IBP Excel Add-In

How to Use the Sample VBA Template in Your Planning Area (Note 1790530)

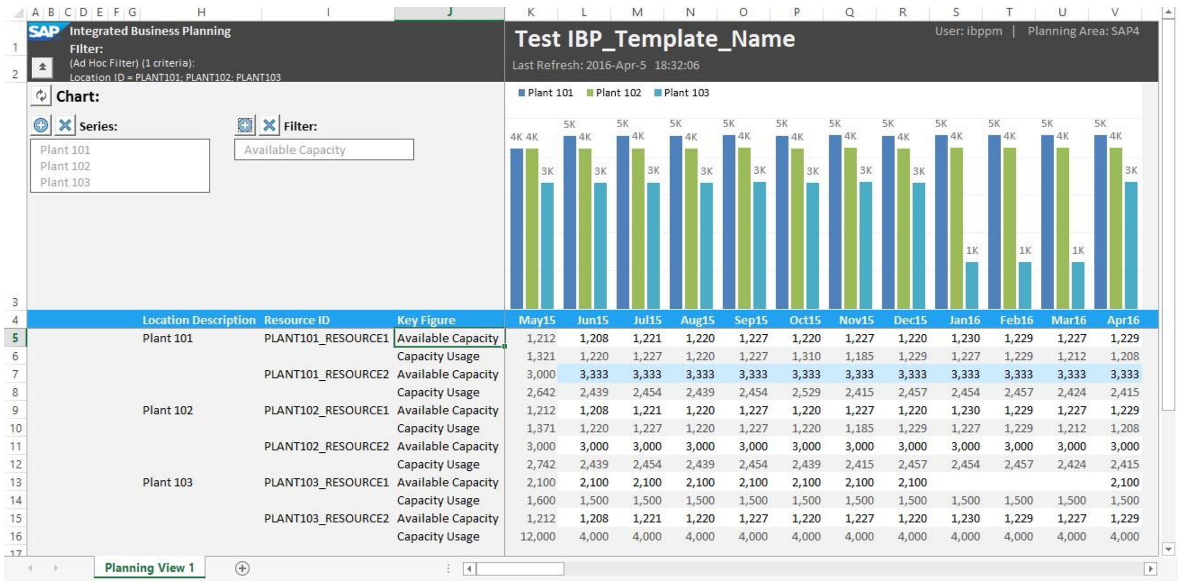
Contents

USER GUIDE

The Advantage of Using VBA Templates

VBA-driven charts are more flexible than our previously published formula-based charts. It can handle non-standard layouts and can plot attributes other than key figures or versions.

Consider this chart, where we compare the total available capacity in three plants:

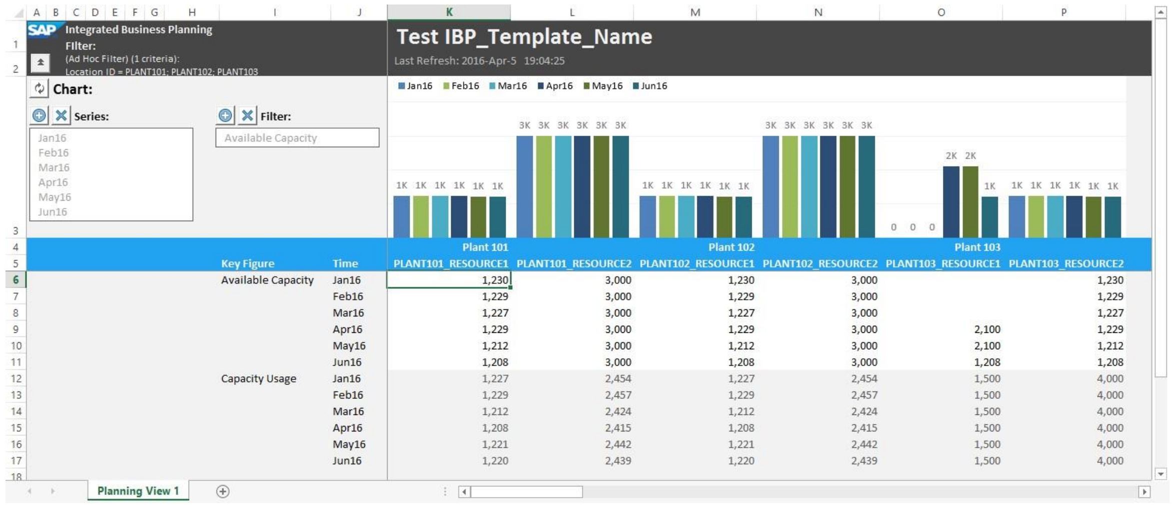


Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

Test IBP_Template_Name
Last Refresh: 2016-Apr-5 18:32:06
User: ibppm | Planning Area: SAP4

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Or this, where we compare the available capacity of six resources over six months:



Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

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Last Refresh: 2016-Apr-5 19:04:25

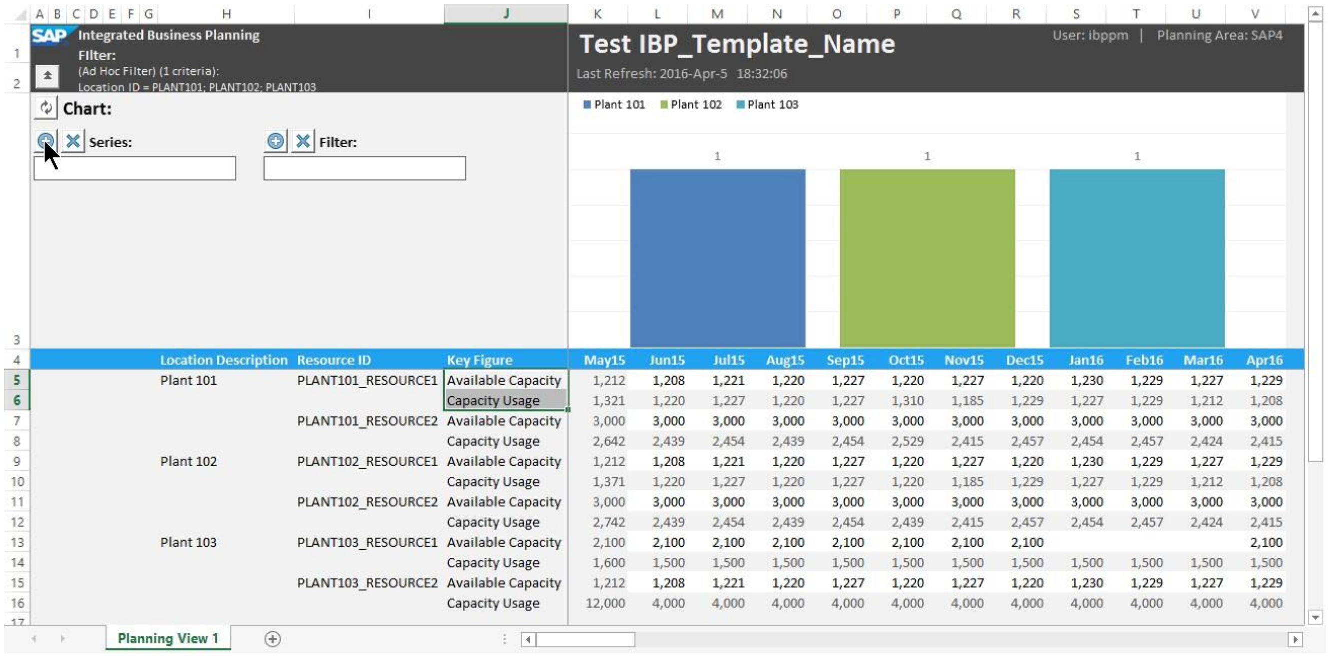
		Plant 101		Plant 102		Plant 103	
Key Figure	Time	PLANT101_RESOURCE1	PLANT101_RESOURCE2	PLANT102_RESOURCE1	PLANT102_RESOURCE2	PLANT103_RESOURCE1	PLANT103_RESOURCE2
Available Capacity	Jan16	1,230	3,000	1,230	3,000		1,230
	Feb16	1,229	3,000	1,229	3,000		1,229
	Mar16	1,227	3,000	1,227	3,000		1,227
	Apr16	1,229	3,000	1,229	3,000	2,100	1,229
	May16	1,212	3,000	1,212	3,000	2,100	1,212
	Jun16	1,208	3,000	1,208	3,000	1,208	1,208
Capacity Usage	Jan16	1,227	2,454	1,227	2,454	1,500	4,000
	Feb16	1,229	2,457	1,229	2,457	1,500	4,000
	Mar16	1,212	2,424	1,212	2,424	1,500	4,000
	Apr16	1,208	2,415	1,208	2,415	1,500	4,000
	May16	1,221	2,442	1,221	2,442	1,500	4,000
	Jun16	1,220	2,439	1,220	2,439	1,500	4,000

Caution

This flexibility makes it easy to add apples to oranges. If, for example, we hadn't filtered by Available Capacity in above chart, the chart would have summed up capacity and usage.

Working with a Template

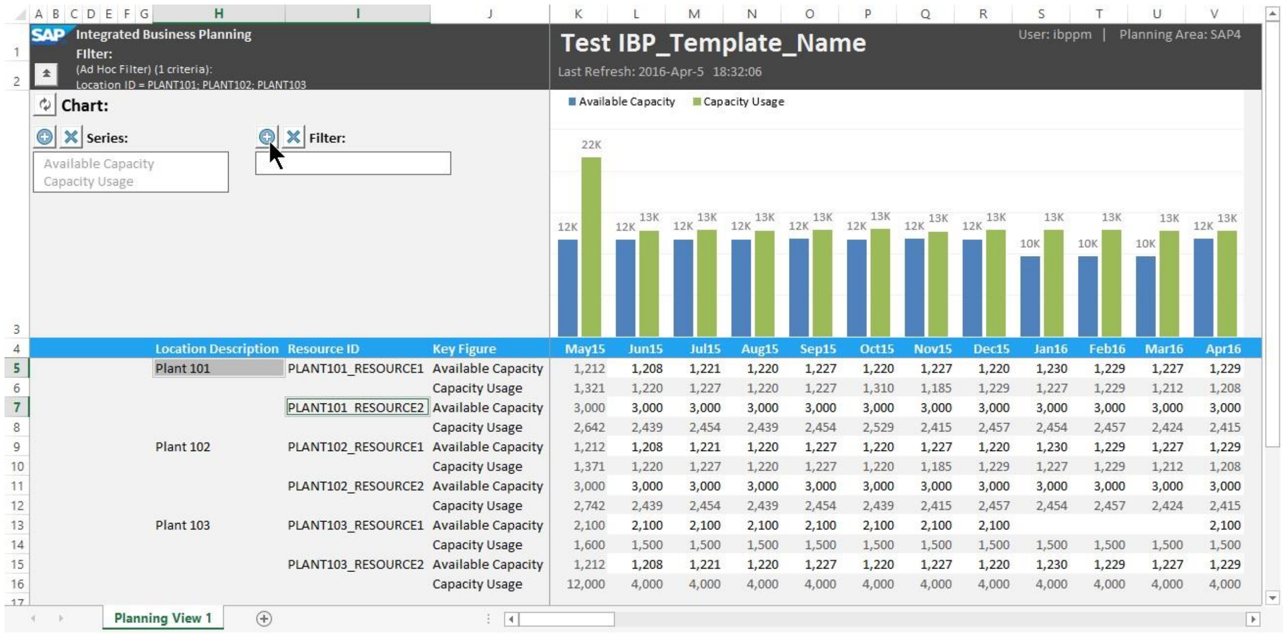
To define your chart's content, select the key figures you want to plot in your row axis and press the ⊕ button next to *Series*:



SAP Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103
Chart:
Series:
Filter:
Test IBP_Template_Name
Last Refresh: 2016-Apr-5 18:32:06
User: ibppm | Planning Area: SAP4
Plant 101
Plant 102
Plant 103
1
1
1
Planning View 1

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

The system will note your selection in the box below and adjust the chart. To restrict the chart to certain attribute values, select those values and press ⊕ next to *Filter*:



Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

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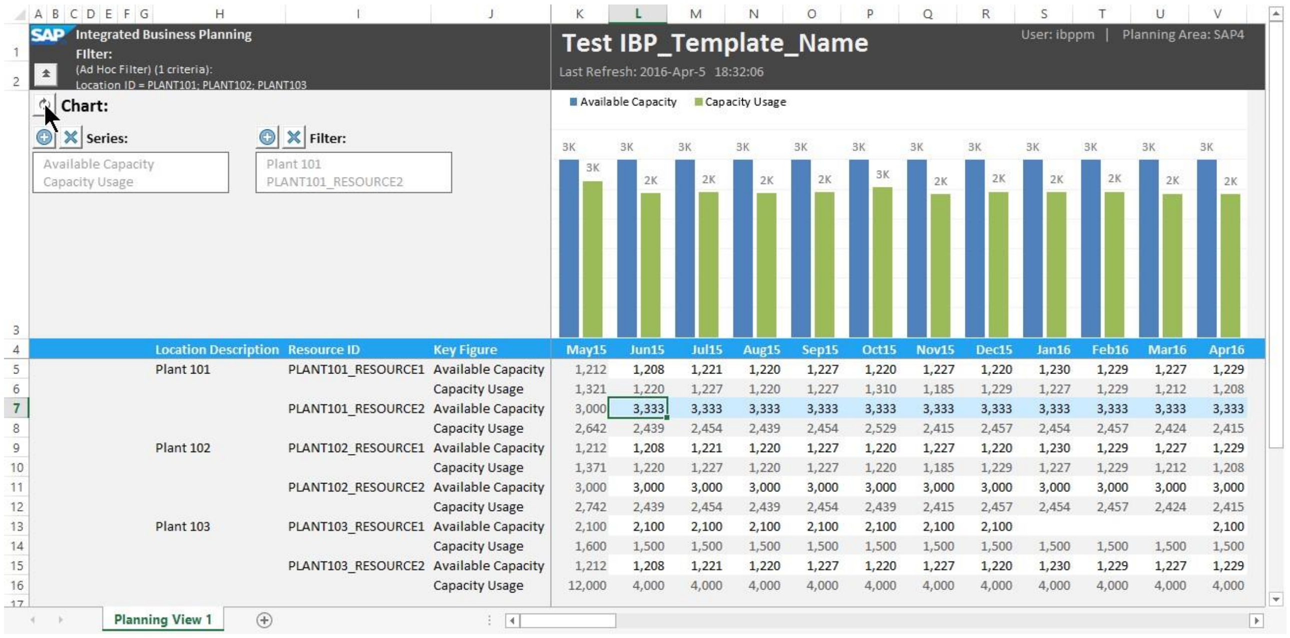
Chart:
Series: Available Capacity, Capacity Usage
Filter:

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Planning View 1

The system will note your selection in the box below and adjust the chart. To refresh the chart after manual edits, press the ↻ button next to *Chart*:



Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

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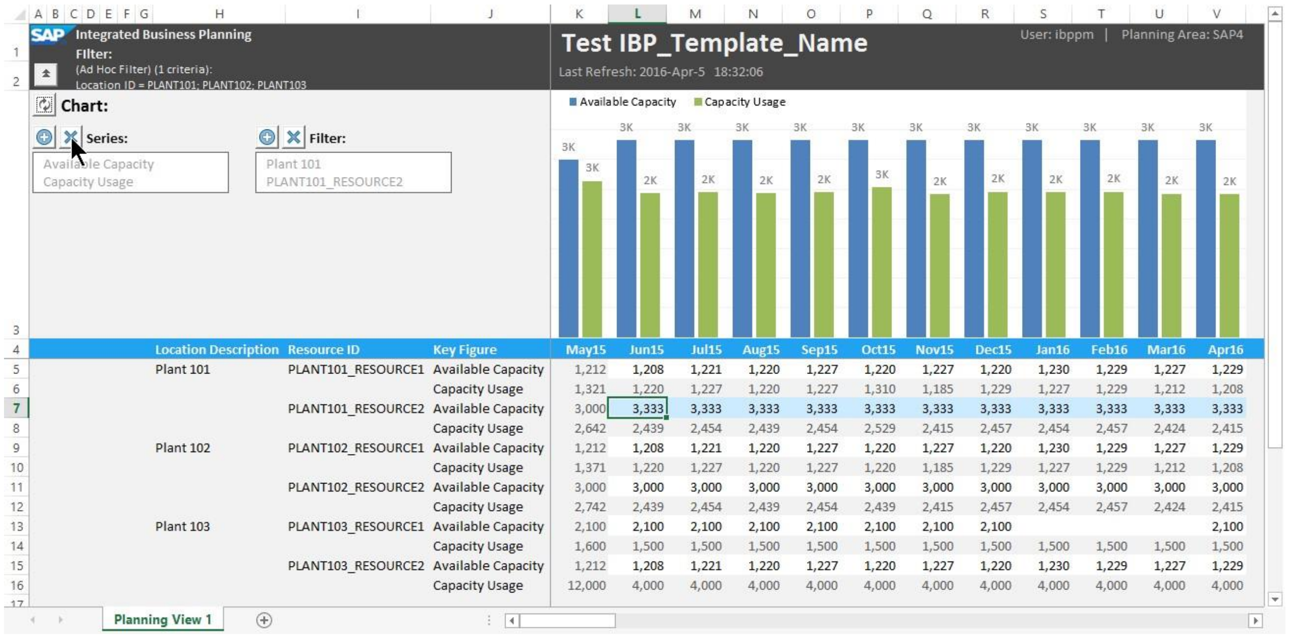
Last Refresh: 2016-Apr-5 18:32:06
User: ibppm | Planning Area: SAP4

Chart:
Series: Available Capacity, Capacity Usage
Filter: Plant 101, PLANT101_RESOURCE2

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Planning View 1

The system will recalculate the chart:



Test IBP_Template_Name

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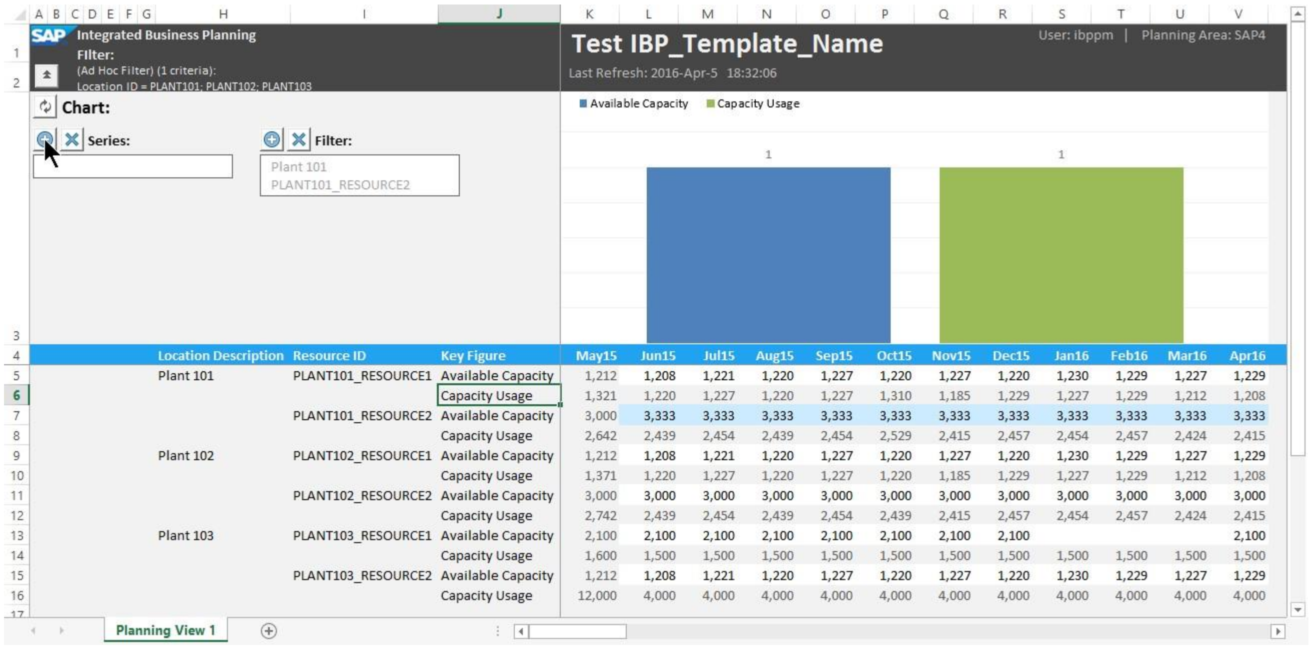
User: ibppm | Planning Area: SAP4

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

It is not necessary to select all values at once. If values aren't next to each other or you prefer a different sequence in your series, you select the values one by one. In our example we start over by clearing the *Series* with ✖. Then we select one key figure and add it with ⊕:



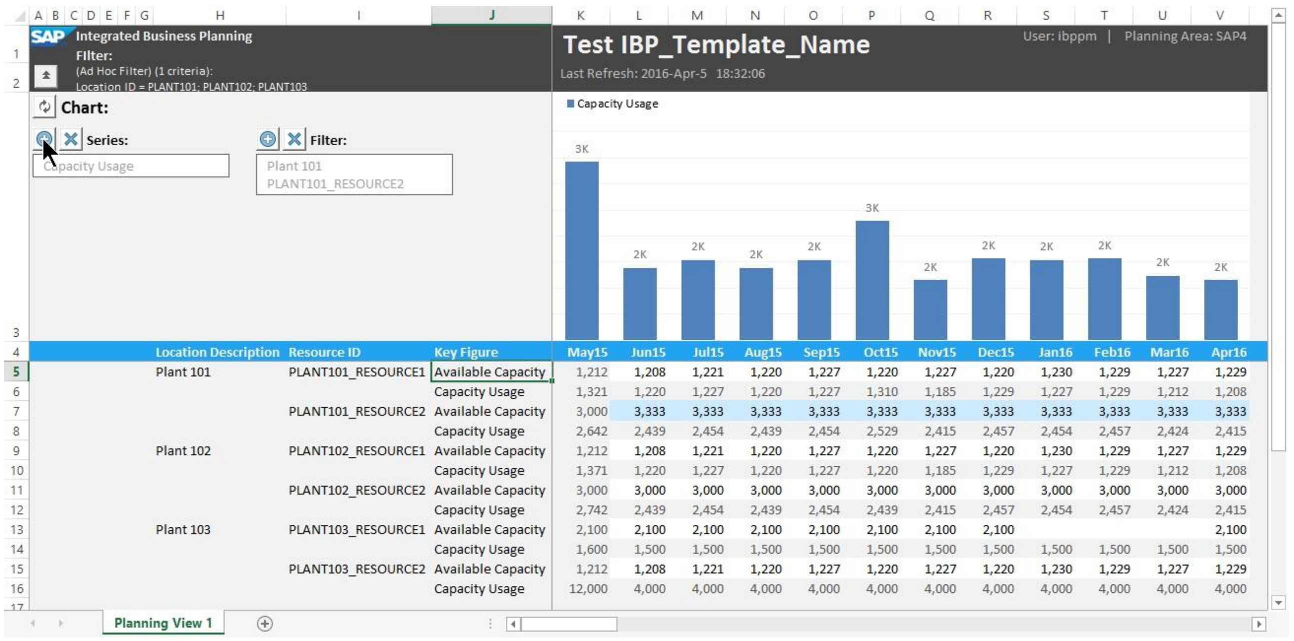
Test IBP_Template_Name

Last Refresh: 2016-Apr-5 18:32:06

User: ibppm | Planning Area: SAP4

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Then you add the second key figure in the same way:



Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

Chart:

Series: Capacity Usage

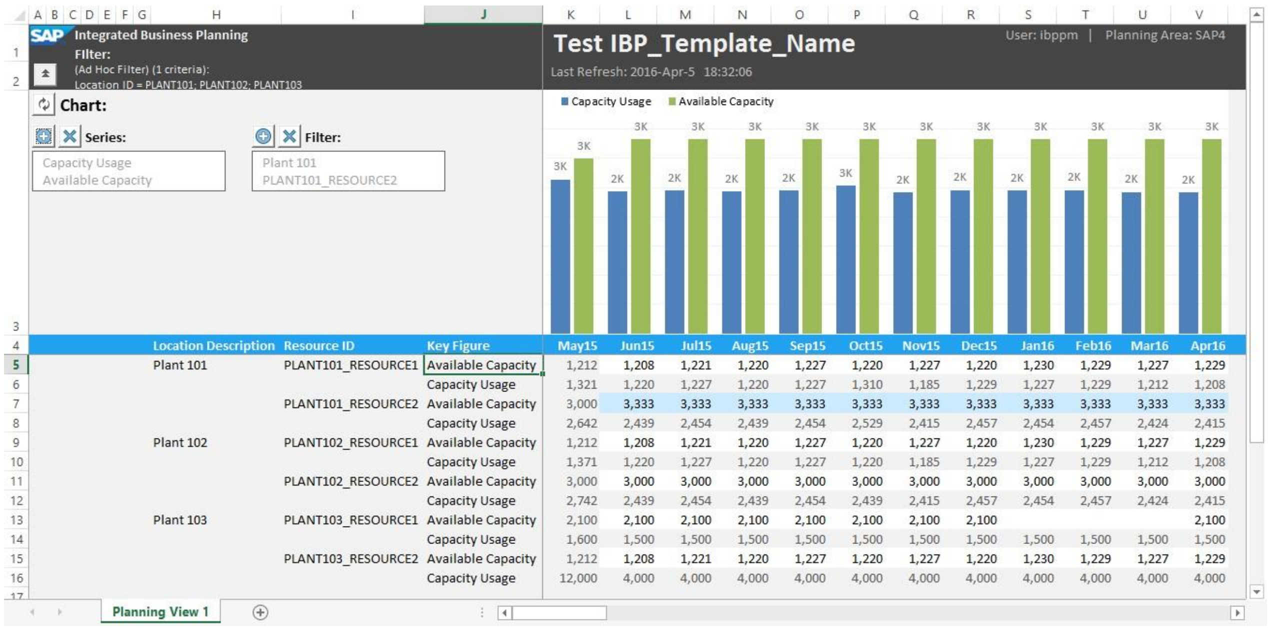
Filter: Plant 101 PLANT101_RESOURCE2

Test IBP_Template_Name
User: ibppm | Planning Area: SAP4
Last Refresh: 2016-Apr-5 18:32:06

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Planning View 1

Now the sequence in the series is reversed compared to the sequence in the axis:



Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Location ID = PLANT101; PLANT102; PLANT103

Chart:

Series: Capacity Usage, Available Capacity

Filter: Plant 101 PLANT101_RESOURCE2

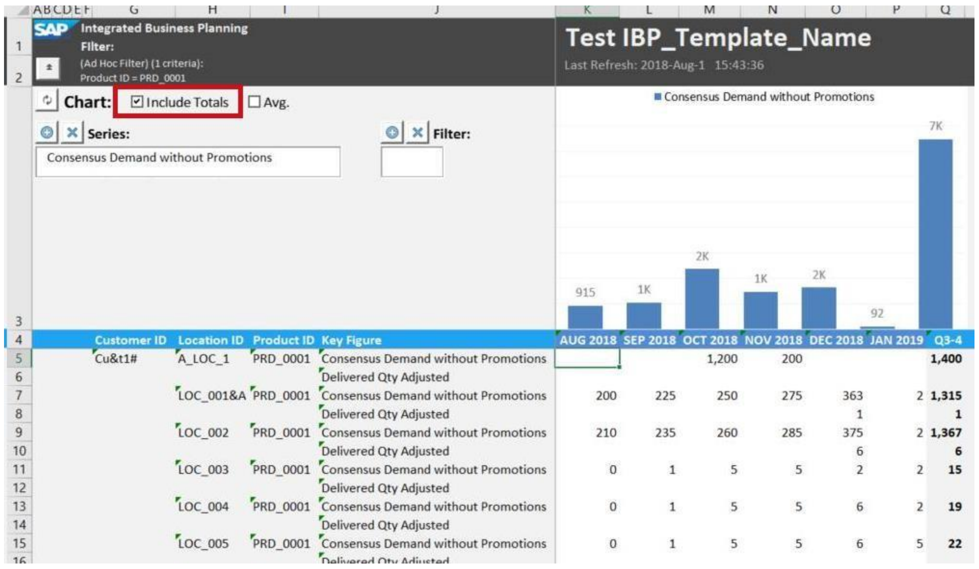
Test IBP_Template_Name
User: ibppm | Planning Area: SAP4
Last Refresh: 2016-Apr-5 18:32:06

Location Description	Resource ID	Key Figure	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Apr16
Plant 101	PLANT101_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,321	1,220	1,227	1,220	1,227	1,310	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT101_RESOURCE2	Available Capacity	3,000	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333
		Capacity Usage	2,642	2,439	2,454	2,439	2,454	2,529	2,415	2,457	2,454	2,457	2,424	2,415
Plant 102	PLANT102_RESOURCE1	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	1,371	1,220	1,227	1,220	1,227	1,220	1,185	1,229	1,227	1,229	1,212	1,208
	PLANT102_RESOURCE2	Available Capacity	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
		Capacity Usage	2,742	2,439	2,454	2,439	2,454	2,439	2,415	2,457	2,454	2,457	2,424	2,415
Plant 103	PLANT103_RESOURCE1	Available Capacity	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100				2,100
		Capacity Usage	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
	PLANT103_RESOURCE2	Available Capacity	1,212	1,208	1,221	1,220	1,227	1,220	1,227	1,220	1,230	1,229	1,227	1,229
		Capacity Usage	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Planning View 1

Notes

- The values you plot by using *Series* must be from the same column in the row axis.
  If you add a value to either box that conflicts with previous content, the new value will overwrite the existing value or values.
- When local members are added to series, filters will not work.
- The sequence in *Filter* is irrelevant.
- By default, the chart plots the sum of values that fit to the selection criteria.
- If you select the *Include Totals* checkbox, your chart will plot time-based totals as well as the other selected values. Attribute-based totals will *not* be considered in this case.


SAP Integrated Business Planning
Filter:
(Ad Hoc Filter) (1 criteria):
Product ID = PRD_0001
Chart:
☑ Include Totals
☐ Avg.
Series:
Filter:
Consensus Demand without Promotions
7K
2K
2K
1K
1K
915
92

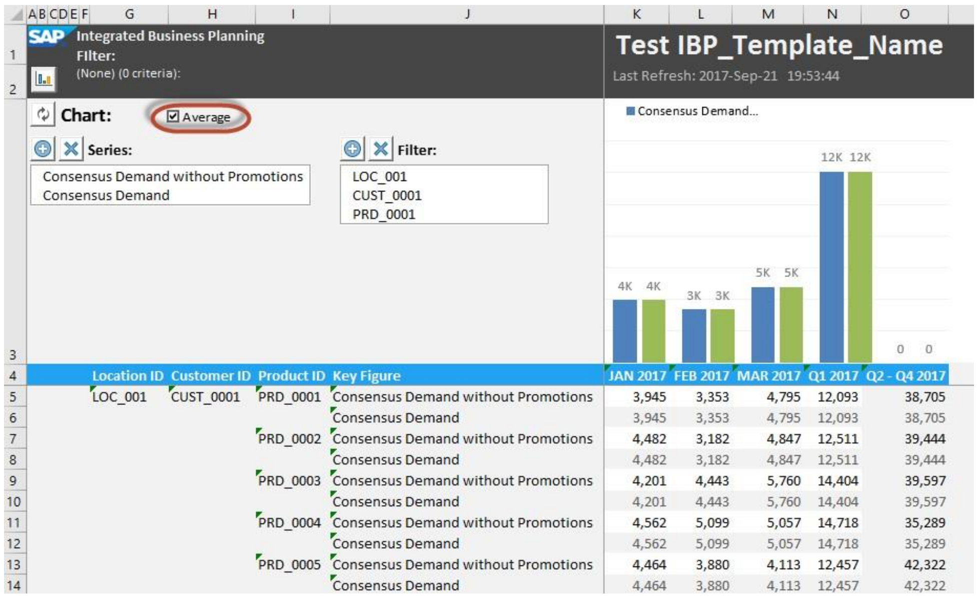
Test IBP_Template_Name

Last Refresh: 2018-Aug-1 15:43:36

Series: Consensus Demand without Promotions

Customer ID	Location ID	Product ID	Key Figure	AUG 2018	SEP 2018	OCT 2018	NOV 2018	DEC 2018	JAN 2019	Q3-4
Cu&t1#	A_LOC_1	PRD_0001	Consensus Demand without Promotions			1,200	200			**1,400**
			Delivered Qty Adjusted							
	LOC_001&A	PRD_0001	Consensus Demand without Promotions	200	225	250	275	363	2	**1,315**
			Delivered Qty Adjusted					1		**1**
	LOC_002	PRD_0001	Consensus Demand without Promotions	210	235	260	285	375	2	**1,367**
			Delivered Qty Adjusted					6		**6**
	LOC_003	PRD_0001	Consensus Demand without Promotions	0	1	5	5	2	2	**15**
			Delivered Qty Adjusted							
	LOC_004	PRD_0001	Consensus Demand without Promotions	0	1	5	5	6	2	**19**
			Delivered Qty Adjusted							
	LOC_005	PRD_0001	Consensus Demand without Promotions	0	1	5	5	6	5	**22**
			Delivered Qty Adjusted							

- if you select the *Average* checkbox, the chart plots the averages of the values that fit to the selection criteria.



Integrated Business Planning
Filter:
(None) (0 criteria):

Test IBP_Template_Name
Last Refresh: 2017-Sep-21 19:53:44

Chart: ☑ Average

Series:
Consensus Demand without Promotions
Consensus Demand

Filter:
LOC_001
CUST_0001
PRD_0001

Location ID	Customer ID	Product ID	Key Figure	JAN 2017	FEB 2017	MAR 2017	Q1 2017	Q2 - Q4 2017
LOC_001	CUST_0001	PRD_0001	Consensus Demand without Promotions	3,945	3,353	4,795	12,093	38,705
			Consensus Demand	3,945	3,353	4,795	12,093	38,705
		PRD_0002	Consensus Demand without Promotions	4,482	3,182	4,847	12,511	39,444
			Consensus Demand	4,482	3,182	4,847	12,511	39,444
		PRD_0003	Consensus Demand without Promotions	4,201	4,443	5,760	14,404	39,597
			Consensus Demand	4,201	4,443	5,760	14,404	39,597
		PRD_0004	Consensus Demand without Promotions	4,562	5,099	5,057	14,718	35,289
			Consensus Demand	4,562	5,099	5,057	14,718	35,289
		PRD_0005	Consensus Demand without Promotions	4,464	3,880	4,113	12,457	42,322
			Consensus Demand	4,464	3,880	4,113	12,457	42,322

- You can remove individual items from *Series* or *Filter* by selecting the items you want to remove before clicking ✖. Selecting none or all items clears the control completely.
- The chart updates automatically after you choose *Save Data*, *Simulate*, *Refresh*, *Edit View*, and other functions that cause the planning view to render. It also updates after changes to *Series* and *Filter* wherever possible. It does not react immediately to manual edits, like a chart based on formulas – you need to refresh it manually.

Formatting a Template

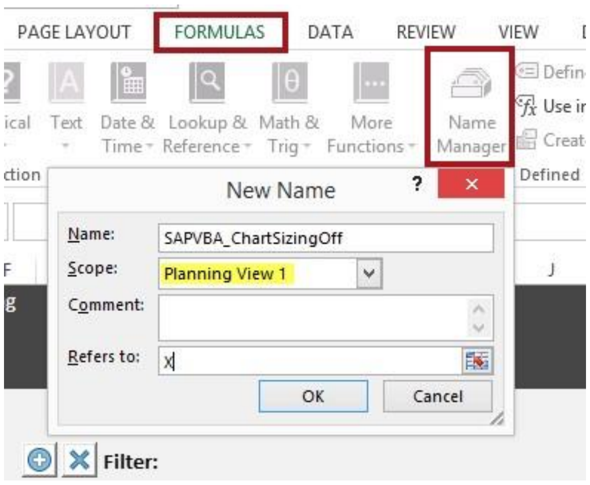
Adjusting the Controls

To render properly the active-x controls, an autofit needs to be done for the columns that show the settings. To also have the possibility to avoid the autofit, the template takes the EPM sheet option “autofit column width” as an indicator. If users do not want the autofit for every column but only for the columns that shows the setting, they can deselect the EPM sheet option, and set the variable *Use EPMAUTOFIT* in the VBA coding of the sheet to false.

If changes made to a planning view result in changes in its size, the chart adapts to the new width in two ways:

- It adjusts the x-axis of the chart automatically to the new number of columns if you edit the view.
- It resizes the width of the chart’s plot area to match the width of the planning view columns after rendering.

  If this feature is not wanted, it can be switched off by creating Excel Name *SAPVBA_ChartSizingOff* as shown in the following screenshot - make sure to set the scope to the worksheet that contains the chart. Entering any value in the *Refers to* field will switch the sizing off.


New Name

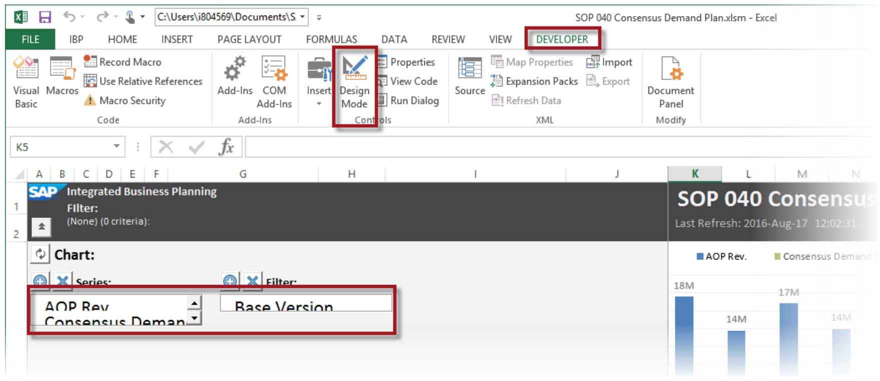
Name: SAPVBA_ChartSizingOff

Scope: Planning View 1

Comment:

Refers to: x

A possible issue with ActiveX controls is that some parts of them are not visible if the same workbook is used with different screen resolutions:



This situation can usually be corrected by toggling the *Design Mode* on and off (the DEVELOPER tab may need to be switched on to access the button).

Hiding the Controls

Finally, button ⏶ / 📊 will collapse / expands row 3 and hides the chart controls – like row grouping would. Please do not use row grouping to hide this row as the controls can lose their anchors due to an Excel bug.

Preventing Automatic Color Changes

If you change the time settings for any planning view, then the color of time header will change for the modified time setting. We kept this behavior because of performance reasons. If you want to change this behavior in your planning view, do the following:

1. Open MS Excel and log in to IBP
2. Open or create the respective template
3. Choose *Edit View* and select *Sheet Options…*
4. Go to the *Performance* group and deselect *Keep Formulas Static that Reference Planning* View *Cells*
5. Click *OK*

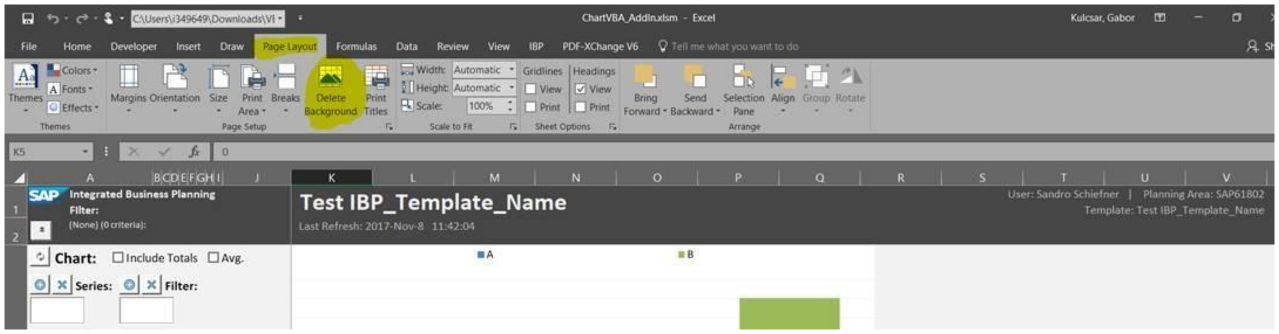
Deselecting this option might affect the performance of your planning view. You can change this setting for every template.

Extending the Header

If more space is needed in the header of the table, an extra row can be inserted there. This action does not cause any issues with the chart.

Changing the Background

If you want a different background for the template, you can first delete the grey background via *Page Layout* → *Delete Background* and then insert a new background.



ADMINISTRATOR’S GUIDE

Installing a Template

The VBA-template comes in two flavors:

- **Embedded**

  With this flavor, all code is in the template.

  The advantage is that the end user does not need to install an additional add-in to run the templates.

  The downside is that the code is replicated in every template and favorite, which makes it impossible to correct a bug in all copies in the code. Therefore, you would have to correct all templates and ask your end-users to recreate their favorites from the corrected templates.

  To use the embedded template, extract ChartVBA_Embedded.xlsm from the archive delivered with note 1790530 and proceed with the next chapter.

- **With VBA add-in**

With this flavor, the central code resides in the VBA add-in, only control events, EPM-events, and control manipulation code are located directly in the template.

The downside is that users must install an additional add-in. The advantage is that replacing the VBA add-in with a newer version will correct any central code issue for all favorites and templates without the need to fix individual workbooks.

To enable the VBA add-in, do the following:

1. Extract *SAP_IBP_Chart.xlam* from the archive delivered with note 1790530 and place it in **%appdata%\Roaming\Microsoft\AddIns**.
2. Open Excel and go to *File* > *Options* > *Add-Ins*. You should see *Sap_Ibp_Chart* under *Inactive Application Add-ins* with type Excel Add-in.
3. Choose *Manage: Excel Add-ins -> Go*
4. Check the checkbox for *Sap_Ibp_Chart* and confirm with *OK.*

Note

Specific Excel versions will not load the Excel Add-in unless it is in a trusted location. Go to *File > Options > Trust Center > Trust Center Settings… > Trusted Locations > Add new location… > Browse* and copy **%appdata%\Microsoft\AddIns** into the path field. Press *OK* until you are done.

Note

Regardless of the flavor you opt for, specific MS Excel versions might not load templates properly unless the file path for the related workbook is added as a Trusted Location. To do so, go to *File > Options > Trust Center > Trust Center Settings… > Trusted Locations > Add new location… > Browse.* Copy **C:\Users\<User Name>\Documents\SAP_IBP** (which is by default file path for IBP workbooks) and paste it into the path field. Press *OK* until you are done.

Do not place the file SAP_IBP_Chart.xlam in the *C:\Users\<User Name>\Documents\SAP_IBP* folder.
If you have administrative rights for your PC, an option is to put the file SAP_IBP_Chart.xlam to the default trusted location for Excel. The path is *C:\Program Files (x86)\Microsoft Office\root\<office version>\Library.*

If your workbook file path is not at above mentioned location, then you can find it in the *Settings* option under IBP Excel Add-in. For this, open *MS Excel > Logon to IBP > Go to Settings… > **File Path for Workbooks*** and add the mentioned location as a Trusted Location.

Your VBA add-in is installed and ready to use. To update it, replace it with a newer version. You don’t need to re-install it. Note that all users of the VBA templates will have to install the VBA add-in once.

Now extract *ChartVBA_AddIn.xlsm* from the archive delivered with note 1790530 and proceed with the next chapter.

Creating a Template from ChartVBA*.xlsm

To create a template, do the following:

1. Open *ChartVBA_AddIn.xlsm* or *ChartVBA_Embedded.xlsm* (refer to previous chapter to make the choice)

2. Choose the worksheet with the chart you prefer – you can delete the other one.

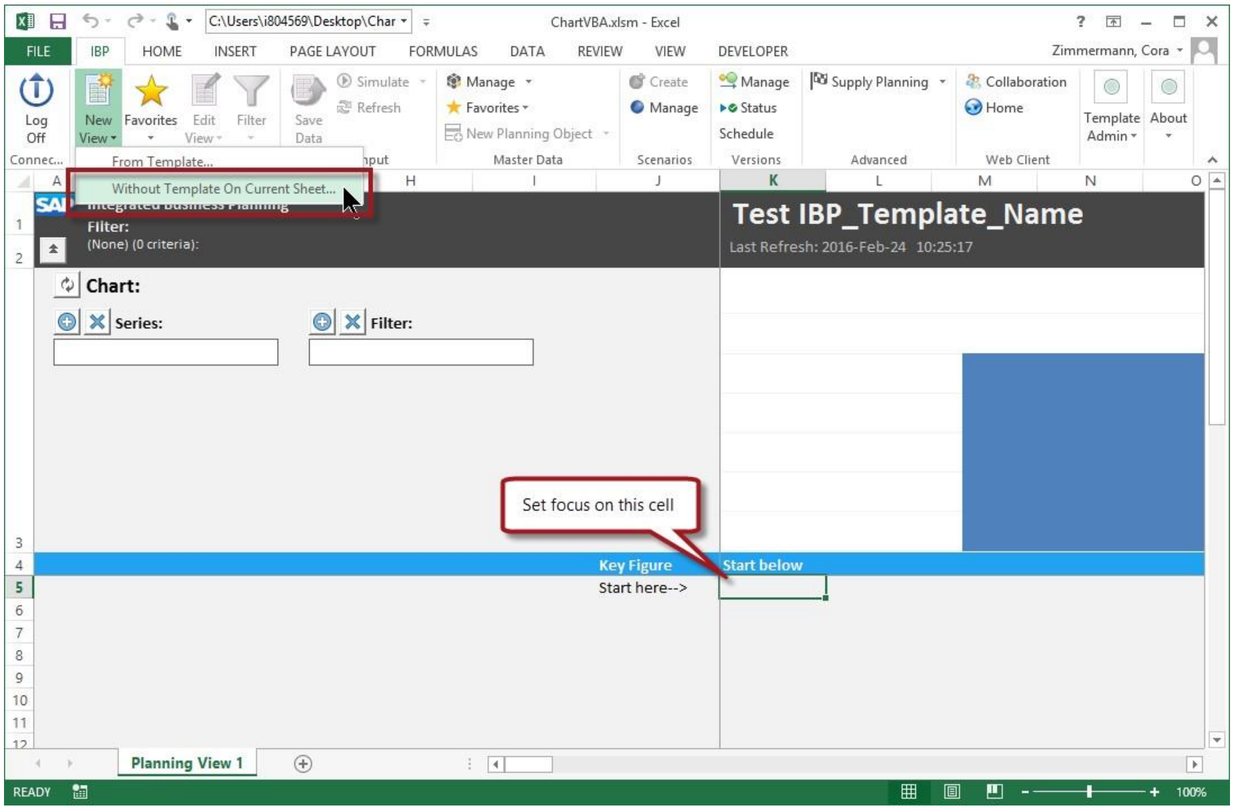
3. If desired, adjust the controls, chart, header section, and VBA code as you see fit
   (refer to chapter "A Look Under the Hood" for more information).

   ℹ Note
   The **S&OP 3.0** add-in does not support the SOP_Filter_* fields – to avoid confusion, please delete those fields from A1/A2.

4. If you need more than 10 columns for the row headers, insert more columns and adjust the header section accordingly; repair the headers in what is initially row 4.

5. For a multi sheet template, copy the sheet as many times as you want.
   Remember:
   a. You can only copy the sheet as long as it has no planning view in it – deleting extra sheets later is no problem.
   b. if you copy an extra sheet from your "empty template" workbook later, you need to delete any links to the original workbook.

6. Save your version of the empty template.



7. Log on to IBP.

8. Focus on the cell next to *Start here* and below *Start below* and create a planning view using *New View* > *Without Template On Current Sheet…*.

9. When the planning view is rendered, follow the instructions in chapter "User Guide: Working with the Chart" to set meaningful defaults in *Series* and *Filter.*

10. Repeat the last three steps for every sheet.

11. Adjust the formatting. Note that you can copy an existing formatting sheet from a previous template – this template comes pre-formatted for flexible key figure editability (see the "Formatting a Template" section and Appendix 1 in this document for more information).

12. Hide the formatting sheet, upload your template, and save a versioned copy locally.

Adapting a Template

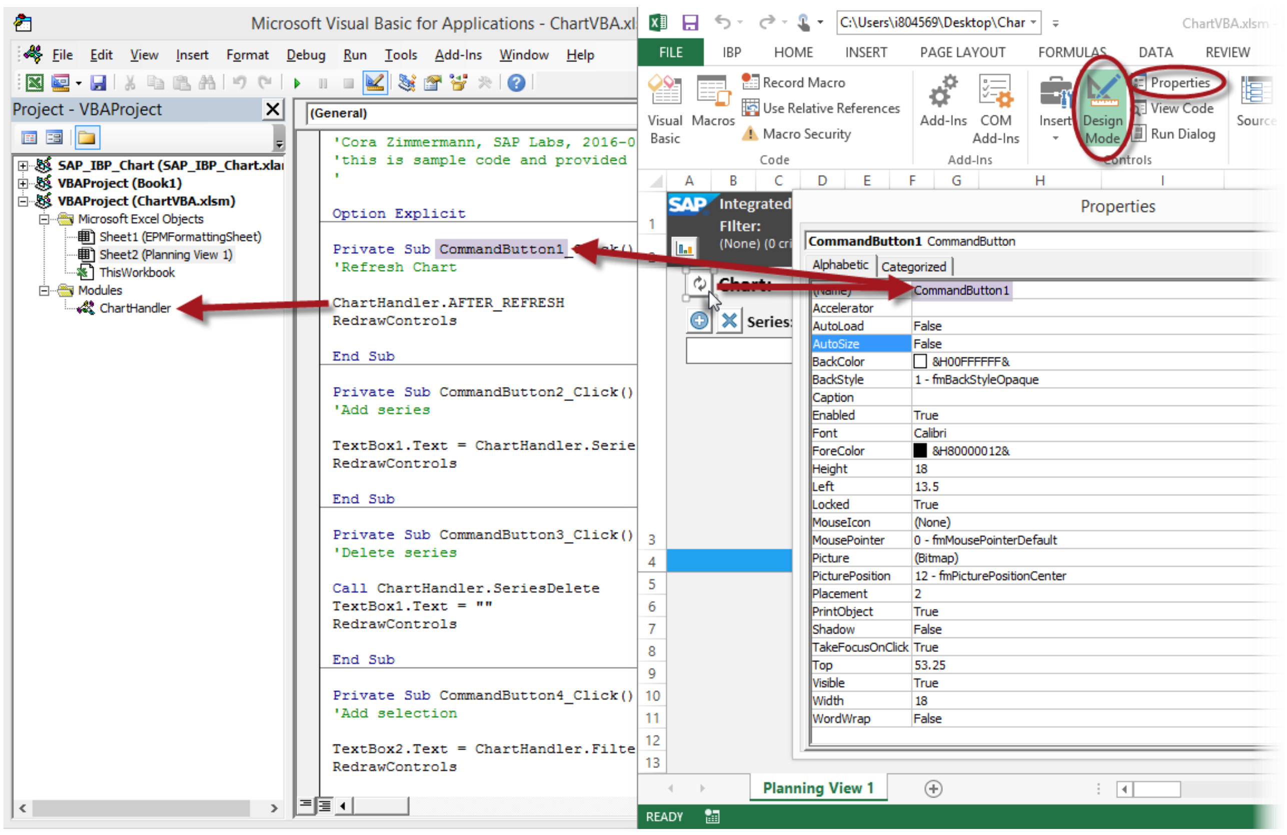
This section addresses template administrators who want to change or enhance the sample code provided with the templates.

Note that the intent of delivering sample templates is to jumpstart the template development within the implementation project. The delivered templates cannot eliminate this very important task, they can only make it easier. Therefore, changes or enhancements to the code by the implementation team is expected.

Support: The code is provided "as is" and support may be extended as a courtesy until the code is stable. Any changed code is solely your responsibility.

To view the code, use Alt+F11 or *DEVELOPER* → *Visual Basic* (you may have to customize your ribbon to make the DEVELOPER tab visible).

To adjust the controls, use *DEVELOPER* → *Design Mode*, then select the control you want to adjust. Click *DEVELOPER* → *Properties* to change names or captions.



```
'Cora Zimmermann, SAP Labs, 2016-0
'this is sample code and provided
'

Option Explicit

Private Sub CommandButton1_
'Refresh Chart

ChartHandler.AFTER_REFRESH
RedrawControls

End Sub

Private Sub CommandButton2_Click()
'Add series

TextBox1.Text = ChartHandler.Serie
RedrawControls

End Sub

Private Sub CommandButton3_Click()
'Delete series

Call ChartHandler.SeriesDelete
TextBox1.Text = ""
RedrawControls

End Sub

Private Sub CommandButton4_Click()
'Add selection

TextBox2.Text = ChartHandler.Filte
RedrawControls
```

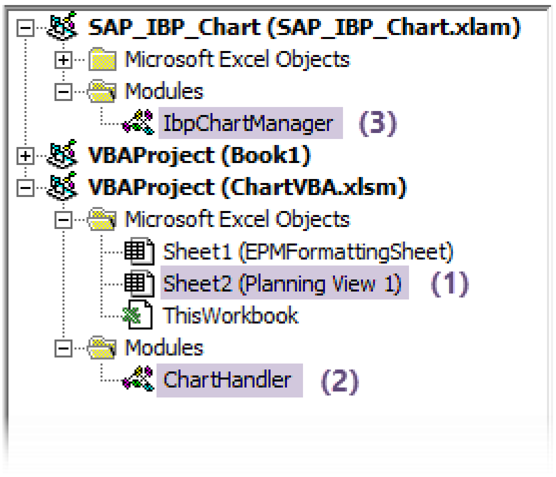
Properties

CommandButton1 CommandButton

Alphabetic | Categorized

(Name)	CommandButton1
Accelerator	
AutoLoad	False
AutoSize	False
BackColor	☐ &H00FFFFFF&
BackStyle	1 - fmBackStyleOpaque
Caption	
Enabled	True
Font	Calibri
ForeColor	■ &H80000012&
Height	18
Left	13.5
Locked	True
MouseIcon	(None)
MousePointer	0 - fmMousePointerDefault
Picture	(Bitmap)
PicturePosition	12 - fmPicturePositionCenter
Placement	2
PrintObject	True
Shadow	False
TakeFocusOnClick	True
Top	53.25
Visible	True
Width	18
WordWrap	False

Depending on whether you are using the embedded template or the VBA add-in, you will find VBA code in two or three places:



(1) In the sheet with the chart and planning view:

Both flavors have a slim code layer behind the Excel worksheet. This layer provides two kinds of services:

- CommandButton<n>_Click()
  These subroutines handle the user's button click. They call the logic in the central code and fill or clear the corresponding text box. Two routines collapse and expand the chart-line (line 3).
  Except for the collapse subroutine, they then call the second service:

- RedrawControls()
  This subroutine resizes and repositions all controls except collapse and expand to repair any movement or distortion and to adjust to the width of the text box content. The central code also calls back into this method (if you rename it, adjust those calls, too).

If you make any adjustments to these controls, you may have to change the corresponding code.

This sheet-dependent code will be copied with the sheet if you create a multisheet template.

(2) In *ChartHandler* module

In the embedded flavor of the template, this module contains the EPM-hook for AFTER_REFRESH() and all central code.

In the add-in flavor of the template this module contains only the EPM-hook AFTER_REFRESH(). The central code is in the add-in (point 3).

AFTER_REFRESH() is a function called by the IBP add-in's EPM layer after every rendering of a planning view, no matter how it is triggered (refresh, simulate, save data, new view, edit view, open favorite/template, sheet options, …).

In the VBA templates, the AFTER_REFRESH-hook is used to auto-update the chart.

(3) In *SAP_IBP_Chart*, module *IbpChartManager*

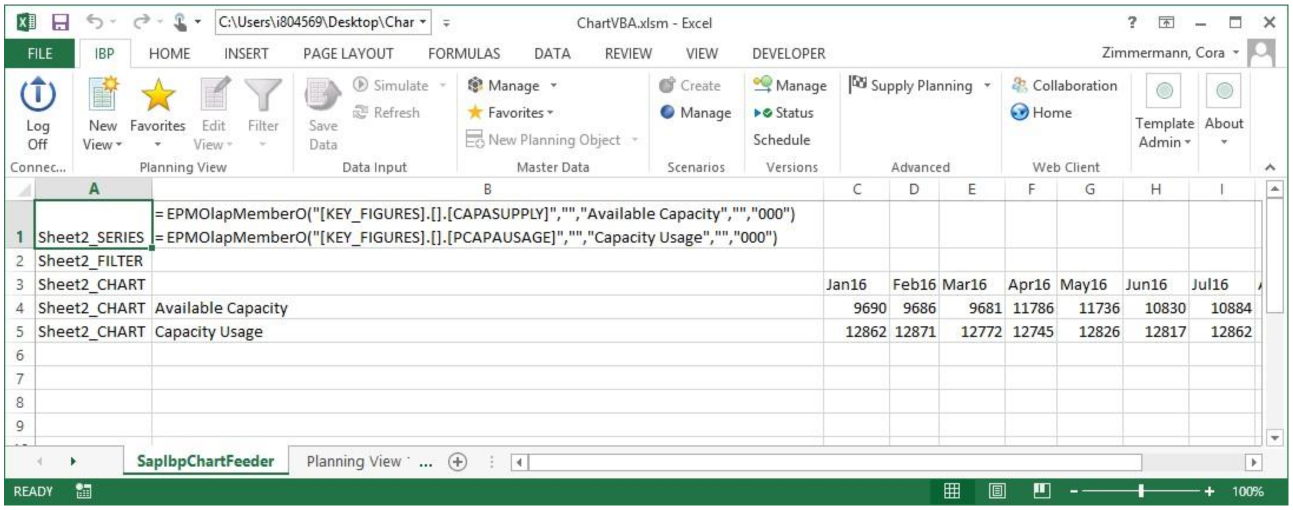
This is the VBA add-in. It is an xlam add-in, which is basically an empty workbook with VBA code and a special extension (.xlam).

The *IbpChartManager* module is almost identical to *ChartHandler* in the embedded version. The only difference is the missing AFTER_REFRESH(), which needs to be in the active workbook to be found by EPM.

The templates use a helper sheet named *SapIbpChartFeeder*. In case the sheet is deleted, you will have to re-select your *Series* and *Filter* - the system will regenerate the sheet automatically when you do.

SapIbpChartFeeder serves all chart-sheets in the workbook.

It remembers *Series* and *Filter* selections per sheet and holds the numbers to plot:



	A	B	C	D	E	F	G	H	I
1	Sheet2_SERIES	=EPMOlapMemberO("[KEY_FIGURES].[].[CAPASUPPLY]","","Available Capacity","","000") =EPMOlapMemberO("[KEY_FIGURES].[].[PCAPAUSAGE]","","Capacity Usage","","000")							
2	Sheet2_FILTER								
3	Sheet2_CHART		Jan16	Feb16	Mar16	Apr16	May16	Jun16	Jul16
4	Sheet2_CHART	Available Capacity	9690	9686	9681	11786	11736	10830	10884
5	Sheet2_CHART	Capacity Usage	12862	12871	12772	12745	12826	12817	12862
6									
7									
8									
9									

It uses the code name of the sheet (here *Sheet2* is the code name of *Planning View 1*), so renaming your planning view sheet doesn't break the link between the sheets.

The VBA code in *ChartHandler* or *IbpChartManager* links the chart to its data, so extending the series or the width of the planning view does not require manual intervention.

ChartHandler and *IbpChartManager* also senses the position of the planning view, so adding columns to accommodate more planning levels does not require any manual intervention.

If the series labels in the chart's legend don't update correctly, right-click the chart, chose *Select Data…* and extend the selection to cover column B, where the system puts the series labels. Doing this once should fix the issue permanently.

APPENDIX: FORMATTING KEY FIGURES THAT ARE EDITABLE IN THE PAST

The checkbox *Inputable* (using property *CALC* with values Y/N) works on entire rows and columns. A cell is editable only if all column and row attribute values relevant for the cell are editable.

Assume you have key figures in rows and time periods in columns. Each key figure and time bucket only has one *CALC* flag: Either editable or not editable. Past time buckets are always flagged as "not editable". They cannot be flagged as editable for one key figure and as not editable for a different key figure.

Therefore, flexible key figure editability cannot be formatted this way. IBP provides these two properties:

Property *Editable Indicator* for dimension *Key Figures* with these values:

- **ALL**
- **FUTURE**
- **PAST**
- **NONE**

Property *Past Current Future Indicator* for time dimensions with these values:

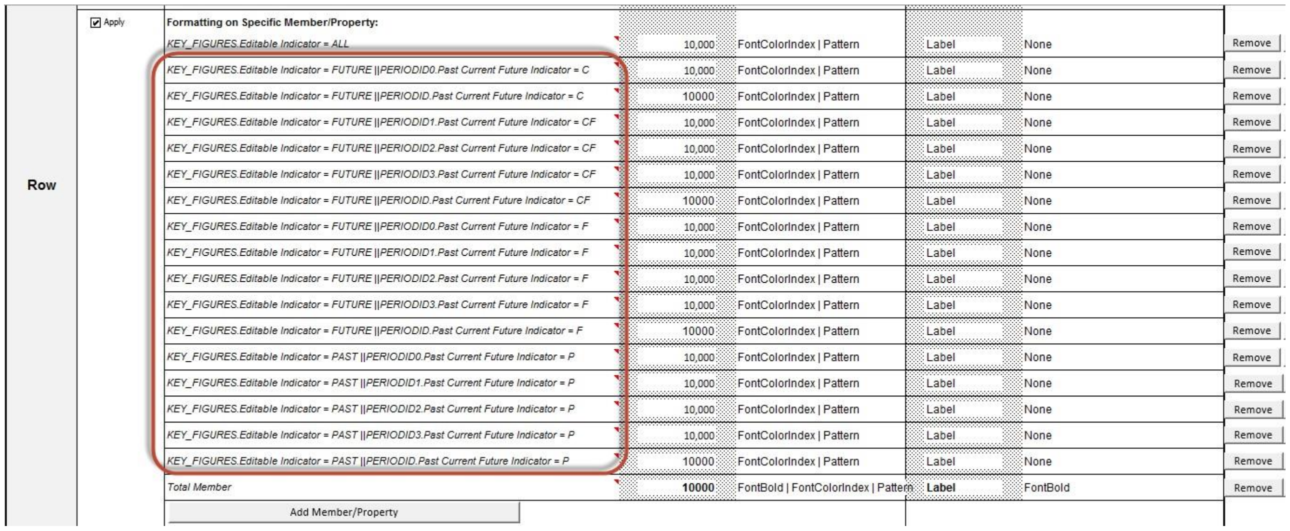
- **P** (past – all time dimensions)
- **C** (current – lowest granularity)
- **F** (future – all time dimensions)
- **PC** (past and current – aggregated time dimensions, e.g. Q1 in March)
- **PCF** (past, current, and future – aggregated time dimensions, e.g. Q1 in February)
- **CF** (current and future – aggregated time dimensions, e.g. Q1 in January)

The system will allow editing for these property value combinations:

Editable Indicator (Key Figures)	**Past Current Future Indicator** (Time)
ALL	(irrelevant)
FUTURE	C
FUTURE	CF
FUTURE	F
PAST	P

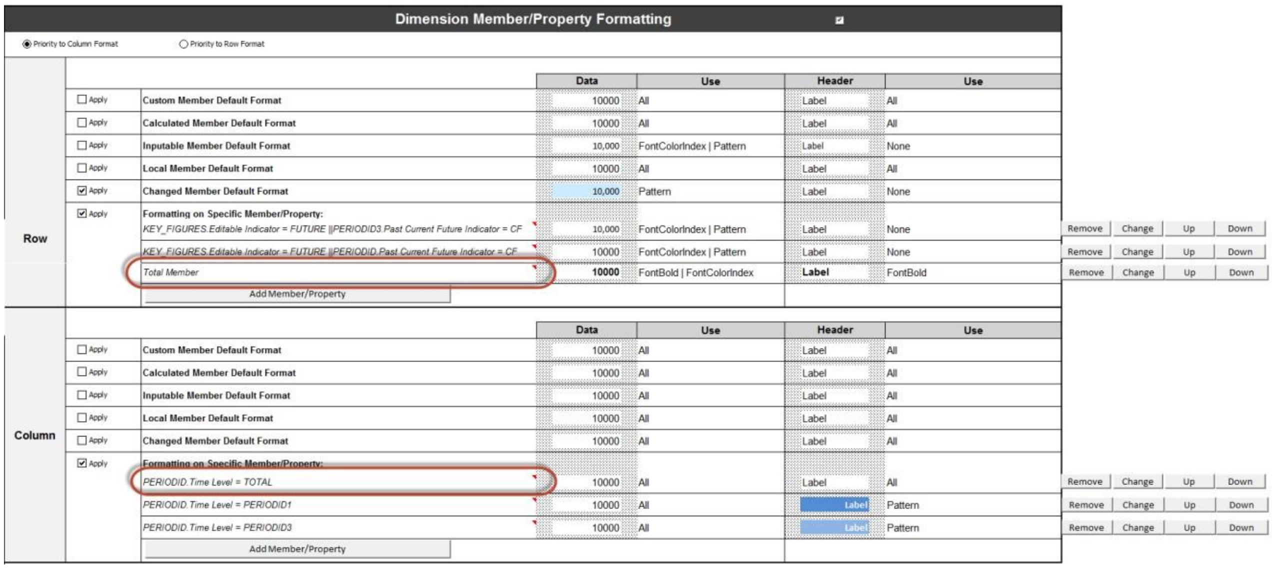
To give special formatting to editable cells, the formatting instructions need to match those property combinations for all aggregation levels in your time profile that are relevant for your template.

Below are the formatting instructions delivered with this note. They are maintained for a four-tier time profile including PERIODID for flexible time axis. It is safe to remove all instructions for PERIODID3 if your time profile only has three tiers:



Row	☑ Apply	Formatting on Specific Member/Property:					
		KEY_FIGURES.Editable Indicator = ALL	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID0.Past Current Future Indicator = C	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID.Past Current Future Indicator = C	10000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID1.Past Current Future Indicator = CF	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID2.Past Current Future Indicator = CF	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID3.Past Current Future Indicator = CF	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID.Past Current Future Indicator = CF	10000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID0.Past Current Future Indicator = F	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID1.Past Current Future Indicator = F	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID2.Past Current Future Indicator = F	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID3.Past Current Future Indicator = F	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID.Past Current Future Indicator = F	10000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = PAST ‖PERIODID0.Past Current Future Indicator = P	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = PAST ‖PERIODID1.Past Current Future Indicator = P	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = PAST ‖PERIODID2.Past Current Future Indicator = P	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = PAST ‖PERIODID3.Past Current Future Indicator = P	10,000	FontColorIndex | Pattern	Label	None	Remove
		KEY_FIGURES.Editable Indicator = PAST ‖PERIODID.Past Current Future Indicator = P	10000	FontColorIndex | Pattern	Label	None	Remove
		Total Member	**10000**	FontBold | FontColorIndex | Pattern	**Label**	FontBold	Remove
		Add Member/Property					

If you need to maintain these instructions yourself, note that depending on the time you do this, not all indicators are sent for all time periods. For example, the CF indicator for a year is only sent in January, since as of February the year already contains a past month and the current year is sent with indicator PCF, all other years either with P or F. At this point in time, you cannot set the CF-instruction for the year.



Dimension Member/Property Formatting

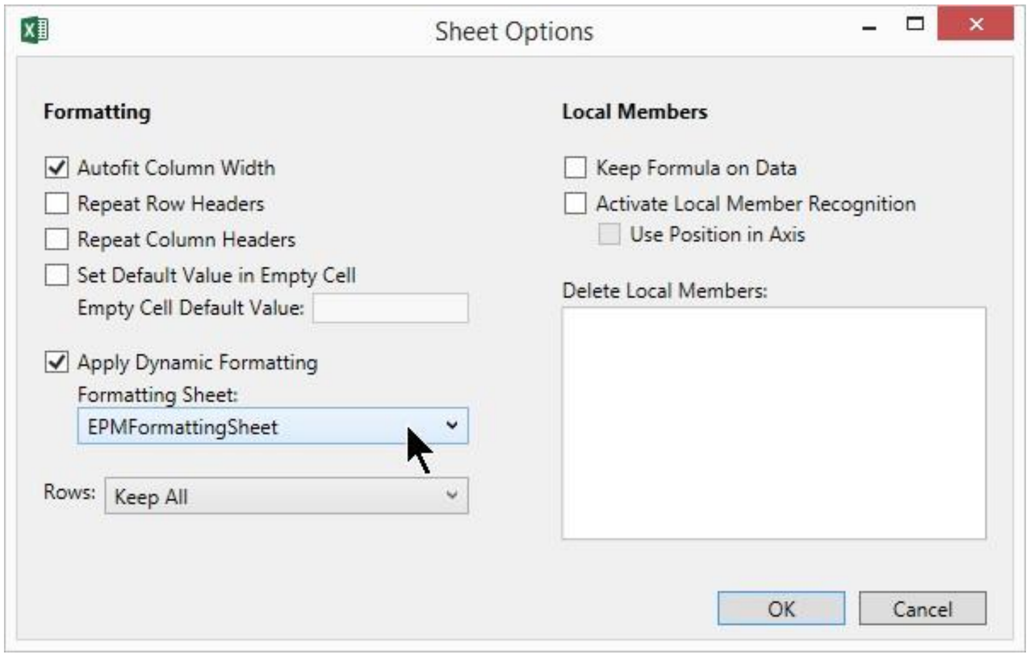
(● Priority to Column Format) ○ Priority to Row Format

			Data	Use	Header	Use				
Row	☐ Apply	Custom Member Default Format	10000	All	Label	All				
	☐ Apply	Calculated Member Default Format	10000	All	Label	All				
	☐ Apply	Inputable Member Default Format	10,000	FontColorIndex | Pattern	Label	None				
	☐ Apply	Local Member Default Format	10000	All	Label	All				
	☑ Apply	Changed Member Default Format	10,000	Pattern	Label	None				
	☑ Apply	Formatting on Specific Member/Property:								
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID3.Past Current Future Indicator = CF	10,000	FontColorIndex | Pattern	Label	None	Remove	Change	Up	Down
		KEY_FIGURES.Editable Indicator = FUTURE ‖PERIODID.Past Current Future Indicator = CF	10000	FontColorIndex | Pattern	Label	None	Remove	Change	Up	Down
		Total Member	**10000**	FontBold | FontColorIndex	**Label**	FontBold	Remove	Change	Up	Down
		Add Member/Property								

			Data	Use	Header	Use				
Column	☐ Apply	Custom Member Default Format	10000	All	Label	All				
	☐ Apply	Calculated Member Default Format	10000	All	Label	All				
	☐ Apply	Inputable Member Default Format	10000	All	Label	All				
	☐ Apply	Local Member Default Format	10000	All	Label	All				
	☐ Apply	Changed Member Default Format	10000	All	Label	All				
	☑ Apply	Formatting on Specific Member/Property:								
		PERIODID.Time Level = TOTAL	10000	All	Label	All	Remove	Change	Up	Down
		PERIODID.Time Level = PERIODID1	10000	All	Label	Pattern	Remove	Change	Up	Down
		PERIODID.Time Level = PERIODID3	10000	All	Label	Pattern	Remove	Change	Up	Down
		Add Member/Property								

Formatting rules also exist for attribute-based totals and time-based totals. Formatting rule for attribute-based totals was inserted in the *Row* section, formatting rule for timebased totals was inserted in *Column* section.

To introduce these instructions into an existing template or vice versa, you can copy the formatting sheet into a template workbook. Rename and delete the formatting sheets as needed. Use the sheet options to make sure all planning view sheets refer to the correct formatting sheet (*Planning View* → *Edit View* → *Sheet Options*):


Sheet Options

Formatting

- [✓] Autofit Column Width
- [ ] Repeat Row Headers
- [ ] Repeat Column Headers
- [ ] Set Default Value in Empty Cell

Empty Cell Default Value:

- [✓] Apply Dynamic Formatting

Formatting Sheet: EPMFormattingSheet

Rows: Keep All

Local Members

- [ ] Keep Formula on Data
- [ ] Activate Local Member Recognition
- [ ] Use Position in Axis

Delete Local Members: