

EvDRE for SAP Planning and Consolidation 10 for Microsoft



Copyright

© Copyright 2011 SAP AG. All rights reserved.

SAP Library document classification: PUBLIC

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, System i, System i5, System p, System p5, System x, System z, System z10, System z9, z10, z9, iSeries, pSeries, xSeries, zSeries, eServer, z/VM, z/OS, i5/OS, S/390, OS/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+, POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipes, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF, Redbooks, OS/2, Parallel Sysplex, MVS/ESA, AIX, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP BusinessObjects Explorer, StreamWork, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.






Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects Software Ltd. Business Objects is an SAP company.

Sybase and Adaptive Server, iAnywhere, Sybase 365, SQL Anywhere, and other Sybase products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Sybase, Inc. Sybase is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see *Help on Help* → *General Information Classes and Information Classes for Business Information Warehouse* on the first page of any version of *SAP Library*.

Typographic Conventions

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

EvDRE Functionality	6
EvDRE Syntax.....	6
EvDRE Parameters	7
EvDRE Structure	9
EvDRE Processing Sequence.....	11
EPMCellRanges	11
Workbook Options.....	12
Key Range Parameter	14
Multiple Key Ranges.....	16
Current View Precedence	16
PageKey Range.....	17
RowKey Range.....	18
ColKey Range.....	19
CellKey Range.....	20
GetOnly Range.....	22
Format Ranges.....	23
Multiple Format Ranges.....	24
EvDRE Options.....	27
Sorting Range.....	29
Include Blank Rows or Columns	31
Expand Range Parameter	32
MemberSet Parameter	34
BeforeRange Parameter	37
AfterRange Parameter	39
EvSUM and EvSUB	39
Suppress Parameter	41
Insert Members.....	42
Repeated Expansions.....	44
Sequential Expansions	46
Expansion Across Sheets.....	47



EvDRE Functionality

The EvDRE (Data Range Exchange) function optimizes the performance of large reports and input forms by using cell ranges as parameters rather than performing data send and retrieve functions in each data cell.

In this release of SAP BusinessObjects Planning and Consolidation, you can use reports and input schedules created in release 7.5 that contain EvDRE functions, and the topics in this section of the application help describe how to do this. You cannot create new EvDRE reports and input forms in this release. Instead, this functionality is part of the EPM add-in for Microsoft Office (formerly called Interface for Excel). For information on creating new reports and input schedules in this release, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

Terminology has changed from release 7.5 of Planning and Consolidation to this release. When you use EvDRE reports and input schedules created in release 7.5, you will see the 7.5 terminology in the user interface as well as in this application help. The following list shows 7.5 terms as well as new terminology you may see elsewhere in Planning and Consolidation:

Terms in Release 7.5

Terms in Release 10.0

input schedule

input form

current view

context

application

model

application set

environment

dynamic hierarchy

ownership-based hierarchy

submit

save

Content Library

Documents

Also, parameters and Ev functions that existed in release 7.5 are recognized in the EPM add-in; however, they may have new names. For example, “AppName” and “EvRNG” are recognized, however the new names of these parameters are “connection name” and “EPMCellRanges” respectively. See the EPM add-in for Microsoft Office documentation for more information.



EvDRE Syntax



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The `EV_DRE` function has two required parameters and one optional parameter.

Syntax

`EV_DRE (AppName, Key range, Expand range)`

Parameter	Description
AppName	(Required) The name of the application from which to retrieve, or where to send data. See EvDRE Parameters .
Key range	(Required) The cell range that displays the dimension IDs that are either static or dynamic from the current view. See Key Range Parameter .
Expand range	(Optional) The definition of the expansion to perform. See Expand Range Parameter . In a static report, that is, one where no expansions are used, <i>Expand range parameter</i> in EvDRE is blank.

Error Checking

For workbooks using `EV_DRE`, the system checks the syntax of the function, and displays a descriptive status message within the control panel section of the workbook. The status message informs you of syntax and other data-related issues. If the status is *OK*, the `EV_DRE` parameters have the correct syntax. If the status starts with *#ERR*, an error has been detected. The status message provides a short description of the problem.



EvDRE Parameters



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

In an `EV_DRE` workbook, the main `EV_DRE` parameters used are `AppName`, `Key Range`, and `Expand Range`.

Features

AppName

The first parameter accepts the default application name (taken from the current view) that is displayed next to `App`. In function `=EVDRE(B3,A14:B20,A23:C29)`, the `AppName` parameter is `B3`.



Example

In the following example, the *AppName* parameter points to cell B3, whose value is *FINANCE*.

	A	B	C
1	EVDRE:OK		
2			
3	App	FINANCE	

End of the example.

Key Range



Example

The second parameter uses the values in the *Range/Value* table. In the function `=EVDRE(B3,A14:B20,A23:C29)`, the *Key range* parameter is `A14:B20`.

For more information, see [Key Range Parameter](#).

In the example, the *Key range* parameter points to the data in cells A14:B20.

	A	B
13	RANGE	VALUE
14	PageKeyRange	Sheet1!\$B\$4:\$B\$11
15	ColKeyRange	Sheet1!\$G\$3:\$I\$3
16	RowKeyRange	Sheet1!\$E\$5:\$E\$25
17	CellKeyRange	
18	GetOnlyRange	
19	FormatRange	Sheet1!\$E\$3

End of the example.

Expand Range



Example

The Expand range parameter uses the values in the Parameter/Expansion table, if your workbook contains an expansion. In the function =EVDRE(\$B\$3,A14:B20,A23:C29), the Expand range parameter is A23:C29.

For more information, see [Expand Range Parameter](#).

In the example, the Expand range parameter points to the data in cells A23:C29.

	A	B	C
22	PARAMETER	EXPANSION1	EXPANSION2
23	ExpandIn	COL	ROW
24	Dimension	RPTCURRENCY	ACCOUNT
25	MemberSet	MEMBERS	BAS
26	BeforeRange		
27	AfterRange		
28	Suppress	Y	Y
29	Insert		

End of the example.



EvDRE Structure



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

An EVDRE workbook has key ranges for the page, column, and row.

Features

The key of a cell is the current view of the cell. That is, the key is the combination of members — one per dimension — used to uniquely identify the value displayed in the cell.

A key range is a range of cells that contribute to the definition of the key of a range of cells. For example, a *RowKey range* is a range of cells that defines a portion of the key; for example, the Account or the Category of all the cells in those rows.

A key range can define the key for multiple dimensions on both rows and columns. For example, a column key range (*COLKey range*) could define the Entity, Time period, and Currency for a range of columns. The *Data range* contains the data retrieved from the database; using the page, row, and column key ranges, the ranges must be enlarged to accommodate the desired number of dimensions. The *ColKey range* has more than one row and the *RowKey range* has more than one column.



Note

Reserved heading ranges for Excel formulas or other Ev functions can retrieve, for example, the headings of the appropriate members. The system does not populate the heading ranges with data, but includes them in the expansion process, allowing for the replication of the content of these cells in the expanded columns or rows.

In addition, the system dynamically determines the combination of columns and rows with zero values, and suppresses them.

End of the note.



Example

In the following example, the column and row key ranges are A4, A5 & A6 and C2 and D2. The data range is C4, C5 & C6 and D4, D5 & D6. B4, B5 & B6 and C3 & D3 are reserved for heading ranges.

	A	B	C	D
1				
2			actual	budget
3				
4	Cash			
5	Accrec			
6	Inventory			

End of the example.

More Information

[Key Range Parameter](#)

[Expand Range Parameter](#)



EvDRE Processing Sequence



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The `EvDRE` processing sequence is designed so that the formatting instructions of the Format range do not override the formats of the Before and After ranges as well as of the formatted sets. If some portions of the report are already formatted, the format instructions do not break the predefined formats.

When the system expands an EvDRE report, it processes the tasks in the following sequence:

1. Expands the member sets to apply (this includes the members of the formatted sets, if defined)
2. Performs suppressions (optional — based on the setting in the expansion or option ranges)
3. Refreshes data
4. Applies formatting instructions
5. Applies sorting instructions
6. Inserts Before and After ranges of sorting, with their formats
7. Applies formats of the formatted sets
8. Inserts Before and After ranges of the expansions, with their formats



EPMCellRanges



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The Range function defines cell ranges as function (such as EvDRE) parameters. For example, when a ColKey range is defined for the EvDRE function, it contains a value like E2:E9. EvRNG makes it easy to select the range directly from the workbook, and returns the selected range as the value.

Features

When the EvRNG function defines a cell range, you can select the function, then press *F2*, and Excel highlights the range. This allows you to visualize the position of the range in the sheet.

During an expansion the parameters of the EvRNG function adjust themselves automatically when the body of the report redefines the number of rows and columns of the report. This self-adjustment allows EvDRE to retain the consistency of its parameters with the content of the report, permitting you to expand the same report multiple times without breaking the definitions of its design. You must use EvRNG in these cells whenever the function uses expansions.



Workbook Options



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

Workbook options set behaviors within a report or input schedule.

Features

The system determines default workbook option settings depending on whether a report or input schedule is active. You can change any of the following options:

Option	Description
Type	Options are <i>Report</i> and <i>Input Schedule</i> .
Refresh	The system automatically performs a refresh after you submit data to the

Option	Description
	<p>database using the <i>Submit Data</i> button in the EPM tab of the ribbon.</p> <p>When you refresh a workbook, the system goes to the server and returns data values for the cells whose retrieval formulas are affected.</p> <p>When you expand a workbook, the expansion functions dynamically expand dimensional data.</p> <p>All refresh and expansion options for both reports and input schedules are enabled by default.</p> <ul style="list-style-type: none"> • <i>Refresh workbook on worksheet update</i>: The system automatically performs a refresh when a change is made to an affected data cell. • <i>Refresh workbook on workbook open</i>: The system automatically performs a refresh when the workbook opens. • <i>Expand on workbook open</i>: The system automatically expands the expansion functions when the workbook opens. • <i>Expand on current view change</i>: The system automatically expands the expansion functions when the current view is changed. <p>You can refresh using the <i>Refresh</i> button in the EPM tab of the ribbon. <i>Refresh Worksheet</i> is the default action when you chose the <i>Refresh</i> button.</p>
<p>Allow users to change option</p>	<p>If you select this, users who are not administrators can set workbook options on a workbook. If you leave it blank, only administrators can change these options. By default, this option is selected.</p>
<p>Set worksheet password</p>	<p>You can set a Planning and Consolidation password on the workbook. A Planning and Consolidation password is required when the report or input schedule is distributed or collected using the Offline Distribution Wizard.</p> <p>The password is different from native Excel's workbook password. If you use the Excel password to secure a workbook, Planning and Consolidation expansions may not work properly. To set the password, select <i>Options</i> on the EPM tab.</p>
<p>Lock Status</p>	<p>The <i>Workbook Options</i> dialog shows whether the current workbook is locked or unlocked.</p> <p>You can lock members of the current view for the worksheet using the <i>Current View Options</i> feature.</p>
<p>Maximum</p>	<p>For performance purposes, there is a maximum number of rows and</p>

Option	Description
Expansion Limit	<p>columns to return when the row or column in the report or input schedule dynamically expands.</p> <p>For Microsoft Excel, the maximum number of rows is 65,535 and the maximum number of columns is 255. However, for a file format of Excel 12 (Excel 2007) html, xml workbook or template, the maximum number of rows is 1,048,575 and the maximum number of columns is 16,383.</p> <p>This option controls member expansion behavior in the active spreadsheet.</p>
Drill Down options	<p>You can use <i>Expand by Overwriting</i> or <i>Expand by Inserting</i>. When you select <i>Expand by Overwriting</i>, the expanded members display in the rows below the expanded member, clearing existing members. When you select <i>Expand by Inserting</i>, any rows below the expanded member shift down, and new rows are inserted to accommodate the newly displayed members.</p>
Read options for the comments	<p>This field is used for cell-based comments. If an EvCOM function returns a comment value, you can have it displayed as text in the cell or in a Microsoft Excel popup.</p>

Activities

To set workbook options, open the workbook for which you want to set the options and choose *Options* in the EPM tab.



Key Range Parameter



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

A key range is the cell range that displays the dimension IDs from the current view.

Features

The Key Range parameter uses the values in the *Range/Value* table.

The same `EV_DRE` function can support multiple key ranges on both the columns and rows simultaneously.

Column key and Row key ranges can have multiple dimensions.

Activities

You can define a multiple key range by entering a range for the first heading set, a comma (,), then a range for the second heading set.



Note

You can activate this feature by assigning multiple ranges to the same EvRNG function. See [EPMCellRanges](#).

You can assign a maximum of 30 parameters to any Excel function.

End of the note.

To use multiple dimensions in a key range, you must enlarge the ranges to accommodate the desired number of dimensions. The `ColKeyRange` has more than one row and the `RowKeyRange` has more than one column.

To include a blank line between retrieved values, you can leave a row or column blank without entering multiple ranges.

Example

If the formula is `=EVDRE(B3,A14:B20,A23:C29)`, the *Key range* parameter points to the data in cells `A14:B20`. The first column (with the heading *RANGE* below) contains the name of the range. You enter the range values in the second column (with the heading *VALUE*). The reserved range names allow you to order the ranges in any sequence, and skip any ranges that are unused or not required.

	A	B
13	RANGE	VALUE
14	PageKeyRange	Sheet1!\$B\$4:\$B\$11
15	ColKeyRange	Sheet1!\$G\$3:\$I\$3
16	RowKeyRange	Sheet1!\$E\$5:\$E\$25
17	CellKeyRange	
18	GetOnlyRange	
19	FormatRange	Sheet1!\$E\$3
20	Options	AutoFitCol

More Information

[CellKey Range](#)

[ColKey Range](#)

[RowKey Range](#)

[PageKey Range](#)



Multiple Key Ranges



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The same `EV_DRE` function call can support multiple key ranges on both the columns and rows simultaneously.

If you want to include a blank line between retrieved values, you can leave a row or column blank without having to enter multiple ranges. See [Including blank rows and columns](#).

This feature can be activated assigning multiple ranges to the same `EV_RNG` function.

The maximum number of parameters that can be assigned to any Excel functions (and `EV_RNG` is no exception) is 30.

Activities

To define a multiple key range:

1. From EPM add-in, open an `EV_DRE` report or input form.
2. In the `ColKeyRange` and/or `RowKeyRange` rows of the Key range parameter table, enter a range for the first heading set, a comma (,), then a range for the second heading set.
3. Save the report or input form.



Current View Precedence



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You can define which current view has precedence by a combination of the settings described in the following table.

Features

The full key (current view) of a cell is controlled by EvDRE overlaying onto each cell the definitions of a current view as defined by any combination of the following settings:

Rank	Description
1	The system current view, as defined by the current view bar.
2	The page current view, as defined in the <code>PageKeyRange</code> .
3	The column current view, as defined in the <code>ColumnKeyRange</code> .
4	The row current view, as defined in the <code>RowKeyRange</code> .
5	The cell current view, as defined in the <code>CellKeyRange</code> .

If these definitions are in conflict, the system takes precedence from the lowest to the highest. For example, the cell key, if it exists, takes precedence over the row key, the row key takes precedence over the column key, and the column key takes precedence over the page key.



PageKey Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You define a *PageKey range* to specify a set of default dimension members to use for the entire data range.

Features

- The *PageKey range* is optional and you can limit it to only specific dimensions in the application.
- If any dimensions are not specified in the *PageKey range*, the system takes them from the current view or the workbook-specific current view.
- You can enter one or more members in a *PageKey range* cell. If you want to enter multiple members, use a comma-separated list. The system adds the values of the set of members you specify for the given dimension. For example, if you specify `ENTITY: Rome, Milan, Naples` in the *PageKey range*, all retrieved values for the page contain the sum of the values from Rome, Milan, and Naples.
- If the page key has an expansion dimension, the system uses the member ID for the evaluation of the expansion.
- You can use the *EvMBR* function in the *PageKey range* to define specific members to display the ID of a member (selected from the Member Lookup dialog box) in the cell without changing the current view.
- The *PageKey* range definition must reference member IDs that exist in a one-column range.

Activities

To define the *PageKey range*, from EPM add-in, open the EvDRE report or input schedule. In the PageKeyRange fields of the Key range parameter table, enter a range of cells that points to one or more dimensions. . Save the report or input schedule.



RowKey Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The range of cells that is reserved for the member IDs used to return data to the rows.

Features

- If your report or input schedule uses expansions, the system takes the member IDs for the range from the values defined in the Expand range parameter's Dimension and MemberSet rows.

- If the report is static, the system takes the member IDs from the current view of the report or input schedule, or from other values specified in the *Pagekey* and *CellKey* ranges.
- The number of columns in the range must correspond to the number of dimensions for which the current view is row-specific.

RowKey ranges and expansions

When an EvDRE function uses expansions, the following occurs:

- The *RowKey* range (and/or the *ColKey* range) automatically resizes when you expand the data, and its content is populated with the members defined in the *MemberSet* parameter.



Note

The *RowKey* range must have two or more than two rows.

End of the note.

If the expansion criteria return no members, the row does not appear.

Activities

To define the *RowKey* range, from EPM add-in, open the EvDRE report or input schedule. In the *RowKeyRange* rows of the *Key* parameter table, enter a range of cells that contain the member IDs for the rows.



ColKey Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The range of cells reserved for the member IDs used to return data to the columns.

Features

When you use the *ColKey* Range, note the following:

- If your report or input schedule uses expansions, the system takes the member IDs for the range from the values defined in the *Expand* range parameter's *Dimension* and *MemberSet* rows.

- On a static report, the system takes the member IDs from the current view of the report or input schedule or from other values specified in the *PageKey* and *CellKey ranges*.
- The number of rows in the range must correspond to the number of dimensions for which the current view is column-specific.
- You can inset text, blank spaces, or formulas (like break totals) into rows or columns within the data range, without breaking the column or row key ranges in multiple ranges. If you leave at least one blank cell in the column or row keys, the corresponding column or row is not affected by the function.

ColKey ranges and expansions

When an EvDRE function uses expansions, the following occurs:

The *ColKey range* (and/or the *RowKey range*) automatically resizes when you expand the data and its content is populated with the members defined in the MemberSet parameter..



Note

The *ColKey range* must have two or more columns.

If the expansion criteria return no members, the column does not appear.

End of the note.

Activities

To define the *ColKey range*, from EPM add-in, open the EvDRE report or input schedule. In the *ColKeyRange* rows of the *Key range* parameter table, enter a range of cells that contain the member IDs for the columns. Save the report or input schedule.



CellKey Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

Define a *CellKey range* to overwrite a member ID used in the *ColKey* or *RowKey ranges*.

Features

- The optional *CellKey range* represents a range of cells that you can use to redefine the members that apply to the corresponding cells for their respective dimensions. Corresponding cells are the cells in the data range that have a corresponding position relative to the top-left corner of the *CellKeyRange*.
- The *CellKey range* specifies which cells have, for one or more dimensions, a current view that is cell-specific.



Note

You can override the current view, or part of it, for any cell in the data range, as defined by the page keys, the column keys, and the row keys using the Current View Lock and Current View Options of the EPM add-in.

End of the note.

- You can use the *CellKey range* only on static reports (reports that do not include EvDRE-driven expansions). The *CellKeyRange* must be equal to or smaller than the data range for which it redefines the current view for a cell.

Activities

To define the *CellKey range*, from Interface for Excel, open the EvDRE report or input form. In the *CellKey range* rows of the Key range parameter table, enter a range of cells that contain the cell-specific members.

Example

In the following example, the first column retrieves the values of each month of 2007 while the second column retrieves the values of each month of 2008. You achieve this result by using a *CellKey range* made up of only one Row, combined with a Row Expansion. Since the report contains a Row expansion, the expansion automatically creates an expanded copy of the *CellKey range* to the right of the report *Data Range*. This copy is the actual *CellKey range* that the function uses to define the key of the cells of the data range.

The first cell of the original *CellKey range* (G2) contains a formula that has been copied into the expanded *CellKey range* to the right. The result is a key that varies row by row based on the *PERIOD* property of the corresponding row key, while the *YEAR* is controlled by the content of cell E2. The example below shows how this technique can be used to build an inter-company matching report. In column H of the example the inter-company member selected in ROWS need to be swapped with the corresponding entity member, while the inter-company member must be the one corresponding to the entity selected in PAGE.

The result is obtained placing the correct formula in the second column (H) of the *CellKey range* G3:H3, and letting the expansion build the correct keys in column K. A more efficient way to build an inter-company matching report is to use two EVDRE functions overlaid on the same data range.



GetOnly Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You define a *GetOnly range* when you want a group of values in an input form to only retrieve (not send) values. The cells are designated as read-only.

Features

Use the *GetOnly range* only in an input form. When the workbook is defined as an input form in your workbook options, EvDRE assumes its data range to be a send range. Thus, all cells within this range are read-write cells.



Note

EvDRE sends only cells in the send range that have changed value since the last refresh action. This includes values calculated by Excel formulas, allowing the users to define Excel-based logic calculations. The values are sent up to the last decimal place, even if a rounding format is applied. Text values are not sent.

End of the note.

A *GetOnly range* gives the specified cells the ability to only retrieve data. When the workbook is defined as a report in your workbook options, EvDRE assumes its data range to be a get range, and all cells within this range are read-only cells. Thus, the system ignores the *GetOnly range*.

Activities

To define a *GetOnly range*, from Interface for Excel, open the EvDRE report or input form. In the *GetOnlyRange* row of the *Key range parameter* table, enter a range of cells in which you want to allow only retrievals.



Note

You can send cells with zero values in the following ways:

- Enter *zero (0)* and then send the cells.
- Erase the values in the cells and then send the cells.

End of the note.



Format Ranges



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You define format ranges that can point either to one cell or to an entire range of cells.

Features

For one cell, EVDRE applies the format of the defined cell to the entire data range.

For a range of cells, EVDRE interprets the content of the cells in the defined range to derive the formatting instructions, then applies them to different areas in the report range.

When the FormatRange cell is blank, EvDRE automatically derives the format of the data range from the format of the top left cell of the data range to be expanded.

You can define one or multiple format values:

Define one format value

You can point to one cell for the data cell format, define the format range, then select *Expand* in the EPM tab.

Define multiple format values

You can define multiple format values when you want to define formatting for different areas of report.

- You can specify multiple formatting instructions using multiple rows, each row representing one formatting instruction.
- The system executes the *EvDRE* function in sequence from the first (top row) to the last (bottom row) in the range.
- You can define which format should prevail over conflicting formats (for example, the Locked format overwrites the Calc format, which in turn overwrites the Default format).
- You can overlay different formatting properties on the same cell.
- You can also define a different format for different ranges of the sheet.



Note

FormatRange supports empty members in both Row and Column MemberSet definitions to allow for more versatile formatting.

End of the note.

Scaling EvDRE Data

You can scale EvDRE data to the thousands using standard Excel options. From an EvDRE workbook, right click on the cell you want to scale. Select **Format Cells** → **Number** → **Custom**. Select #,##0.00,_) ; [Red](#,##0.00,), then choose **OK**. For example, if you enter 1000 in a cell with this formatting applied, Excel shows 1.00.

Activities

To define multiple formats, set up a table in *EvDRE* with six columns. Each column represents a separate parameter of a formatting instruction. See [Multiple Format Ranges](#).



Multiple Format Ranges



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You can apply multiple formatting instructions. Each column of the formatting range represents one parameter that can be applied to a formatting instruction.


Features


The following columns are all required, and you must enter them in the order described below. (You can skip the title row, which is not part of the range.)



Column	Description	Keywords
<i>CRITERIA</i>	Defines what triggers the formatting instruction. For example, the criteria could be based on the calculated or non-calculated status of a cell.	<ul style="list-style-type: none"> Default — applied regardless of criteria <i>Calc</i> — applied only to calculated members <i>Input</i> — applied only to noncalculated members



Note

Column	Description	Keywords
<p><i>EVALUATE IN</i></p>	<p>The system does not support a comma delimited list of values in the <i>Criteria</i> column (except when you use the {dim.property}= {value} keyword.</p> <p>End of the note.</p> <p>Allows you to restrict the range for which the criteria must be evaluated.</p>	<ul style="list-style-type: none"> • {dim.property}= {value} — applied only to the members of dimensions {dim} with property {property} = {value} <p>You can also you the <i>different-from</i> (<>) keyword.</p> <ul style="list-style-type: none"> • <i>Row</i> — Evaluate the criteria in ROW • <i>Column</i> — Evaluate the criteria in COLUMN • <i>All</i> or blank — Evaluate the criteria in PAGE or COLUMN or ROW or CELL • <i>Page</i> — Evaluate the criteria in PAGE • <i>RowCol</i>
<p><i>FORMAT</i></p>	<p>Represents the desired formatting properties. The definition of the format is directly driven by the Excel format of the <i>FORMAT</i> cell, as defined using the native Excel formatting tools.</p>	
<p><i>USE</i></p>	<p> Note</p> <p>The format properties of a cell include the <i>Lock</i> property. This property is not visible unless you open the Excel Format Cell dialog box. The EvDRE formatting engine uses it to prevent or allow a user to modify the content of the cells or a workbook.</p> <p>End of the note.</p>	<p>Color, font size, font attributes</p> <ul style="list-style-type: none"> • <i>All</i> — Apply all formatting

Column	Description	Keywords
	<p>the defined format should be applied. EvDRE uses only the Pattern and the Fontsize properties of the <i>FORMAT</i> cell and ignores all other formatting properties (for example, font name, or border). By separating formatting options into independent groups the system allows you to overlay different settings that are not mutually exclusive, and combine them into the final result.</p>	<p>properties</p> <ul style="list-style-type: none"> • <i>Pattern</i> — Apply all the pattern formatting properties • <i>Number</i> — Apply the number formatting properties • <i>Alignment</i> — Apply the alignment (Center, Left, Right, Justified). • <i>Font</i> — Apply all the font formatting properties • <i>FontStyle</i> — Apply the font style only (regular, bold, italic) • <i>Border</i> — Apply a border to each individual CELL in the range. • <i>Frame</i> — Apply an external border to the RANGE as a whole. • <i>Style</i> — Apply all style properties (as defined in Excel). • <i>Content</i> — Apply what is in the cell itself. You can change the content; instead of showing the value you can override it with the text noted in the format range. If the value exceeds 1 million, you can change the content to say <i>exceeds</i>. • <i>Lock</i> — Apply the LOCK property • <i>Protection</i> — applies the entire Cell Protection section (Locked+FormulaHidden)
	<p> Note</p> <p>The system supports all cell properties that use VBA syntax.</p> <p>The system does not support a comma delimited list of values in the <i>USE</i> column.</p> <p>End of the note.</p>	
<i>PARAMETERS</i>	Used to enter some formatting instruction directly in textual	<i>Fontsize=account.size</i>

Column	Description	Keywords
<i>APPLY TO</i>	<p>format. For example, entering <code>FONTSIZE="12"</code> defines in a textual format the font size to use.</p> <p> Note</p> <p>The system supports all cell properties that use VBA syntax.</p> <p>End of the note.</p> <p>Defines the sections of the report to which the format should be applied. EvDRE applies the defined format to only the headings area of the row/column containing a calculated member. If you leave this field is blank, the current formatting instruction is applied to only the data range.</p> <p> Note</p> <p>The system does not support a comma delimited list of values in the <i>APPLY TO</i> column.</p> <p>End of the note.</p>	<ul style="list-style-type: none"> • <i>Style</i> — • <i>Content</i> — • <i>Blank</i> — Apply to the Key Range, Headings Range, PageKey Range, and Data Range • <i>Heading</i> • <i>Data</i> — Apply to the Data range • <i>Key</i> — Apply to the row or column Key Range

More Information

[Format Ranges](#)



EvDRE Options



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.



You can define any of the following options in the key range parameter to customize your `EVDRE` data.

Features

You can use the following methods for entering `EVDRE` options:

- You can enter the appropriate keywords in the *Options* cell of the *KeyRange*.
- The *Options* cell (which can also be named *OptionRange*) may contain an `EVRNG` function pointing to a range of cells listing valid options. The first column in the range must contain a valid option keyword. The second column activates the corresponding option with a *Y* value, or with a numeric value.

A list of options is below with a description of each; the keywords are NOT case sensitive.

Option	Description
<code>AutofitCol</code>	Automatically adjusts the size of the columns containing the <code>EVDRE</code> ranges to fit the content after refreshing data.
<code>Bottom</code>	Shows only the specified number (n) of the lowest values in the entire data range.
<code>DumpDataCache</code>	The content of the data cache is written in the log file of the EPM add-in. To open the log file, in the EPM tab, choose  <i>More</i> → <i>Log</i>  .
<code>ExpandOnly</code>	Disables the refresh action and performs only an expansion, when requested. The system does not retrieve data from the database.
<code>HideColKeys</code> and <code>HideRowKeys</code>	Hides the corresponding key ranges.
<code>NoRefresh</code>	Prevents the system from refreshing data from the database.
<code>NoSend</code>	Prevents the system from sending data to the database.
<code>ShowComments</code>	Add an Excel comment in any <i>DataRange</i> cell with a formula, if the value retrieved from the database differs from the one displayed by the formula.
<code>ShowNullAsZero</code>	All empty cells in the data range are filled with zeros.
<code>SortCol</code>	Sorts a given column.

Option	Description
SumParent	Inserts new rows with subtotals. This option works only if EvDRE has 1 row or 1 column in both axes and the member set contains the keyword ALL or the other axis has only one single member.
SuppressDataRow and SuppressDataCol	Performs a suppression on the defined data range directly in Excel.
SuppressNodata	Prevent the suppression of zero values. Only missing (no data) values are suppressed. Otherwise, both zeros and missing data are suppressed.
Top	Shows only the specified number (n) of highest values in the entire data range.

Activities

To define options, follow these steps:

1. Open an EvDRE report or input schedule.
2. In the *Options* cell of the *Key range* parameter table, enter the desired option(s).
When you enter more than one, use a comma as the delimiter. For example, you can enter *SumParent, AutoFitCol, NoSend*.
3. Choose the *Expand* button and save the report or input schedule.



Note

The first column in the range must contain a valid option keyword. The second column activates the corresponding option with a *Yes* value, or with a numeric value, where appropriate.

End of the note.



Sorting Range



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

The `KeyRange` of an EVDRE function contains an optional range called *SortRange*, which points to a range of cells to define how the system sorts the rows of the report.

Features

When you use the *SortRange* option, note the following:

- The range must be 4 columns and 4 rows.
- The first column must contain the name of the sorting parameter and the remaining 3 columns define up to 3 possible sorting methods.
- The first parameter (column) may contain the following:
 - A column identifier (for example J), indicating the column on which the sorting must be based
 - A {dimension}.{property} identifier (for example `ENTITY.CURRENCY`) indicating that the rows must be sorted according to the alphabetical order of the value of some property of a given dimension
- The second parameter (order) specifies the sorting order. You can use *D* (for Descending) or *A* (for Ascending). Leave it blank to default to ascending order.
- You can use the third and fourth parameters (*BeforeRange* and *AfterRange*) to define a range of cells that should be inserted in the report above (*BeforeRange*) or below (*AfterRange*) each change of value in the sorting criteria. In the definition of the *AfterRange*, you can use the keyword *KEY*, which returns the value of the sorting element (the currency) for which a break total is being inserted.

You can also use the *EvSUB* keyword in the data cell to create subtotals by currency. See [EvSUM and EvSUB](#).



Note

You can sort on the currency of entities without retrieving the value of the currency property in the sheet.

The system performs the sorting action after it refreshes the data, even if NO EXPANSION has been performed. If *BeforeRange* or *AfterRange* is defined on the sorting criteria, these ranges are automatically removed from the report and reapplied to its content after the data is refreshed. This also happens if NO EXPANSION is triggered.

End of the note.

More Information

[BeforeRange Parameter](#)

[AfterRange Parameter](#)



Include Blank Rows or Columns



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You can include blank rows or columns within a data range in an EvDRE report or input form.

Features

You can leave these rows or columns blank or insert formulas, without having to break the column or row key ranges into multiple ranges.

When you include a blank row or column in the *RowKey range* or *ColKey range*, the system does not apply the function to the corresponding row or column when it retrieves data.

When a blank cell displays, the system ignores the corresponding data range cells because there is no valid key associated with them. You can insert any text or formula into the cells and the system does not overwrite them.

If you enter formulas in the data range in cells where the row and column keys are valid, the system does one of the following:

- If the workbook is a report (retrieves only), the system ignores values that contain formulas when it retrieves to the cell, and it preserves the formula (as if the key contained blank cells).
- If the workbook is an input form (retrieves and sends), the system compares the retrieved values to the value calculated by the formula. If there is a difference, the system attaches a comment to the cell. When the system sends data values, it sends the values calculated by the formula to the database, in case of a discrepancy.

Inserting formulas

When you enter formulas in the data range in cells where the row and column keys are valid, the system does one of the following:

- If the workbook is a report (retrieves only), the system ignores values that contain formulas when it retrieves to the cell, and it preserves the formula (as if the key contained blank cells).
- If the workbook is an input form (retrieves and sends), the system compares values retrieved with the value calculated by the formula and if there is a difference, it attaches comment to the cell. When data values are sent, the values calculated by the formula are sent to the database, in case of a discrepancy. You can use this feature to calculate the subtotals immediately, as numbers

Activities

To include a blank row or column, select the cell before which you want to insert the blank row or column. Right-click and select **Insert** → *Shift cells right* (for columns) or *Shift cells down* (for rows), then choose *OK*.



Expand Range Parameter



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You define the *Expand range* parameter when you want your report or input schedule to handle expansions. This parameter points to a set of ranges that contain the appropriate expansion definitions.

Features

Parameter/Expansion table

The Expand range parameter uses the values in the *Parameter/Expansion* table. The parameter table consists of:

- The name of the expansion parameter in the first column.
- As many columns as the number of desired expansions. For example, if you want two expansions in the columns, and three expansions in the rows, you have five columns after the expansion parameter name.
- Up to eight rows, each one defining one parameter for each expansion.

Expand range subparameters

The following table describes the subparameters for the Expand range parameter. You must define the first three subparameters, and the others are optional.

Parameter	Description
<i>ExpandIn</i>	This parameter can be either <i>COL</i> or <i>ROW</i> , indicating whether the expansion is to be performed on the columns or on the rows.
<i>Dimension</i>	This parameter contains the name of the dimension for which a dynamic set of members is generated.
<i>MemberSet</i>	For this parameter, you define the set of members to expand for the selected dimension. For more information, see MemberSet Parameter .
<i>BeforeRange</i>	(Optional) Use to specify a range of cells to insert at the beginning of the current expansion. For more information, see BeforeRange Parameter .
<i>AfterRange</i>	(Optional) Use to specify a range of cells to insert at the end of the current expansion. For more information, see AfterRange Parameter .
<i>Suppress</i>	(Optional) Set the Row expansion parameter to Y to suppress the rows that retrieve zero values. Set the Column expansion parameter to Y to suppress all columns that retrieve zero values. For more information, see Suppress Parameter .
<i>Insert</i>	(Optional) Set this parameter to Y for any row or column expansion to perform a runtime insertion of a suppressed row or column after the expansion. You can insert a suppressed row or column by right-clicking the desired key cell and selecting <i>EVDRE: Insert member</i> . The displayed dialog box allows you to select a member whose data you want to display in the row or column. For more information, see Insert Members .

Report Expansion Sequence

When the system expands a report, it follows the sequence of events below:

- Expands the member sets to apply (this includes the members of the formatted sets, if defined)
- Performs the system suppressions
- Refreshes the system data
- Applies the default format
- Applies the formatting and sorting instructions
- Inserts the before and after ranges of sorting, with their formats

- Applies the formats of the formatted sets
- Inserts the before and after ranges of the expansions, with their formats

The sequence ensures that the formatting instructions of the format range do not override the formats of the before and after ranges, as well as of the formatted sets. If some portions of the report are already formatted, the format instructions do not break the predefined formats.

Activities

Defining the Expand range parameter

You can define the Expand range parameter when you want your report or input schedule to handle expansions. The Expand range parameter points to a set of ranges that contain the appropriate expansion definitions.

Example

If the `EVDRE` function is `=EVDRE(B3,A14:B20,A23:C29)`, the Expand range parameter points to the data in cells `A23:C29`.

	A	B	C
22	PARAMETER	EXPANSION1	EXPANSION2
23	ExpandIn	COL	ROW
24	Dimension	RPTCURRENCY	ACCOUNT
25	MemberSet	MEMBERS	BAS
26	BeforeRange		
27	AfterRange		
28	Suppress	Y	Y
29	Insert		

More Information

[EvDRE Syntax](#)

[EvDRE Parameters](#)



MemberSet Parameter



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

This parameter defines the set of members to expand for the corresponding dimension. The default value is `DEP`.

Features

You can define one or more of the following for this parameter:

- A comma-delimited list of members, for example, *Cash,AccRec,Inventory*.
- A valid keyword that describes the members relative to the corresponding dimension member specified in the *PageKeyRange*.
- A filter that describes the members to return.



Note

Do not add any spaces between the values.

End of the note.

Using Keywords

The following table describes the valid keywords that you can use alone, or combine with other keywords and hard-coded members in a comma-delimited list. The default expansion order is children, then parent.



Note

As soon as `PARENTAFTER` in `MemberSet` exists, the `PARENTAFTER` is applied to the whole dimension.

End of the note.

Keyword	Description
<i>MEMBERS</i> <i>[,PARENTAFTER]</i>	All members in the dimension
<i>BASMEMBERS</i>	All base members in the dimension
<i>BAS</i>	All base members below the current member. You can enter <i>BAS(parent)</i> to return the base members of a specified parent, rather than using the parent from the page key range or current view. For

Keyword	Description
	example, <i>BAS(TotalAssets)</i> returns the base level members of <i>TotalAssets</i> .
<i>DEP</i>	All children of the current member. You can enter <i>DEP(parent)</i> to return the dependent members of a specified parent, rather than using the parent from the page key range or current view. For example, <i>DEP(2008.Q1)</i> returns the dependents of <i>2008.Q1</i> .
<i>ALL</i> <i>[,PARENTAFTER]</i>	All dependents of the current member. You can enter <i>ALL(parent)</i> to return all members of a specified parent, rather than using the parent from the page key range or current view.
<i>SELF</i>	The current member. If you define the MemberSet as <i>SELF</i> , the expansion occurs on the current member. If you leave MemberSet blank, the system suppresses the expansion.
<i>NOEXPAND</i>	Do not expand
	If you use a dynamic hierarchy, the ENTITY dimension supports the following member set expansion keywords: <ul style="list-style-type: none"> • <i>GDEP</i> - Group Dependents G • <i>BAS</i> - Group Base-level members • <i>GALL</i> - Group All members below current parent
<i>GDEP, GBAS,</i> <i>GALL</i>	The system activates these keywords only when the active application has a dimension type GROUP. The <i>GDEP</i> keyword generates the list of ENTITIES defined as dependents of the GROUP set in the page key, as found in the dynamic hierarchy stored in the OWNERSHIP cube for the current CATEGORY and TIME combination(s). This keyword also supports a direct assignment of the GROUP to use, with the following syntax: <i>GDEP(GroupName)</i> .

Defining filters

The filter criteria is based on one or more properties in the dimension. For assistance in defining a filter, you can right-click on the *MemberSet* cell and select *EvDRE: Build Filter*. Use the dialog box to define a query based on the property. For example, you can define a query like: *ACCTYPE=INC GROUP=Balance Sheet AND CALC=Y*



Note

The value of the property must be enclosed in double quotes.

The criteria can be equal (=) or different than (<>).

Do not use parentheses.

You cannot combine Filters based on properties with hard-coded members or other keywords like BAS, and so on.

The expressions are not case-sensitive.

End of the note.

Activities

To define the `MemberSet` parameter, take the following steps:

1. From EPM add-in, open the EvDRE report or input schedule.
2. Find the *Expand range* parameter fields.
3. In the *MemberSet* row, enter one of the following in the applicable cells:
 - A comma-delimited list of members for the associated dimension
 - A keyword that describes the members in the hierarchy to retrieve Filter criteria for each expansion column.
 - Filter criteria for each expansion column. To display the *Filter* dialog box, right-click on the `MemberSet` cell and select *EvDRE: Build Filter*. In the *Filter* dialog box, select the properties and values for the associated dimension.
4. Save the report or input schedule.

Example

In the following example, the column expansion returns data for January and February of 2008, and the row expansions return data for all members in the `RptCurrency` dimension for each base-level member in the `Account` dimension.

22	PARAMETER	EXPANSION 1	EXPANSION 2	EXPANSION 2
23	ExpandIn	COL	ROW	ROW
24	Dimension	Time	Rptcurrency	ACCOUNT
25	MemberSet	2008.jan,2008.feb	Members	BAS
26	BeforeRange		Sheet1!\$C\$33:\$E\$33	Sheet1!\$C\$37:\$E\$37



BeforeRange Parameter



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You use this parameter to dynamically insert rows and columns at the beginning of expansions.

Features

- If you have nested expansions, the system repeats all *BeforeRange* ranges.
- The *BeforeRange* parameter is like a template that you design by identifying the range somewhere in the sheet (possibly in a non-visible portion), and that the expansion process places into the body of the report.
- The system places the ranges specified in the row expansions horizontally starting from the first column of the row headings range. The system places column ranges vertically starting from the first row of the column headings range.
- The system copies the format and formulas for the entire range. The value is only copied for the portion relating to the headings.
- If you also expand the columns, the portion of the row range that falls inside the data range needs only to be defined for one column. The column expansion duplicates that portion for all expanded columns. If there is a before range on a column, and also an expansion of rows, the portion of the column ranges that falls inside the data range only needs to be defined for one row.

Activities

To define a `BeforeRange` parameter:

1. From EPM add-in, open the EvDRE report or input schedule.
2. Find a place in the worksheet to enter the range. This can be in a non-visible portion of the sheet.
3. In the *BeforeRange* row of the *Expand range* parameter fields, enter the cell range that describes the format you want to display.

More Information

[Expand Range Parameter](#)

AfterRange Parameter

Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You use this parameter to dynamically insert rows and columns of data at the end of expansions.

Features

You can use the following features with this parameter:

- You define one or more *AfterRange* parameters when you want to include additional data in rows or columns after the expansions.
- If you have nested expansions, the system repeats all *AfterRange* ranges.
- *AfterRange* parameters work the same as *BeforeRange* parameters. The only difference is their placement on the worksheet. For more information, see [BeforeRange Parameter](#).

Activities

To use the *AfterRange* parameter, take the following steps:

1. From Interface for Excel, open the EvDRE report or input schedule you are building. Find a place in the worksheet to enter the range. This could be in a non-visible portion of the sheet.
2. In the *AfterRange* row of the *Expand range* parameter field, enter the cell range that describes the format you want to display.
3. Select *Expand* in the EPM tab to insert a new column containing the sum of the values after the expansion columns.

More Information

[Expand Range Parameter](#)

EvSUM and EvSUB



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You can place a keyword, *EvSUM*, in the data range portion of a before or after range. When the system performs the expansion, it automatically turns this keyword into an Excel formula that calculates the sum of the members of the related expansion. You can nest *EvSUM* instructions within the related before or after ranges.

A newer variation of the *EvSUM* keyword is *EvSUB*, which has similar behavior, but provides more flexibility to the mathematical operations used in the expanded range. *EvSUB* inserts the Excel function *SUBTOTAL* into the appropriate cells and identifies the type of mathematical operation you want performed on the range of cells.



Syntax

```
1. = SUBTOTAL(function_num,ref1,ref2,...)
```

End of the source code.

Function_num is the number 1 to 11 (includes hidden values) or 101 to 111 (ignores hidden values) that specifies which function to use in calculating subtotals within a list.

Function_num (Includes hidden values)	Function_num (Ignores hidden values)	Function
1	101	AVERAGE
2	102	COUNT
3	103	CONTRA
4	104	MAX
5	105	MIN
6	106	PRODUCT
7	107	STDEV
8	108	
9	109	
10	110	

Function_num (Includes hidden values)	Function_num (Ignores hidden values)	Function
11	111	

Example

The instruction *EvSUB(2)* inserts the Excel function *SUBTOTAL(2,{range})* into the sheet, and the function returns the number of elements in the {range} (using the COUNT operation, as triggered by the value 2 of the identifier). Passing no parameter to *EvSUB* corresponds to passing a 9, which represents the SUM operation.



Suppress Parameter



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

EvDRE's *Suppress* parameter allows you to suppress rows and columns so that no values appear in all fields during an expansion.

Features

You can use the following features with the *Suppress* parameter:

- You can base the suppression on a different region of data than the one being retrieved. For example, you may specify that, even if you are retrieving category ACTUAL, you want the suppression to be based on what exists in category BUDGET.
- You can specify multiple members of the same dimension or different dimensions in the overriding expression. For example, in the *Suppress* field, you can enter: `[actual,budget],2008.total`.
- An alternative suppression method is the block suppression. This feature allows you to activate the suppression but also retain the entire set of members of the innermost expansion, even if only one row (or column) has values.

You can activate block suppression while defining an alternative region to drive the suppression

- You can enter the value in any of the expansions defined for the desired axis. The system does not suppress rows or columns returning a zero (where a zero amount is stored in the database). By default, the suppression is driven by the values returned in the data range of the EvDRE function.

Activities

To activate the suppression, enter *Y* in the *Suppress* field of an expansion.

To base the suppression on a different region of data, enter the ID of the overriding dimension members in the *Suppress* field.

To activate the block suppression, enter the keyword *B* in the *Suppress* field. This keyword works only in combination with a formatted range of members assigned to the innermost expansion. For example, you can enter

```
SUPPRESS=B:[actual,budget],2008.total.
```

Retain Members in Suppressions

EvDRE allows you to retain a member in a suppressed dimension. When you select multiple dimensions in the row/column keys, you can display at least one row/column for each member of the outer dimensions, but only the members with values for the inner dimension.

You can use the *RETAIN* keyword in the *SUPPRESS* field to retain a member in a suppressed dimension.

You can also use the *RETAIN* keyword without a parameter. The system takes the member to retain in the suppressed dimension from the current view, as set in the *PageKey range*.



Insert Members



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You use this feature to insert an explicit set of members before the current row or column of an EvDRE report or input schedule.

Features

You can use the following features:

- You can insert an explicit set of members that are valid for insertion. You can define the set by using the same syntax available in the *MemberSet* fields (comma-delimited list; for example, *BAS, DEP*). See [MemberSet Parameter](#).



Note

Keep the *MemberSet* in sync with the list of insertable members.

Do not define a suppressed expansion on one set of members (like Cash, AccRec, or Inventory) but also allow for the insertion of a different set of members (like Banks, AccPay, or OtherLiabs). This may send values to cells that do not appear on the screen, when other values exist in the database for these cells.

End of the note.

- You can use the Insert option in COLUMN keys, enabling you to insert a new column on the fly into the sheet.
- You can also activate the insert mechanism on the *Column* keys, enabling you to insert new columns into the sheet on the fly.
- Do not insert members in rows (or columns) containing *EV_BEFORE* or *EV_AFTER* placeholders.



Note

The *Insert* operation is not allowed on rows (or columns) containing *EV_BEFORE* or *EV_AFTER* placeholders.

End of the note.

Activities

Replace the Insert parameter *Y* with an explicit set of members that are valid for insertion.

Example

Expansion 3

Row

BAS (TOTALCURRENTASSETS)

Y

BAS (TOTALCURRENTASSETS)

The system inserts the FormattedRange into the report design. When a formatted member set range has been defined, the insert action automatically triggers the insertion of the entire set.



Note

You can disable this automatic insertion by using the Insert option in the dimension using a formatted range.

The system does not activate the automatic insertion of the entire set if the member set is not formatted; that is, if the set is defined with a one-column range (or directly defined in the MemberSet field).

End of the note.

The system does not automatically insert the entire set if the member set is not formatted (if the set is defined with a one-column range or directly defined in the MemberSet field).



Repeated Expansions



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You can repeat the same expansion on multiple row and column key ranges.



Note

Multiple expansions - A more generic case of “repeated expansions” is when the MemberSet changes for each one of the ranges defined in the corresponding row (or column) key range. To assign a different member set to each expansion, the user can specify multiple member sets in the MemberSet field, delimiting them with a pipe character (“|”).

End of the note.

Features

You can perform multiple expansions in which the MemberSet changes for each of the ranges defined in the corresponding row (or column) key range.

Activities

To assign a different member set to each expansion, you can specify multiple member sets in the MemberSet field, delimiting them with a pipe character (|).

Example

In the following example, the same row expansion has been performed in two sets of rows, each one with its own column keys:

RANGE	VALUE
PageKeyRange	Sheet1!\$F\$2:\$F\$9
ColKeyRange	Sheet1!\$G\$13:\$I\$13,Sheet1!\$G\$20:\$I\$20
RowKeyRange	Sheet1!\$E\$15:\$E\$17,Sheet1!\$E\$22:\$E\$24
CellKeyRange	
GetOnlyRange	Sheet1!\$G\$15:\$I\$17,Sheet1!\$G\$22:\$I\$24
FormatRange	Sheet1!\$E\$13

PARAMETER	EXPANSION 1		
ExpandIn	ROW		
Dimension	ACCOUNT		
MemberSet	cash, accrec, inventory		
	G	H	I
	2008.JAN	2008.FEB	2008.MAR
15 Cash	412,297,236.68	418,481,695.23	460,329,864.75
16 Accrec	41,229,723.67	41,848,169.52	46,032,986.48
17 Inventory			
	2008.APR	2008.MAY	2008.JUN
22 Cash in Bank	448,821,618.13	455,533,942.41	462,387,251.54
23 Accounts Receivable	112,205,404.53	113,888,485.60	115,596,812.89
24 Inventory	44,882,161.81	45,555,394.24	46,238,725.15

More Information

[ColKey Range](#)

[RowKey Range](#)



Sequential Expansions



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

You perform multiple expansions in a sequence on the same rows or columns by defining a *RowKeyRange* or *ColKeyRange* that is partly static, and partly dynamic.



Example

The following example shows that the *RowKeyRange* includes two columns: one for the Account and one for the *RptCurrency* dimension. The system suppresses the expansion for Account dimension, since the *MemberSet* value is set to *NoExpand*. The Account is hard-coded in the *RowKeyRange*.

End of the example.

PARAMETER	EXPANSION 1	EXPANSION 2
ExpandIn	ROW	ROW
Dimension	ACCOUNT	RPTCURRENCY
MemberSet	NOEXPAND	MEMBERS
Cash		
Cash	USD	
Cash	EUR	
Cash	LC	
Cash		UDS
Cash		EUR

Cash	LC
Accrec	USD
Accrec	EUR
Accrec	LC
Accpay	USD
Accpay	EUR
Accpay	LC

More Information

[ColKey Range](#)

[RowKey Range](#)



Expansion Across Sheets



Note

This topic contains information about using EvDRE reports and input schedules that were created in release 7.5. For information on creating new reports and input schedules, see the online help for EPM add-in for Microsoft Office and the add-in's documentation on SAP Service Marketplace.

End of the note.

In an EvDRE report, you can choose to expand a member set across sheets.

Features

- The expansion replicates the sheet defining the expansion in several sheets (one sheet per expanded member), generating a book of reports for the desired set of members.

The generated sheets are named after the member being expanded in the sheet.

- The page key defining the page member of the sheet dimension also contains the hard coded ID of the current member.
- Each of the resulting tabs contains a replica of the starting EVDRE function, where the chosen dimension's member specified in the *PAGEKEY* is the (hard-coded) member ID associated with the current sheet.

- The starting sheet defining the expansion is the first sheet of the expanded set. The starting sheet also has the chosen dimension's ID hard-coded in the page key, even if it initially contained a reference to the current view (by the use of EvCVW, for example).
- The member set defining the sheet expansion cannot be specified as relative to the content of the page key (because it becomes hard-coded).

Otherwise, the workbook is not reusable for further expansions on different current views (of the dimension expanded in the sheets).

- The member set of the sheet expansion can be either self-defined or you can relate it to what is defined in the current view bar by pointing to another cell in the sheet.
- When you perform an expansion across sheets, the following restrictions apply:
 - There must be only one EvDRE function in the sheet defining the expansion
 - You can expand only one dimension across sheets (no nested sheet expansions)
 - The *BeforeRange* and the *AfterRange* parameters for the sheet expansion are ignored
 - The system ignores the *Insert* parameter for the sheet expansion.

Activities

To expand a memberset across sheets, from the *Spread across worksheets* field, select the desired dimension.

Example

The following is the result of a 3D expansion performed on Entity *SalesEurope*:

App: FINANCE

ACCOUNT	NetIncome	Net Income
CATEGORY	ACTUAL	Actual from GL
DATASRC	Input	Input
ENTITY	SALESEUROPE	Sales Europe
INTCO	Non_InterCo	Non-Inter-company

App: FINANCE

MEASURES	PERIODIC	Periodic			
RPTCURRENCY	EUR	EURO			
TIME	2008.Q1	2008.Q1			
		2008.Q1	2008.JAN	2008.FEB	2008.MAR
		2008.Q1	2008.JAN	2008.FEB	2008.MAR
NETINCOME	Net income	743,805,521.18	249,706,192.55	257,354,085.87	236,745,242.75
PRETAXINCOME	Pretax Income	831,842,995.34	277,819,708.17	285,889,304.22	268,133,982.95
TAXES	Taxes	88,037,474.18	28,113,515.63	28,535,218.36	31,388,740.20