keyboard Shortcuts

See section "**10 Shortcuts: All workbench screens**" in topic "**What are the keyboard shortcuts?**" .

To find that topic in a PDF, see chapter "**Cross reference of topics and PDF files**".

Chapter 2. Cross reference of topics and PDF files

How to download a PDF

Go to SAFR Information Center, select **About this Information Center** and select **PDF**. Follow the instructions on that page.

Alphabetical list of topics

Note the following:

- "**InfoCtr4150**" means the PDF called "**SAFR Information Center 4.15.00**" which contains all help topics.
- "**Top 3**" means the PDF called "**Top 3 - Admin Guide, General Users Guide and Overviews**".

Find the required topic in the first column below. The columns to the right show the PDFs that contain that topic.

Topic	PDF	PDF	PDF	PDF
Add View Source errors	Troubleshooting			InfoCtr4150
Add View Source screen help	Screens			InfoCtr4150
Admin Guide	Admin Guide		Top 3	InfoCtr4150
Administrators START HERE	Admin Guide		Top 3	InfoCtr4150
Basics of using the SAFR Workbench	Admin Guide	General Users Guide	Top 3	InfoCtr4150
Batch activate lookup paths	Admin Guide		Top 3	InfoCtr4150
Batch Activate Lookup Paths errors	Troubleshooting			InfoCtr4150
Batch Activate Lookup Paths screen help	Screens			InfoCtr4150
Batch activate views	Admin Guide		Top 3	InfoCtr4150
Batch Activate Views errors	Troubleshooting			InfoCtr4150
Batch Activate Views screen help	Screens			InfoCtr4150
Change Log Path screen help	Screens			InfoCtr4150
Changing Log Path	Admin Guide	General Users Guide	Top 3	InfoCtr4150
Checking metadata dependencies	Admin Guide		Top 3	InfoCtr4150
Clear environment	Admin Guide		Top 3	InfoCtr4150
Clear environment messages	Screens			InfoCtr4150
Column Source Properties errors	Troubleshooting			InfoCtr4150

Topic	PDF	PDF	PDF	PDF
Column Source Properties screen help	Screens			InfoCtr4150
Common Key Buffers overview	Overviews		Top 3	InfoCtr4150
Control records overview	Overviews		Top 3	InfoCtr4150
Copying metadata	Admin Guide		Top 3	InfoCtr4150
Create New Extract Column Assignment errors	Troubleshooting			InfoCtr4150
Create New Extract Column Assignment screen help	Screens			InfoCtr4150
Create New Extract Record Filter errors	Troubleshooting			InfoCtr4150
Create New Extract Record Filter screen help	Screens			InfoCtr4150
Create New Format-Phase Calculation errors	Troubleshooting			InfoCtr4150
Create New Format-Phase Calculation screen help	Screens			InfoCtr4150
Create New Format-Phase Record Filter errors	Troubleshooting			InfoCtr4150
Create New Format-Phase Record Filter screen help	Screens			InfoCtr4150
Creating control records	Admin Guide		Top 3	InfoCtr4150
Creating environments	Admin Guide		Top 3	InfoCtr4150
Creating global fields	Admin Guide		Top 3	InfoCtr4150
Creating groups	Admin Guide		Top 3	InfoCtr4150
Creating logical files	Admin Guide		Top 3	InfoCtr4150
Creating logical records	Admin Guide		Top 3	InfoCtr4150
Creating lookup paths	General Users Guide		Top 3	InfoCtr4150
Creating physical files	Admin Guide		Top 3	InfoCtr4150
Creating user-exit routines	Admin Guide		Top 3	InfoCtr4150
Creating users	Admin Guide		Top 3	InfoCtr4150
Creating view folders	Admin Guide		Top 3	InfoCtr4150
Creating views	General Users Guide		Top 3	InfoCtr4150
Deleting metadata	Admin Guide		Top 3	InfoCtr4150
Deleting metadata messages	Troubleshooting			InfoCtr4150
Dependency Checker errors	Troubleshooting			InfoCtr4150
Dependency Checker screen help	Screens			InfoCtr4150
Do SAFR batch processes run sequentially or in parallel?				InfoCtr4150
Edit Control Record errors	Troubleshooting			InfoCtr4150

Topic	PDF	PDF	PDF	PDF
Edit Control Record screen help	Screens			InfoCtr4150
Edit Environment errors	Troubleshooting			InfoCtr4150
Edit Environment screen help	Screens			InfoCtr4150
Edit Extract Column Assignment errors	Troubleshooting			InfoCtr4150
Edit Extract Column Assignment screen help	Screens			InfoCtr4150
Edit Extract Record Filter errors	Troubleshooting			InfoCtr4150
Edit Extract Record Filter screen help	Screens			InfoCtr4150
Edit Format-Phase Calculation errors	Troubleshooting			InfoCtr4150
Edit Format-Phase Calculation screen help	Screens			InfoCtr4150
Edit Format-Phase Record Filter errors	Troubleshooting			InfoCtr4150
Edit Format-Phase Record Filter screen help	Screens			InfoCtr4150
Edit Global Field errors	Troubleshooting			InfoCtr4150
Edit Global Field screen help	Screens			InfoCtr4150
Edit Group errors	Troubleshooting			InfoCtr4150
Edit Group screen help	Screens			InfoCtr4150
Edit Logical File errors	Troubleshooting			InfoCtr4150
Edit Logical File screen help	Screens			InfoCtr4150
Edit Logical Record errors	Troubleshooting			InfoCtr4150
Edit Logical Record (Assoc. Log. Files tab) screen help	Screens			InfoCtr4150
Edit Logical Record (LR Fields tab) screen help	Screens			InfoCtr4150
Edit Logical Record (LR Properties tab) screen help	Screens			InfoCtr4150
Edit Lookup Path errors	Troubleshooting			InfoCtr4150
Edit Lookup Path (General tab) screen help	Screens			InfoCtr4150
Edit Lookup Path (Lookup Path Definition tab) screen help	Screens			InfoCtr4150
Edit Physical File errors	Troubleshooting			InfoCtr4150
Edit Physical File screen help	Screens			InfoCtr4150
Edit User errors	Troubleshooting			InfoCtr4150
Edit User screen help	Screens			InfoCtr4150

Topic	PDF	PDF	PDF	PDF
Edit User-Exit Routine errors	Troubleshooting			InfoCtr4150
Edit User-Exit Routine screen help	Screens			InfoCtr4150
Edit View (View Editor tab) screen help	Screens			InfoCtr4150
Edit View (View Properties, Extract Phase tab) screen help	Screens			InfoCtr4150
Edit View (View Properties, Format Phase tab) screen help	Screens			InfoCtr4150
Edit View (View Properties, General tab) screen help	Screens			InfoCtr4150
Edit View (View Properties, Header/ Footer tab) screen help	Screens			InfoCtr4150
Edit View errors	Troubleshooting			InfoCtr4150
Edit View Folder errors	Troubleshooting			InfoCtr4150
Edit View Folder screen help	Screens			InfoCtr4150
Empty "Deleted Views" folder	Admin Guide		Top 3	InfoCtr4150
Environment Checker errors	Troubleshooting			InfoCtr4150
Environment Checker screen help	Screens			InfoCtr4150
Environments - advanced overview	Overviews		Top 3	InfoCtr4150
Environments overview	Overviews		Top 3	InfoCtr4150
Examples: COLUMN and COL.nnn statements	Logic text types			InfoCtr4150
Examples: COLUMN statements	Logic text types			InfoCtr4150
Examples: IF with COLUMN and COL.nnn statements	Logic text types			InfoCtr4150
Examples: IF with COLUMN statements	Logic text types			InfoCtr4150
Examples: IF with SELECT	Logic text types			InfoCtr4150
Examples: IF with SKIP	Logic text types			InfoCtr4150
Examples: SELECTIF statements	Logic text types			InfoCtr4150
Examples: SKIPIF statements	Logic text types			InfoCtr4150
Examples: WRITE statements	Logic text types			InfoCtr4150
Export metadata overview	Overviews		Top 3	InfoCtr4150

Topic	PDF	PDF	PDF	PDF
Export Utility errors	Troubleshooting			InfoCtr4150
Export Utility screen help	Screens			InfoCtr4150
Exporting metadata	Admin Guide		Top 3	InfoCtr4150
FAQ				InfoCtr4150
Finding and replacing logic text	Admin Guide		Top 3	InfoCtr4150
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