

How-To Guide

CUSTOMER

SAP Advanced Planning and Optimization, demand planning
add-in for Microsoft Excel

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How-To Guide for SAP Advanced Planning and Optimization, Demand Planning Add-In for Microsoft Excel



Typographic Conventions

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

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1 Prerequisites

Technical requirements

If you want to run the SAP APO demand planning add-in for Microsoft Excel, you must ensure that the following prerequisites are installed:

- Microsoft .NET framework 4.0 (for Microsoft Office 32 and 64-bit versions)
- Microsoft Visual C++ 2010 Redistributable Package (x86) for Microsoft Office 32-bit version), or
- Microsoft Visual C++ 2010 Redistributable Package (x64) for Microsoft Office 64-bit version)
- Microsoft Office 2010
- One of the following releases of SAP SCM:
 - SAP enhancement package 3 for SAP Supply Chain Management (SAP SCM) 7.0 SP04, or higher
 - SAP enhancement package 2 for SAP Supply Chain Management (SAP SCM) 7.0 SP11, or higher
 - SAP enhancement package 1 for SAP Supply Chain Management (SAP SCM) 7.0 SP12, or higher
 - SAP Supply Chain Management (SAP SCM) 7.0 SP15, or higher

If this release of SAP SCM is installed, SAP Kernel 720_REL must be installed as well.

Furthermore, the following must apply:

- SAP Sales & Operations Planning Add-In for Microsoft Excel is not installed on the users' computers.
- The EPM ribbon is not visible in Microsoft Excel on the users' computers.
 - If the EPM ribbon is visible, choose the Switch to Demand Planning command on the ribbon and restart Microsoft Excel.
- The end users have access to SAP APO and are authorized to use Demand Planning.

Prerequisites for the Procedures Described in this Document

- Fulfilled technical requirements (see above)
- Basic template administrator knowledge
- An active connection to a SAP APO system
- An existing report in the SAP APO demand planning add-in for Microsoft Excel

2 How to set up conditional formatting for a key figure based on other key figures

Business Scenario

Conditional formatting can be used for highlighting erroneous manual entries in an editable key figure, or for highlighting extreme values or outliers in a time series.

In this example, the cells of the Manual Correction key figure will be filled with a specific color if its absolute value is bigger than twice the sum of the History and Forecast key figures for that Characteristic Value Combination and Time Bucket.

Step-by-Step Procedure

1. Choose *View Formatting* in the *Report Editing* ribbon group. The Formatting Sheet opens.
2. Go to *Hierarchy Level Formatting*.
3. Select the *Priority to Row Format* checkbox.
4. In the *Row* section, fill the *Default Formatting* data cell with gray and select the *Apply* checkbox on the left side.

		Data	Use	Header	Use	
Column	<input type="checkbox"/> Apply	10000	All	Label	All	
	<input type="checkbox"/> Apply	10000	All	Label	All	
	<input type="checkbox"/> Apply		Formatting on Specific Level:			
		Level 1	10000	All	Label	All
		Level 2	10000	All	Label	All
	Level 3	10000	All	Label	All	
		Add Level		Remove Last Level		
Row	<input checked="" type="checkbox"/> Apply	10000	All	Label	All	
	<input type="checkbox"/> Apply	10000	All	Label	All	
	<input type="checkbox"/> Apply		Formatting on Specific Level:			
		Level 1	10000	All	Label	All
		Level 2	10000	All	Label	All
	Level 3	10000	All	Label	All	
		Add Level		Remove Last Level		

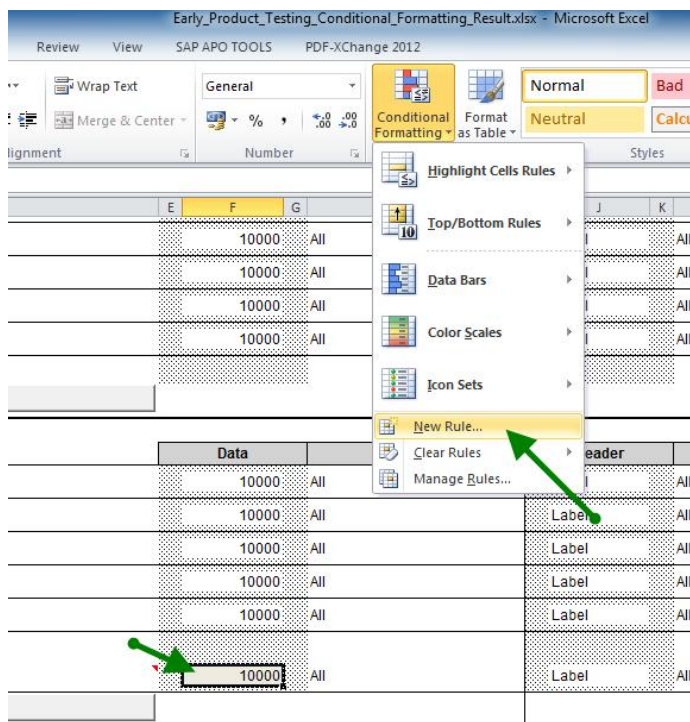
- Select the checkboxes for *Dimension Member/Property Formatting* and *Priority to Row Format*.

Dimension Member/Property Formatting						
Priority to Column Format		Priority to Row Format				
Column		Data	Use	Header	Use	
<input type="checkbox"/>	Apply	Custom Member Default Format	10000	All	Label	All
<input type="checkbox"/>	Apply	Calculated Member Default Format	10000	All	Label	All
<input type="checkbox"/>	Apply	Inputable Member Default Format	10000	All	Label	All

- Add the Manual Correction key figure to the *Row* section.
- Use *Format Painter* to copy the default formatting to this cell.
- Select the *Apply* checkbox on the left side.

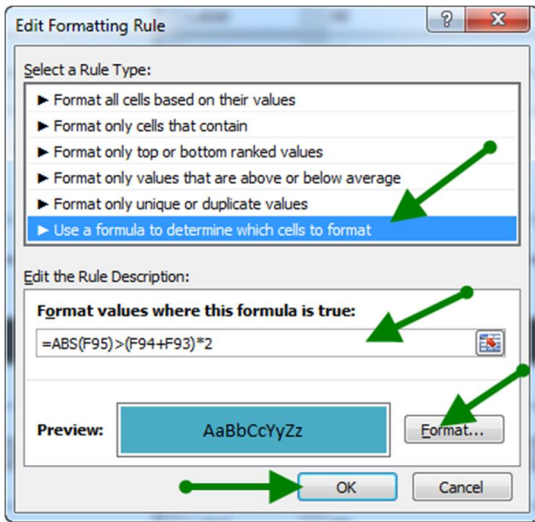
Row			Data	Use	Header	Use
<input type="checkbox"/>	Apply	Inputable Member Default Format	10000	All		
<input type="checkbox"/>	Apply	Local Member Default Format	10000	All		
<input type="checkbox"/>	Apply	Changed Member Default Format	10000	All		
<input checked="" type="checkbox"/>	Apply	Formatting on Specific Member/Property:				
		Manual Correction	10000	All		
		Add Member/Property				

- Select the data cell for Manual Correction and choose the *Home -> Conditional Formatting-> New Rule* menu item.



- Choose *Use a formula to determine which cells to format* option.
- Set the following formula: $=ABS(F95) > (F94+F93) * 2$.

12. Choose blue fill as a format.



F95 refers to the position of the data cell of the Manual Correction key figure in the Formatting Sheet.

F94 and F93 are used because the Forecast and History key figures are one and two rows above the Manual Correction key figure in the report.

13. Choose *Edit Report* in the *Report Editing* button group. The Report Editor opens.
14. Go to the *Options* tab page.
15. Deselect the *Inherit Sheet Options* checkbox. The *Report Formats* section becomes editable.
16. In the *Report Formats* section, select *Apply Dynamic Formatting*, choose *EPMFormattingSheet* as the default formatting sheet, and select *Clear report format before applying Dynamic Formatting*. Click *OK*.
17. Refresh the report. The result should be the following:

		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013	M 06.2013	M 07.2013	M 08.2013	M 09.2013	M 10.2013	M 11.2013	M 12.2013
S100 E-READER	History	560	3434	262	305	239	252	339	339	339	24	25	26
	Forecast									384	454	418	399
	Manual Correction										-1840	1940	
S100 MEDIA PLAYER	History	701	432	277	437	339	426	425	436	456	24	25	26
	Forecast									606	616	512,667	569,667
	Manual Correction										0	-1	1
S100 PHONE	History	758	754	616	836	625	786	721	717	0	11	11	1
	Forecast									747	765	701,333	621,333
	Manual Correction										0	0	
S100 SMARTPHONE	History	414	556	393	398	542	584	483	469	451	24	26	23
	Forecast									463	485	426,333	449,667
	Manual Correction										0	0	
S100 TABLET	History	481	226	224	195	240	293	281	285	284	25	25	23
	Forecast									304	337	300,667	349
	Manual Correction										0	0	

3 How to set up input validation based on other key figures

Business Scenario

Input validation can be used to prevent erroneous entries by checking the values against certain ranges, reference key figures or simply just checking the sign of a value that was entered.

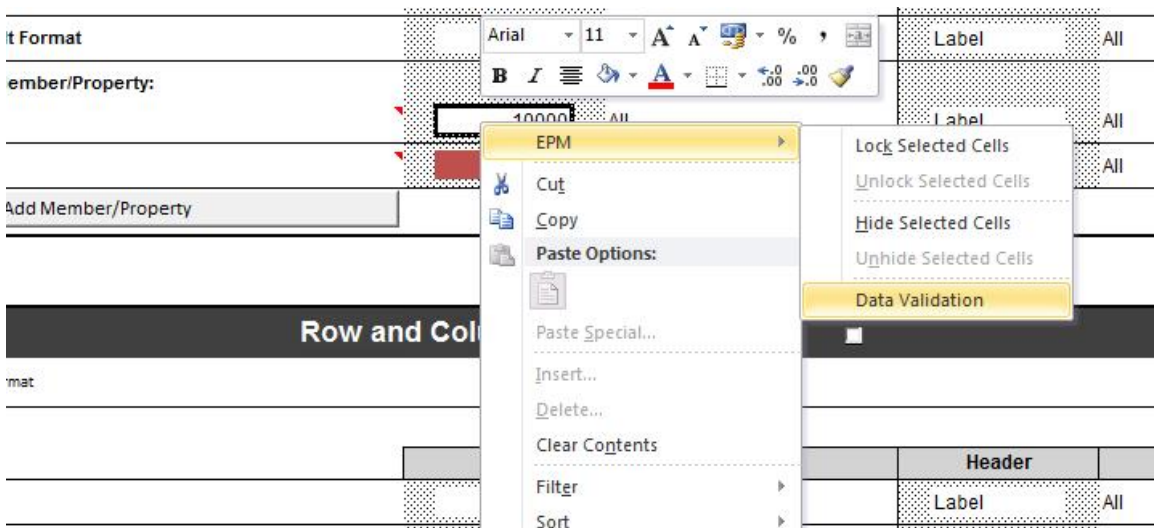
In this example, a validation will be added to the Manual Correction key figure.

Step-by-Step Procedure

1. Choose *View Formatting* in the *Report Editing* ribbon group. The Formatting Sheet opens.
2. In the Formatting Sheet, clear the conditional formatting defined for the Manual Correction key figure.
3. Fill the cell with white background.

Row	<input type="checkbox"/> Apply	Inputable Member Default Format	10000	All	Label
	<input type="checkbox"/> Apply	Local Member Default Format	10000	All	Label
	<input type="checkbox"/> Apply	Changed Member Default Format	10000	All	Label
	<input checked="" type="checkbox"/> Apply	Formatting on Specific Member/Property:			
		Manual Correction	10000	All	Label
		History	10000	All	Label
		Add Member/Property			

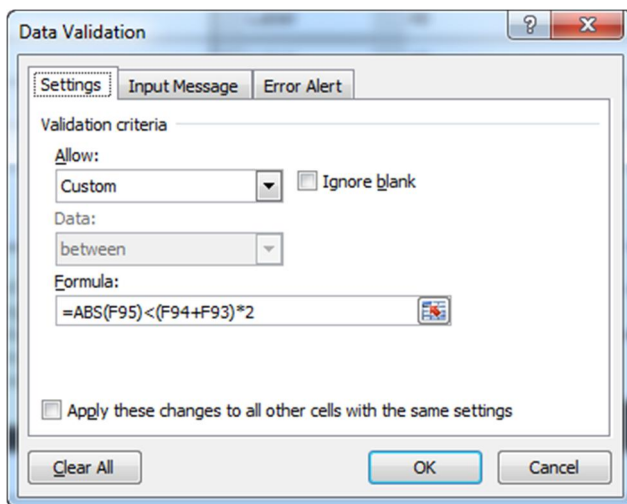
4. Right-click on the cell and choose *EPM -> Data Validation* from the context menu.



5. Define the following validation criteria:

- Allow: *Custom*
- Ignore Blank: <Unchecked>
- Formula: **`=ABS (F95) < (F94+F93) *2`**

In the formula, F95 refers to position of the data cell of the Manual Correction key figure in the Formatting Sheet. F94 and F93 are used because the Forecast and History key figures are one and two rows above the Manual Correction key figure in the report.

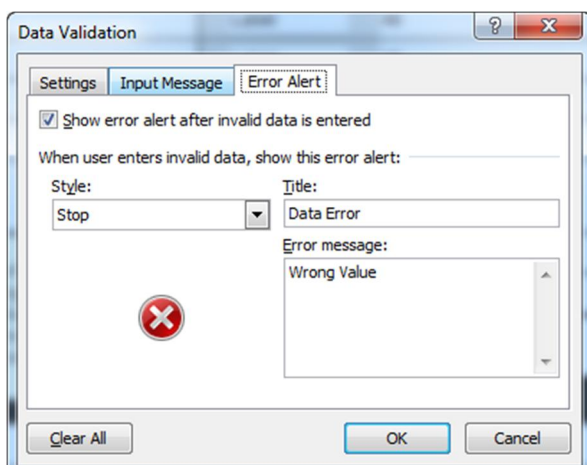


6. Define an input message, for example:

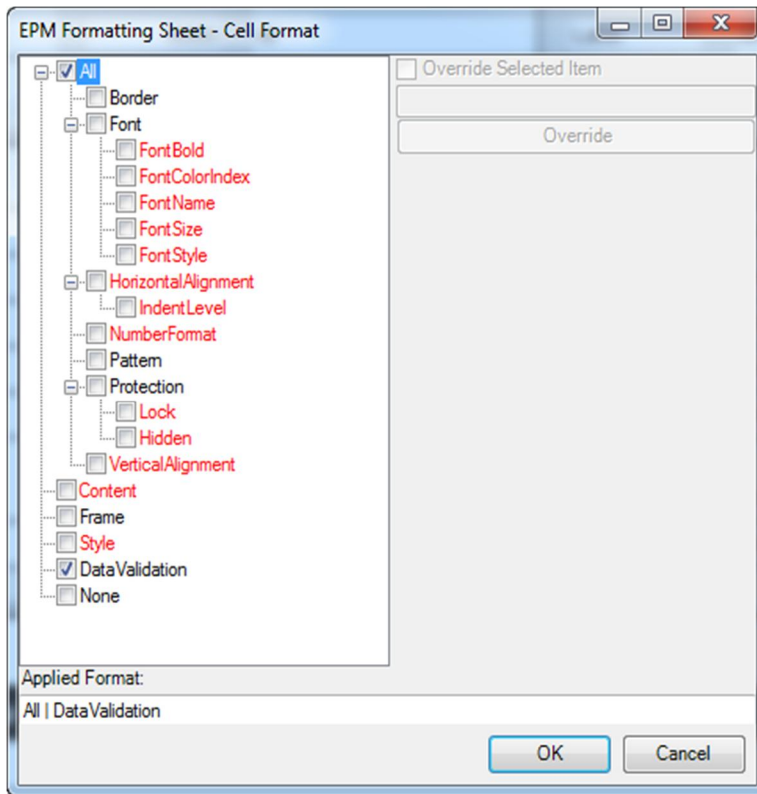
- Title: **Manual Correction**
- Input Message: **The absolute value of this should not be bigger than twice of the value of the sum of the History key figure and Forecast key figure.**

7. Define the following error alert:

- Title: **Data Error**
- Error Message: **Wrong Value**



8. Double-click the *Use* cell next to the Manual Correction data cell and choose the *DataValidation* option.



After you refresh the report, the instruction text is displayed whenever you select the Manual Correction cell.

		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013	M 06.2013	M 07.2013	M
S100 E-READER	History	560	3434	262	305	239	252	339	
	Forecast								
	Manual Correction	-900							
S100 MEDIA PLAYER	History	701			437	339	426	425	
	Forecast								
	Manual Correction								
S100 PHONE	History	758			836	625	786	721	
	Forecast								
	Manual Correction								
S100 SMARTPHONE	History	414	556	393	398	542	584	483	
	Forecast								
	Manual Correction								
S100 TABLET	History	481	226	224	195	240	293	281	
	Forecast								
	Manual Correction								



In case you enter a wrong value, the error message appears.

M 01/2019	M 02/2019	M 03/2019	M 04/2019	M 05/2019	M 06/2019	M 07/2019	M 08/2019	M 09/2019
560	3434	262	305	239	252	339	339	
-900	-11111							
701			437	339	426	425	436	
758			836	625	796	721	717	
414	556					483	469	
481	226					281	285	

Manual Correction
The absolute value of this should not be bigger than twice of the value of the sum of the key figures.

Data Error
Wrong Value
Retry Cancel Help

4 How to make the past or future read-only for a key figure

Business Scenario

In the Demand Planning transaction of SAP APO, values for the Forecast key figure are usually defined as read-only for time periods set in the past. It is also typical that values for the History key figure are defined as read-only for time periods set in the future. Microsoft Excel cannot impose these limitations by itself. Instead, the administrator must define the read-only rules during the report creation. If the rules are set properly, users can avoid receiving error messages from SAP APO when trying to upload data that they were not supposed to edit.

Step-by-Step Procedure

1. To define the Today Bucket, add the following formula to a cell outside of the report data area:

`= "M " & MONTH (TODAY ()) & " . " & YEAR (TODAY ())`

The screenshot shows an Excel spreadsheet with the following data:

		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013
S100 E-READER	History	560	3434	262	305	
	Forecast					
	Manual Correction	-900				
S100 MEDIA PLAYER	History	701	432	277	437	
	Forecast					
	Manual Correction					

2. Define the following formula above the first time bucket (for example, in cell F3): `=TRIM(F1)>TRIM(F$5)`
 F1 refers to the cell of the Today bucket, while F5 refers to the cell of the first time bucket header (M 01. 2013). The helper cell in row 3 shows `TRUE` for column F as the time bucket in its header is smaller than the Today bucket.

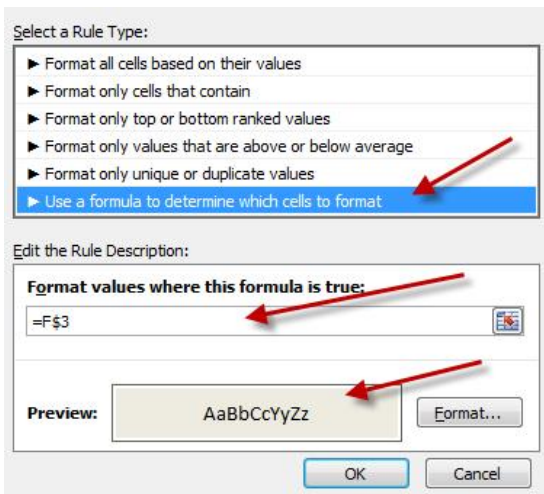
The screenshot shows an Excel spreadsheet with the following data:

		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013
	History	560	3434	262	305	
	Forecast					
	Manual Correction					
	History	701	432	277	437	
	Forecast					
	Manual Correction					

- Hide the two helper rows (row 1 and 3).

Manipulation		Selections		Formatting Rules		Template Editing		Tools		Add-In				
fx		=TRIM(\$F\$1)>TRIM(\$F\$5)												
C	D	F	G	H	I	J	K	L	M	N	O	P	Q	S
		M 11.2013												
		TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	
		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013	M 06.2013	M 07.2013	M 08.2013	M 09.2013	M 10.2013	M 11.2013	M 12.2013	
100 E-READER	History	560	3434	262	305	239	252	339	339	339	24	25	26	
	Forecast									384	454	418	399	
	Manual Correction										-1840	1940		
100 MEDIA PLAYER	History	701	432	277	437	339	426	425	436	456	24	25	26	

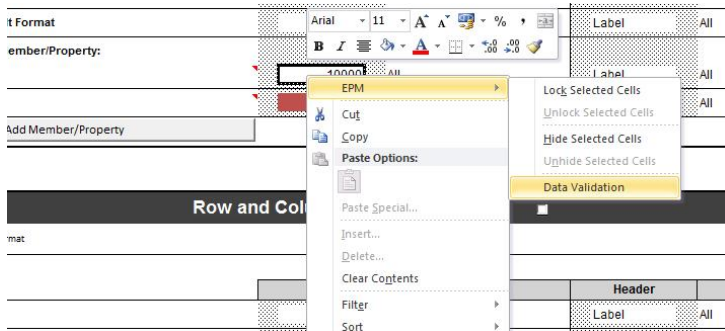
- Go to the Formatting Sheet and define conditional formatting for the data cell of the dimension member for which you want to set the formatting rule that cells from the past should be filled with gray. To make this setting, choose *Conditional Formatting -> New Rule...* on the *Home* ribbon, and enter **=F\$3**. This formula will define that the cell must be filled with gray if the hidden helper cell in it column shows TRUE, which means that it is a time bucket from the past.



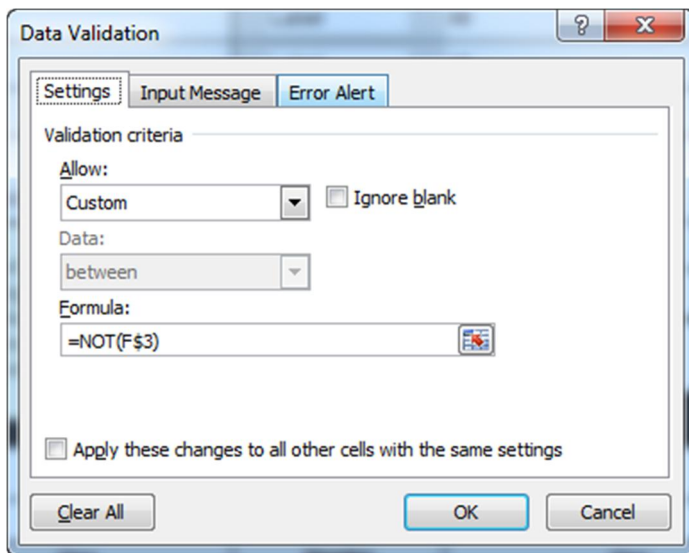
- Refresh data. The cells showing data from the past are now grayed out, but those in the present and future are still white.

		M 01.2013	M 02.2013	M 03.2013	M 04.2013	M 05.2013	M 06.2013	M 07.2013	M 08.2013	M 09.2013	M 10.2013	M 11.2013	M 12.2013
S100 E-READER	History	560	3434	262	305	239	252	339	339	339	24	25	26
	Forecast									384	454	418	399
	Manual Correction										-1840	1940	
S100 MEDIA PLAYER	History	701	432	277	437	339	426	425	436	456	24	25	26
	Forecast									606	616	512,667	569,667
	Manual Correction										0	-1	1
S100 PHONE	History	758	754	616	836	625	786	721	717	0	11	11	1
	Forecast									747	765	701,333	621,333
	Manual Correction										0	0	
S100 SMARTPHONE	History	414	556	393	398	542	584	483	469	451	24	26	23
	Forecast									463	485	426,333	449,667
	Manual Correction										0	0	
S100 TABLET	History	481	226	224	195	240	293	281	285	284	25	25	23
	Forecast									304	337	300,667	349
	Manual Correction										0	0	

- To modify the validation rule of the cell, choose *EPM -> Data Validation*.



- Select *Custom* in the *Allow* field, and enter **=NOT (F\$3)**
Data validation is bound to the helper cell row, but in inversion mode since all cells that are not gray can be modified.



i Note

If you want to make similar settings for the future, proceed in a reversed order; set the white cell of the formatting Sheet to **=F\$3**, and the gray cell to **=NOT (F\$3)**.



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