



SAP S/4HANA 1709

Release Highlights

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SAP S/4HANA

Evolution

- Industry to core
 - Discrete Industries and Mill Products (DIMP) -
- Effective Order Management and Billing
- Efficient Procurement
- Accelerated Material Requirements Planning
- Real-time Inventory Management and Material Valuation

SAP S/4HANA, on-premise edition 1511

- Oil and Gas with SAP S/4HANA
- Industry to core – Retail
- Consistent SAP Fiori User Experience
- Optimized Portfolio and Project Management
- Embedded Software in Product Development
- Entire SAP S/4HANA Finance Scope included
- Plan to Produce in ONE System (Production Planning and Detailed Scheduling – PP/DS)
- Embedded SAP Extended Warehouse Management
- Integrated Quality Management
- advanced Available to Promise (aATP)

SAP S/4HANA 1610

- Industries to Core – SAP Agricultural Contract Management
- SAP Commercial Project Management with S/4HANA
- Commodity Management
- Sales – Electronic and Digital Payments
- GRC – Legal Control and Export Classification
- Consumer Products – Catch Weight Management
- SAP S/4HANA Central Master Data
- Finance – Machine Learning for automation capability
- QM – Manage usage decisions and Analytics for Quantitative Results
- EAM – Report and Repair Malfunction
- PLM – Visual Manufacturing Planner and Recipe Management
- Maximize Fiori Experience with SAP Fiori Overview Pages
- Predictive Analytics as a system of intelligence – Contract Consumption in Procurement –
- Embedded Transportation Management
- Demand Driven Manufacturing
- Manufacturing Extension for Complex Assembly Industries
- Advance Variant Configuration

SAP S/4HANA 1709

SAP S/4HANA 1709

Key Innovations



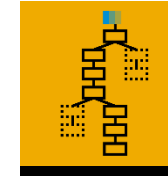
Embedded Transportation Management

- Basic Shipping and Data Harmonization
- Integration in extended warehouse mgmt.



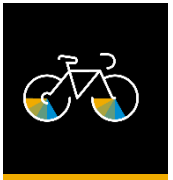
Manufacturing

- Demand Driven Manufacturing
- Advance Variant Configuration



Manufacturing

- Engineering Cockpit
- Extension for Complex Assembly Industries



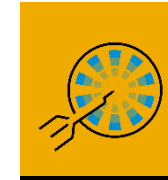
Consumer Products Industry

- Catch Weight Management for System Conversion



Finance

- Machine Learning with SAP Cash Application Integration; Financial Planning



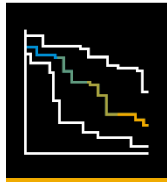
Quality Management

- Manage usage decisions
- Analytics for quantitative results



Commodity Management

- Extending pricing with the commodity pricing engine



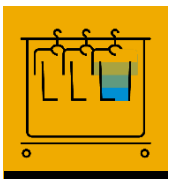
Procurement

- Centralized purchase requisitions through hub deployment
- Machine Learning for Contract Consumption



Extended Warehouse Management

- advanced Labor Management
- Pallet Planning



Industry to Core Retail / Wholesale

- Wholesale Fashion enablement; Order allocation; Segmentation



Enterprise Asset Management

- Report and Repair Malfunction
- Breakdown Analysis



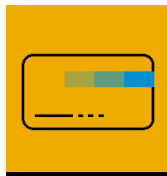
PLM

- Visual Enterprise Generator Conversion
- Recipe Management and Recipe finder



Service Core (CRM Add-On)*

- Migrate installed base CRM with eliminated middleware, harmonized data models



Sales

- Electronic and digital payments with Integration with Payment Hub



Maximize SAP Fiori Experience

- SAP Fiori Overview Pages

SAP S/4HANA 1709

User Experience Enhancements

SAP Fiori 2.0

- UX evolution
- New Fiori apps

Additional SAP Fiori Overview Pages:

- sales management
- project profitability
- inventory management
- treasury management

Value Proposition

- Immediate, domain-specific insights on the tasks that need your attention
- Ability to take quick actions to solve issues.
- Easy forward navigation to related applications.

Capabilities

- Very flexible selection criteria available.
- Drill down on detail KPIs.
- Easy-to-use formats with charts, lists, and tables on a single page.



SAP S/4HANA 1709

New release including new technology stack

SAP HANA[®] 2

Active consumption of new SAP HANA 2 features with SAP S/4HANA 1709

- Active/Active
 - = offload analytical workload to SAP HANA System Replication (secondary)
- SAP S/4HANA scale-out
 - = Run largest S/4HANA systems with application-optimized data distribution

Focus on Innovation

Foster Innovation

Drive Innovation

Power Innovation

Database Management
Transformed

Data
Management
Transformed

Analytical
Intelligence
Transformed

Application
Development Transformed



Vybrané inovácie v oblasti plánovania a riadenia výroby

SAP S/4HANA 1709 OP

PUBLIC

- **SAP S/4HANA for Manufacturing planning and scheduling**
aka. PP/DS
- **Demand-Driven Replenishment**
aka. DDMRP

SAP S/4HANA for Manufacturing planning and scheduling

Comprehensive Plan to Produce in ONE System

- **PP/DS planning and scheduling features available in SAP S/4HANA**

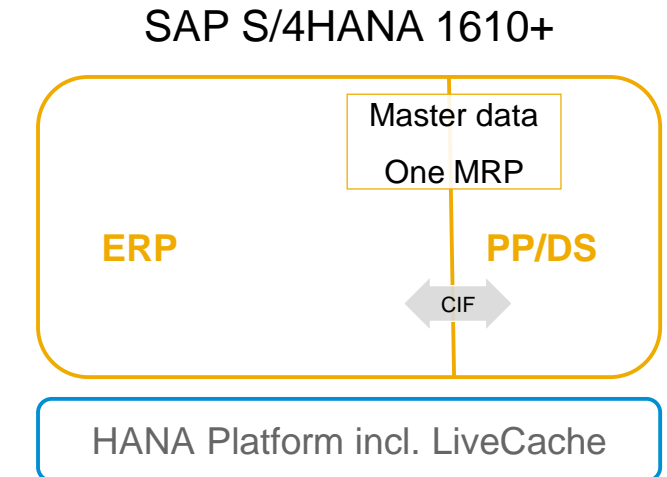
- Constraint-based capacity planning, scheduling & optimization
- Heuristic framework
- Industry-specific features (RPM, MMP & CBP)
- Simulation versions and transactional simulation

- **Simplicity and Seamless Integration**

- One coherent application, consistent look at feel, intuitive navigation
PP/DS is an integral part of S4/HANA (not an add-on, not a side-by-side installation)
- Simplified master data and integration model maintenance

- **Utilize HANA (HANA only)**

- Fast MRP [One MRP for infinite planning]
- liveCache is integral part of HANA, just one database to manage



Advanced Production Planning

- Multi-level production planning
- Order Pegging
- Heuristics framework:
 - Use delivered advanced planning heuristics (40+)
 - Develop own heuristics
 - Industry specific:
 - Automotive (RPM, MMP)
 - Mill (CDP)
 - Process (Res.networks, tanks, campaigns...)
- Supports various manufacturing models:
 - Make to Stock
 - Make to Order
 - Engineer to Order

...



Product Planning Table, Planning Version 000

PP/DS Resource Alerts (4 Alerts)

Status	Priority	Priority	Description	Ping	Versn	Resource	Descriptn	Location	Loc. desc.	Order	Priority	Scheduled	Operation	Valid from
1	1	1	Resource overload (single activity)	000		WL_ASSY1_1400_002	Assembly I	1400	Stuttgart	Cross-Order	0			08/11/2014 11:19:02
1	1	1	Resource overload (single activity)	000		WL_PAINTS_1400_002	Paintshop	1400	Stuttgart	Cross-Order	0			08/11/2014 11:39:05
1	1	1	Resource overload (single activity)	000		WL_PACK1_1400_002	Packaging I	1400	Stuttgart	Cross-Order	0			08/11/2014 19:28:29
1	1	1	Resource overload (single activity)	000		WL_PAINTS_1400_002	Paintshop	1400	Stuttgart	Cross-Order	0			08/15/2014 10:17:27

Product view: Periodic

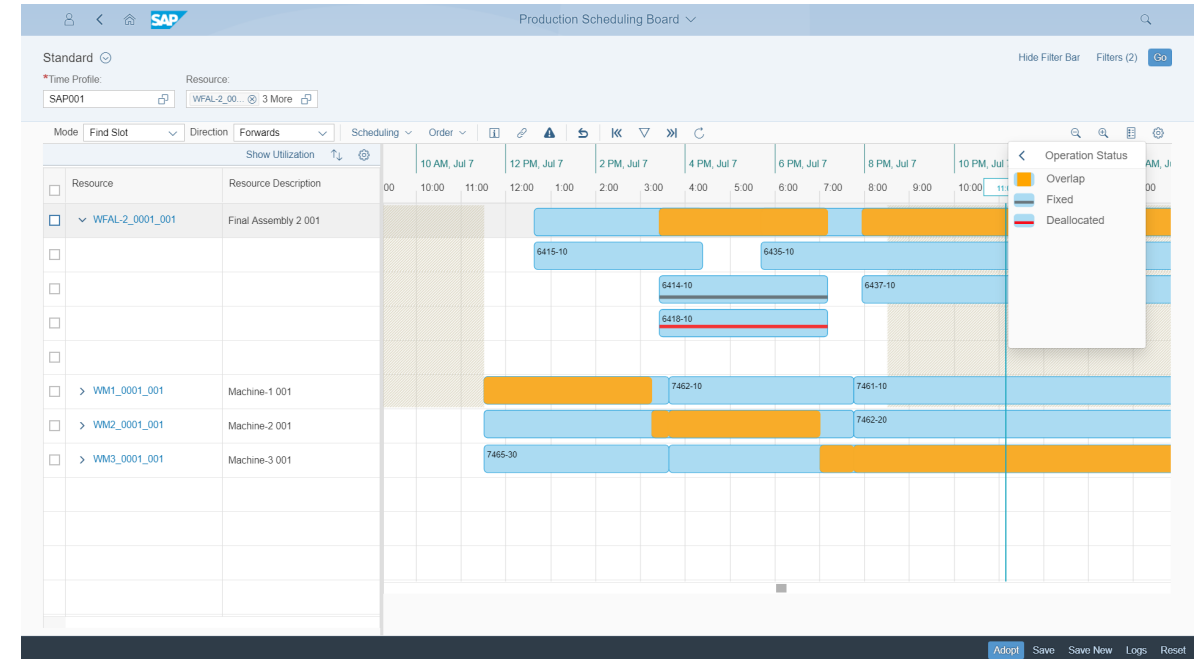
	Un.	FR 08/08/...	SA 08/09/...	SU 08/10/...	MO 08/11/...	TU 08/12/...	WE 08/13/...	TH 08/14/...	FR 08/15/...	SA 08/16/...	SU 08/17/...	MO 08/18/...	TU 08/19/...
I_100 / Inline Skates 3270 w...	PC				200-		100-		100-				
I_200 / Inline Skates 3270 yel...	PC					100-		100-					
I_300 / Inline Skates 3270 gr...	PC								200-				
I_400 / Inline Skates 3270 blu...	PC				100-				100-				
I_500 / Inline Skates 3270 bla...	PC												

Production view: Periodic

	Un.	FR 08/08/...	SA 08/09/...	SU 08/10/...	MO 08/11/...	TU 08/12/...	WE 08/13/...	TH 08/14/...	FR 08/15/...	SA 08/16/...	SU 08/17/...	MO 08/18/...	TU 08/19/...
WL_ASSY1_1400_002 / Asse...	%	21.478			21.478	10.739	10.739	26.731	16.225				
I_100 / I_100	140	200					100		100				
I_200 / I_200	140				100	100							
I_300 / I_300	140							200					
I_400 / I_400	140				100				100				

Detailed Scheduling & Optimization

- Forward & Backward (multi-level) Constrained Scheduling
 - Constrained scheduling
 - Scheduling modes
 - Optimal sequencing
- Scheduling Optimizer
- Flexible graphical prod.operations scheduling
- Backlog Resolution
- What-if Analysis & Simulation
- Configurable exception Alert Monitor



One MRP

One MRP

Part of MRP-Live

MRP Live

📄 📁

Planning Scope

Plant	0001	to	
Material	DEMO*	to	
Product group		to	
MRP Controller	001	to	

☐ Regenerative Plng

Also to be Included in Planning

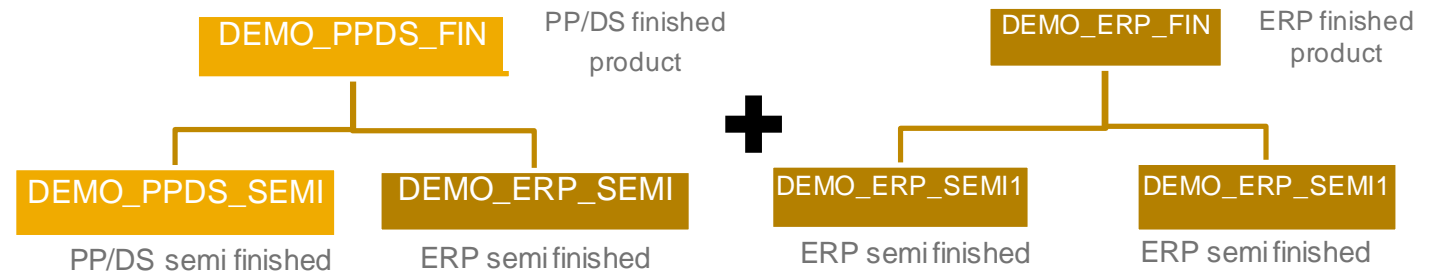
☐ BOM Components

☐ Stock Transfer Materials

Control Parameters

Planning Mode	1
Scheduling	
Name for Performance Log	

MRP Run with S/4 core & PP/DS materials



Benefits

- One MRP planning run for
 - classic MRP planning logic and
 - advanced PPDS heuristics
- One low level code calculation

One MRP cockpit

- All materials (S4 and PP/DS)
- Common list of shortages or uncovered demands
- Special detail views for PP/DS-relevant materials
 - simulation capabilities and
 - what-if analysis

Monitor Material Coverage

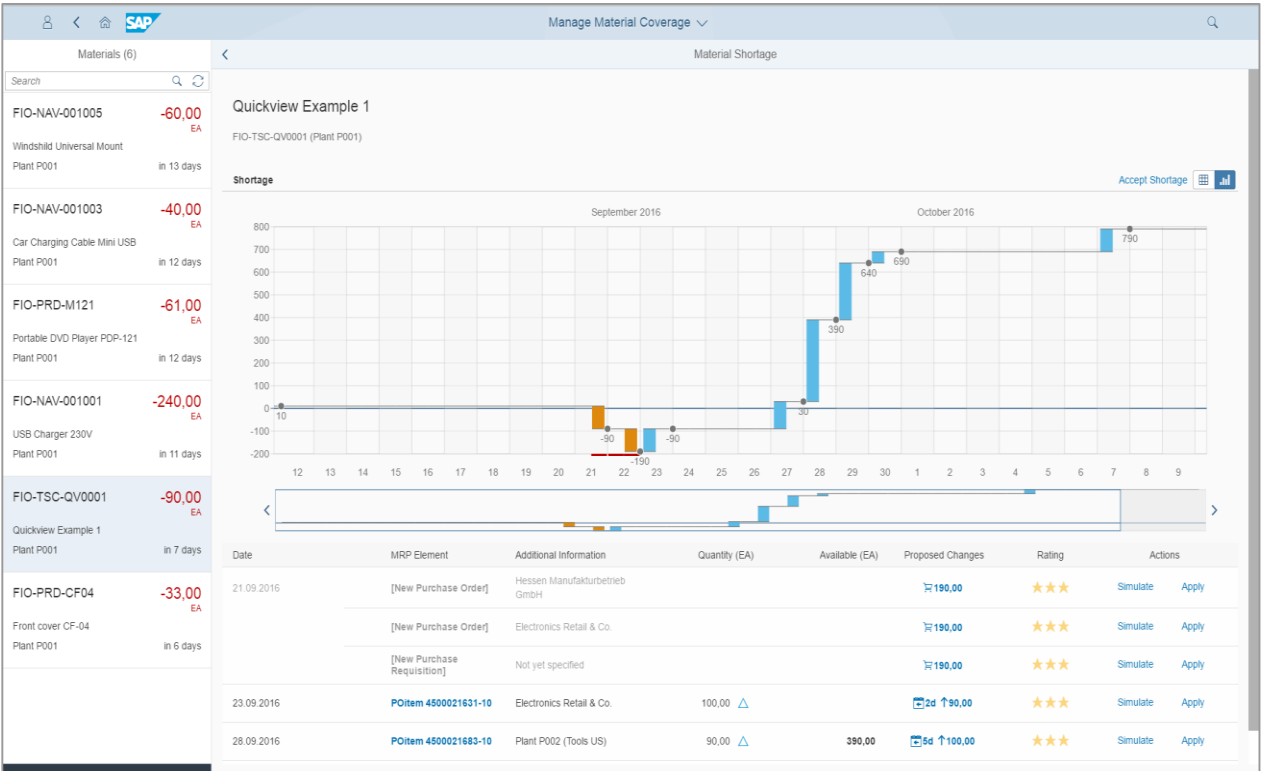
Standard * ☺

*Shortage Definition: MRP Standard Time till Shortage:

Materials (125)

Material No.	Material Description	Vendor Name	Vendor Number	First Shortage On	Shortage Quantity	Stock Availability
<input type="checkbox"/> FIO-TSC-ACCEP7	Test Accept	Electronics Retail & Co.	FIO-VEND01	30.09.2016	5,00 EA	
<input type="checkbox"/> FIO-NAV-001005	Windshield Universal Mount	2 Vendors		29.09.2016	60,00 EA	
<input type="checkbox"/> FIO-NAV-001003	Car Charging Cable Mini USB	Sunny Electronics GmbH	FIO-VEND03	28.09.2016	40,00 EA	
<input type="checkbox"/> FIO-PRD-M121	Portable DVD Player PDP-121			28.09.2016	61,00 EA	
<input type="checkbox"/> FIO-TSC-DEF110	Default Material 110	Electronics Retail & Co.	FIO-VEND01	28.09.2016	110,00 EA	
<input type="checkbox"/> FIO-TSC-DEF210	Default Material 210	Electronics Retail & Co.	FIO-VEND01	28.09.2016	199,00 EA	
<input checked="" type="checkbox"/> FIO-NAV-001001	USB Charger 230V	2 Vendors		27.09.2016	240,00 EA	
<input checked="" type="checkbox"/> FIO-TSC-ACC0007	Accept Scenario 7	Electronics Retail & Co.	FIO-VEND01	21.09.2016	10,00 EA	
<input checked="" type="checkbox"/> FIO-TSC-PRV0002	Preview Scenario 2	Electronics Retail & Co.	FIO-VEND01	21.09.2016	200,00 EA	
<input type="checkbox"/> FIO-TSC-PRV0007	Preview Scenario 7			21.09.2016	50,00 EA	
<input type="checkbox"/> FIO-TSC-QV0001	Quickview Example 1	2 Vendors		21.09.2016	90,00 EA	
<input type="checkbox"/> FIO-PRD-C401	Battery B-401			20.09.2016	12,00 EA	
<input checked="" type="checkbox"/> FIO-PRD-CF04	Front cover CF-04	Sunny Electronics GmbH	FIO-VEND03	20.09.2016	33,00 EA	
<input checked="" type="checkbox"/> FIO-STL-COLORS	Display All Colors in Stock Overview	Electronics Retail & Co.	FIO-VEND01	20.09.2016	20,00 EA	
<input type="checkbox"/> FIO-TSC-0000310C	Shortage Definition Example 3b Comp			20.09.2016	470,00 EA	
<input type="checkbox"/> FIO-TSC-ACC00001	Accept Scenario 1	Electronics Retail & Co.	FIO-VEND01	20.09.2016	42,00 EA	
<input type="checkbox"/> FIO-TSC-QV0003C	Quickview Example 3 Comp			20.09.2016	240,00 EA	
<input type="checkbox"/> FIO-PRD-C00003	Product Order Component 00003			19.09.2016	120,00 EA	
<input type="checkbox"/> FIO-PRD-C00004	Product Order Component 00004			19.09.2016	140,00 EA	
<input type="checkbox"/> FIO-PRD-C00201	Product Order Component 00201			19.09.2016	100,00 EA	

Revoke Acceptance of Shortages Manage Materials



Combined Order Support

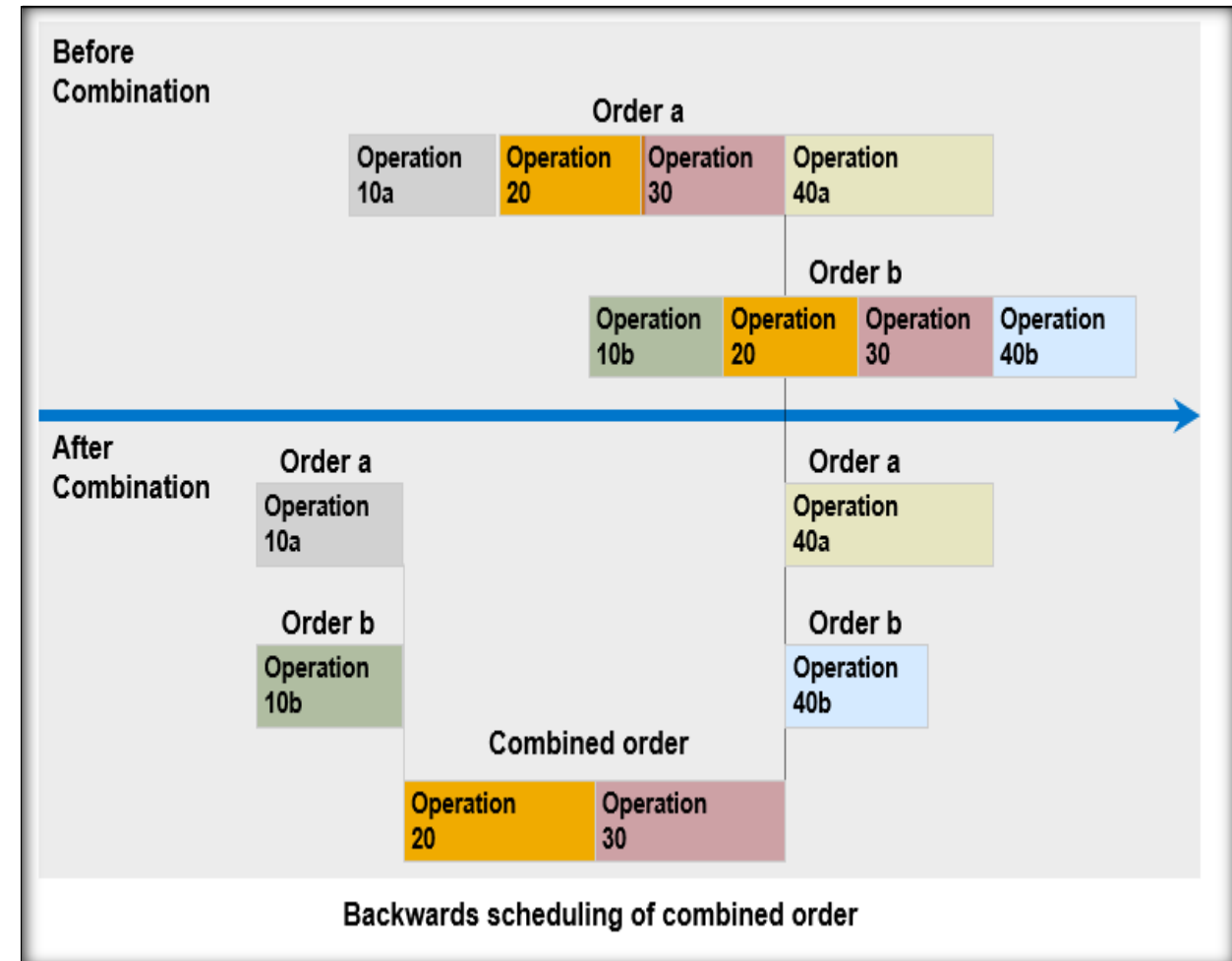
Order Combination Concept

Business Background

- In the mill industry, different products may go through common process steps. It is desirable to group and execute them together. This optimizes resource usage and reduces order handling for the user

Solution

- Common operation sequences in different orders can be combined in one production order
- Combination can be for selected operations (except process orders) or entire orders
- Operations to be combined must have same base unit of measure and no gaps in between
- The combination steps are: selection, combination and scheduling
- With 1709, combined orders can also be planned in embedded PP/DS



Capacity Utilization Object Page

Monitor Capacity Utilization

Navigation

AG1

Monitor Capacity Utilization

AG1

Hide Filter Bar

Restore

Filters (3)

Go

*Evaluation Profile:

SAP Standard Capacity Utiliz...

*Evaluation Horizon:

28 Days

Resource:

WPPDS_WC3_... 2 More

Resources (3)

Legend

↑↓

⚙

<input type="checkbox"/>	Resource	Breakdown	Maximum	Minimum	Average	First Overload	First Underload	Utilization
<input type="checkbox"/>	WPPDS_WC1_0001_001 test work center 1 001		201 %	0 %	74 %	26.06.2017	19.06.2017	<div></div>
<input type="checkbox"/>	WPPDS_WC2_0001_001 test work center 2 001		195 %	0 %	54 %	29.06.2017	19.06.2017	<div></div>
<input type="checkbox"/>	WPPDS_WC3_0001_001 test work center 2 001		0 %	0 %	0 %		19.06.2017	<div></div>

Resource Planning Table

Production Scheduling Board

Variants

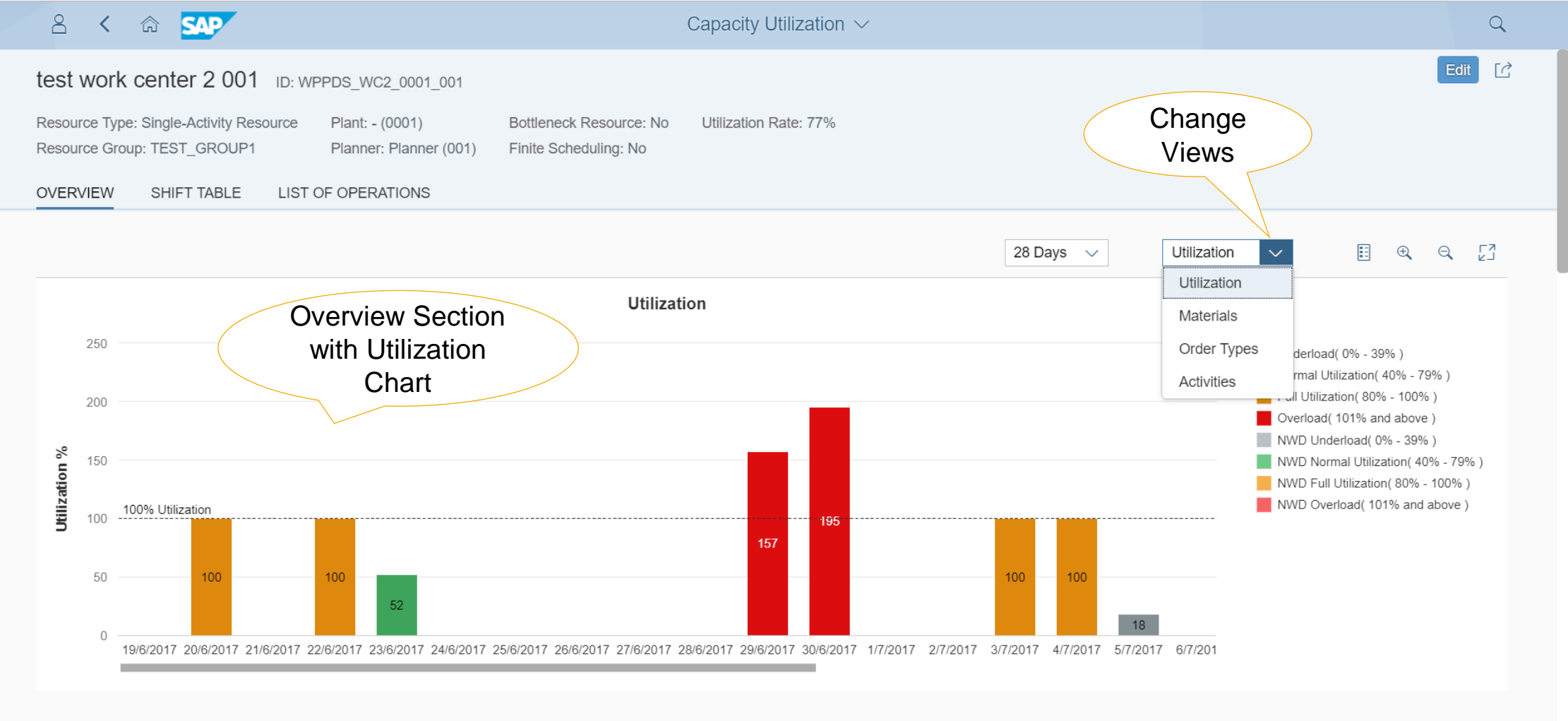
Filtered List

Detail Page Navigation

Navigation to Resource PIng Table or Scheduling Board

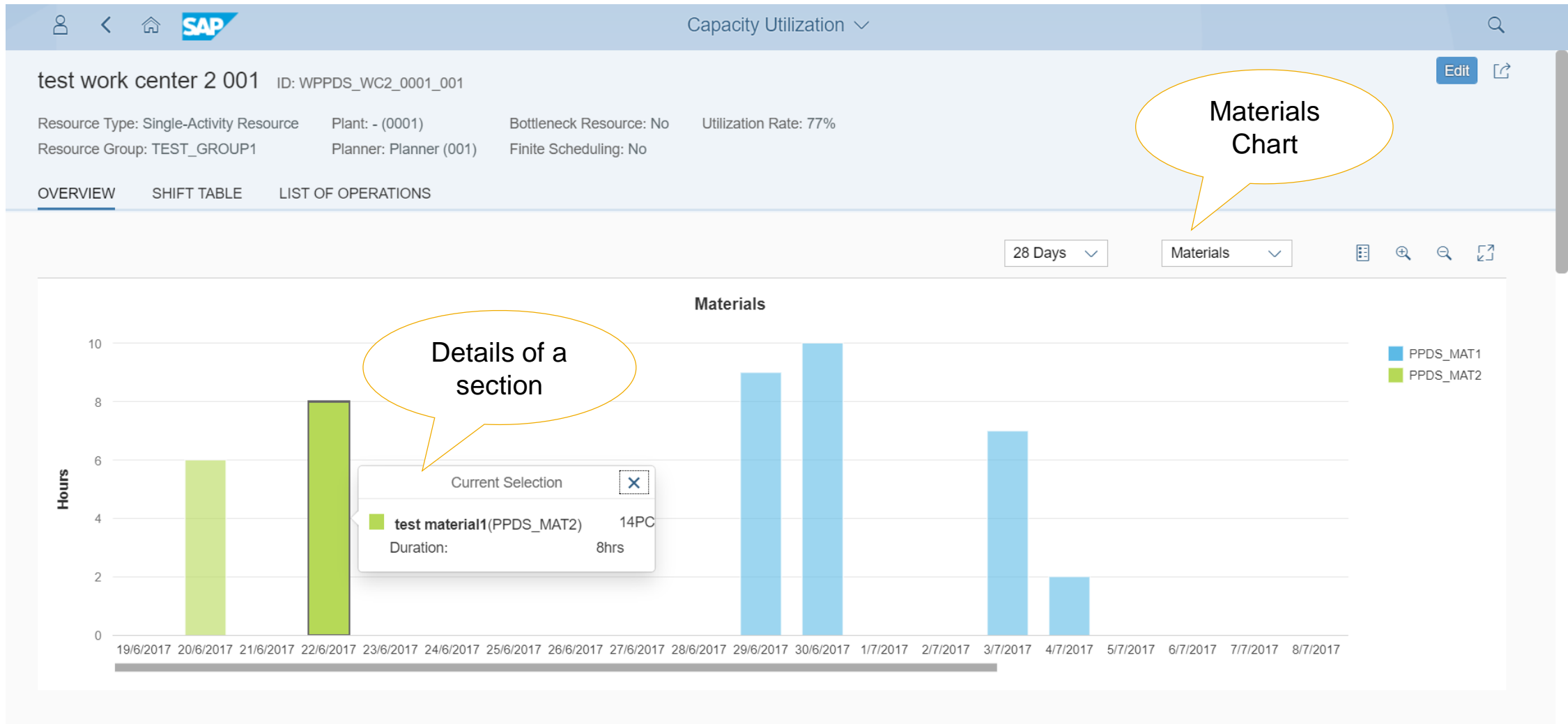
Capacity Utilization

Object Page

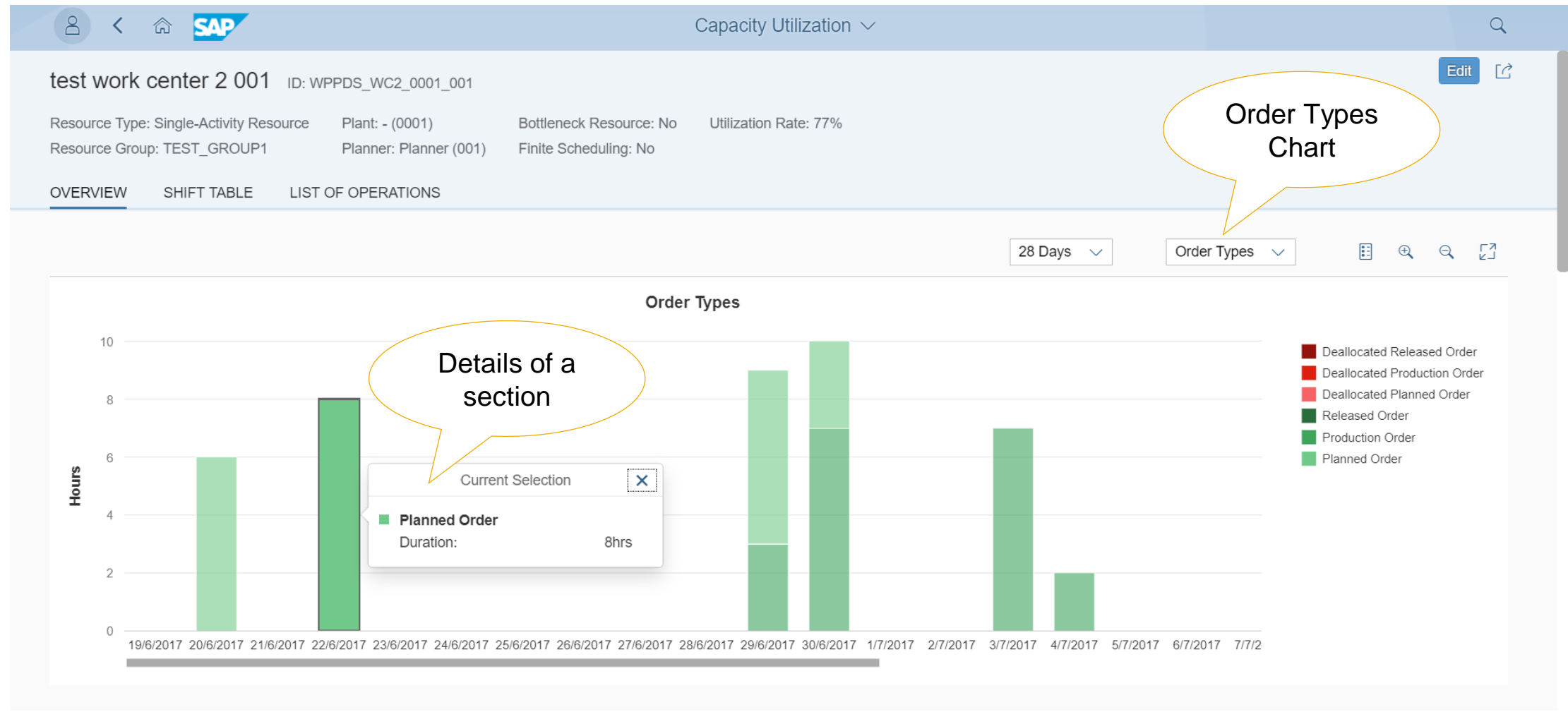


Capacity Utilization

Page Overview

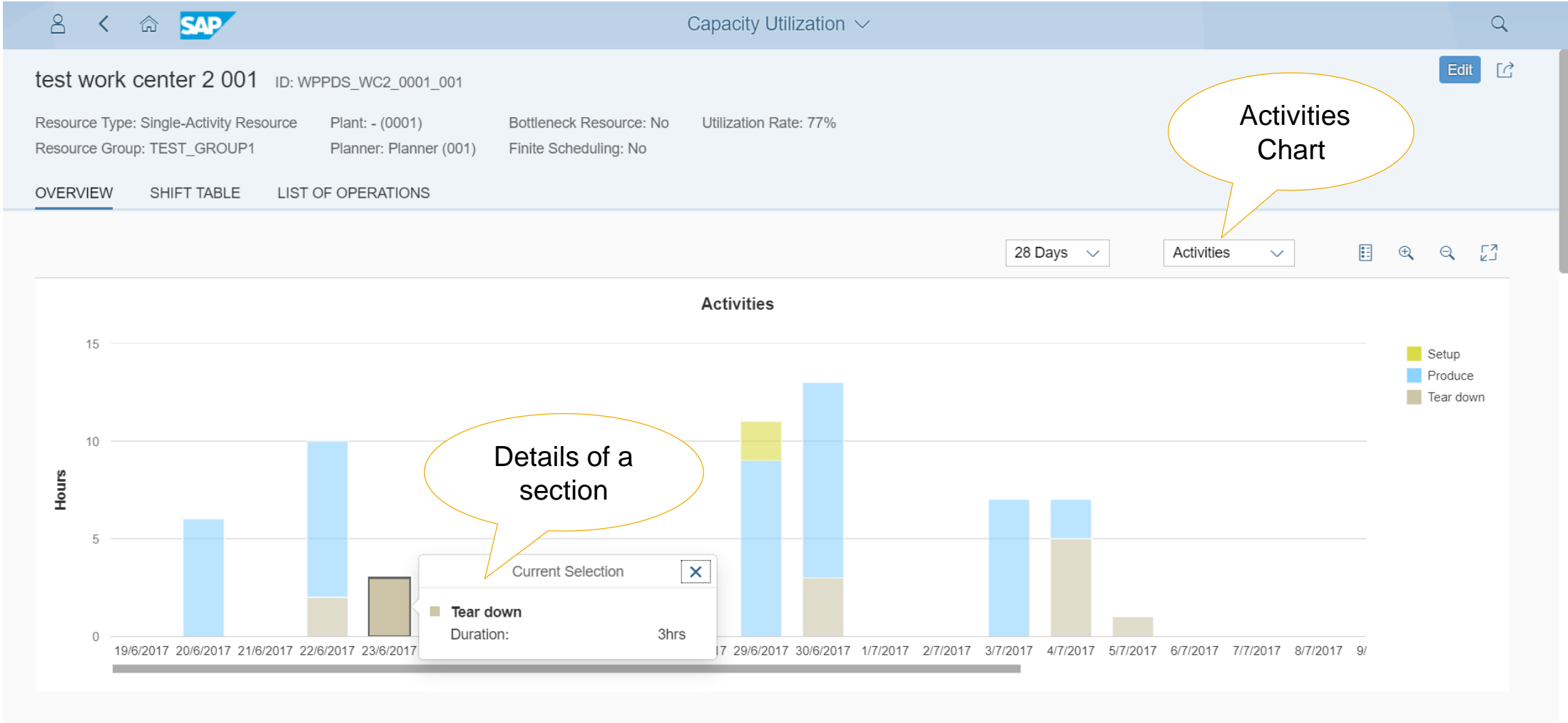


Capacity Utilization – Page Overview



Capacity Utilization

Page Overview



Capacity Utilization

Shift Table

Capacity Utilization

test work center 2 001 ID: WPPDS_WC2_0001_001

OVERVIEWSHIFT TABLELIST OF OPERATIONS

Shifts (19)





Date	Start Time	End Time	Shift Definition	Shift Utilization %	Resource Utilization %	Downtime	Capacities
20/6/2017 Tuesday	06:00 AM	02:30 PM	TM01	77	<div><div></div></div> 100%		4
	03:30 PM	04:30 PM		77	<div><div></div></div> 0%		3
22/6/2017 Thursday	06:00 AM	02:30 PM	TM01	77	<div><div></div></div> 100%		45
	06:00 PM	03:00 AM	TM03	77	<div><div></div></div> 100%		3
23/6/2017 Friday	06:00 AM	02:30 PM	TM01	77	<div><div></div></div> 52%		4
24/6/2017 Saturday	08:00 AM	05:00 PM		77	<div><div></div></div> 0%		3
28/6/2017 Wednesday	06:00 AM	02:30 PM	TM01	89	<div><div></div></div> 0%		5
29/6/2017 Thursday	06:00 AM	02:30 PM	TM01	89	<div><div></div></div> 157%		5
30/6/2017	06:00 AM	02:30 PM	TM01	89	<div><div></div></div> 195%		5

Shift level Resource Utilization


Shift Table Section

Capacity Utilization

Shift Table (in Edit mode)



Capacity Utilization



test work center 2 001 ID: WPPDS_WC2_0001_001

OVERVIEW

SHIFT TABLE

LIST OF OPERATIONS

Shifts (19)

Delete

14

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<input type="checkbox"/>	Date	Start Time	End Time	Shift Definition	Utilization %	Resource Utilization %	Downtime
<input type="checkbox"/>	20/6/2017 Tuesday	06:00 AM	02:30 PM	TM01 06:00AM-02:30F ▼	77	<div><div></div></div> 100%	
<input type="checkbox"/>		03:30 PM ⌚	04:30 PM ⌚	▼	77	<div><div></div></div> 0%	3
<input type="checkbox"/>	22/6/2017 Thursday	06:00 AM	02:30 PM	NV01 09:00AM-01:00PM	77	<div><div></div></div> 100%	5
<input type="checkbox"/>				NV02 10:00AM-09:00PM	77	<div><div></div></div> 100%	3
<input type="checkbox"/>				TM01 06:00AM-02:30PM	77	<div><div></div></div> 52%	4
<input type="checkbox"/>				TM02 02:30PM-04:30PM	77	<div><div></div></div>	
<input type="checkbox"/>				TM03 06:00PM-03:00AM	77	<div><div></div></div>	
<input type="checkbox"/>	24/6/2017 Saturday	08:00 AM ⌚	05:00 PM ⌚	▼	77	<div><div></div></div>	3
<input type="checkbox"/>	28/6/2017 Wednesday	06:00 AM	02:30 PM	TM01 06:00AM-02:30F ▼	89	<div><div></div></div> 0%	5
<input type="checkbox"/>	29/6/2017 Thursday	06:00 AM	02:30 PM	TM01 06:00AM-02:30F ▼	89	<div><div></div></div> 157%	5

3

Save Cancel

Choose
Shift Details

Shift Actions

Change
Shift Time

Change
Number of
Capacities

Change
Utilization %

Save/Cancel
Changes

Production Scheduling Board

Hide Filter Bar Filters (2) [Go](#)

Resource:

WFAL-2_00... (x) 3 More

Mode Find Slot Direction Forwards Scheduling Order

[Hide Utilization](#)

< Utilization

- Underload
- Normal Utilization
- Full Utilization
- Overload
- No Information

Utilization display

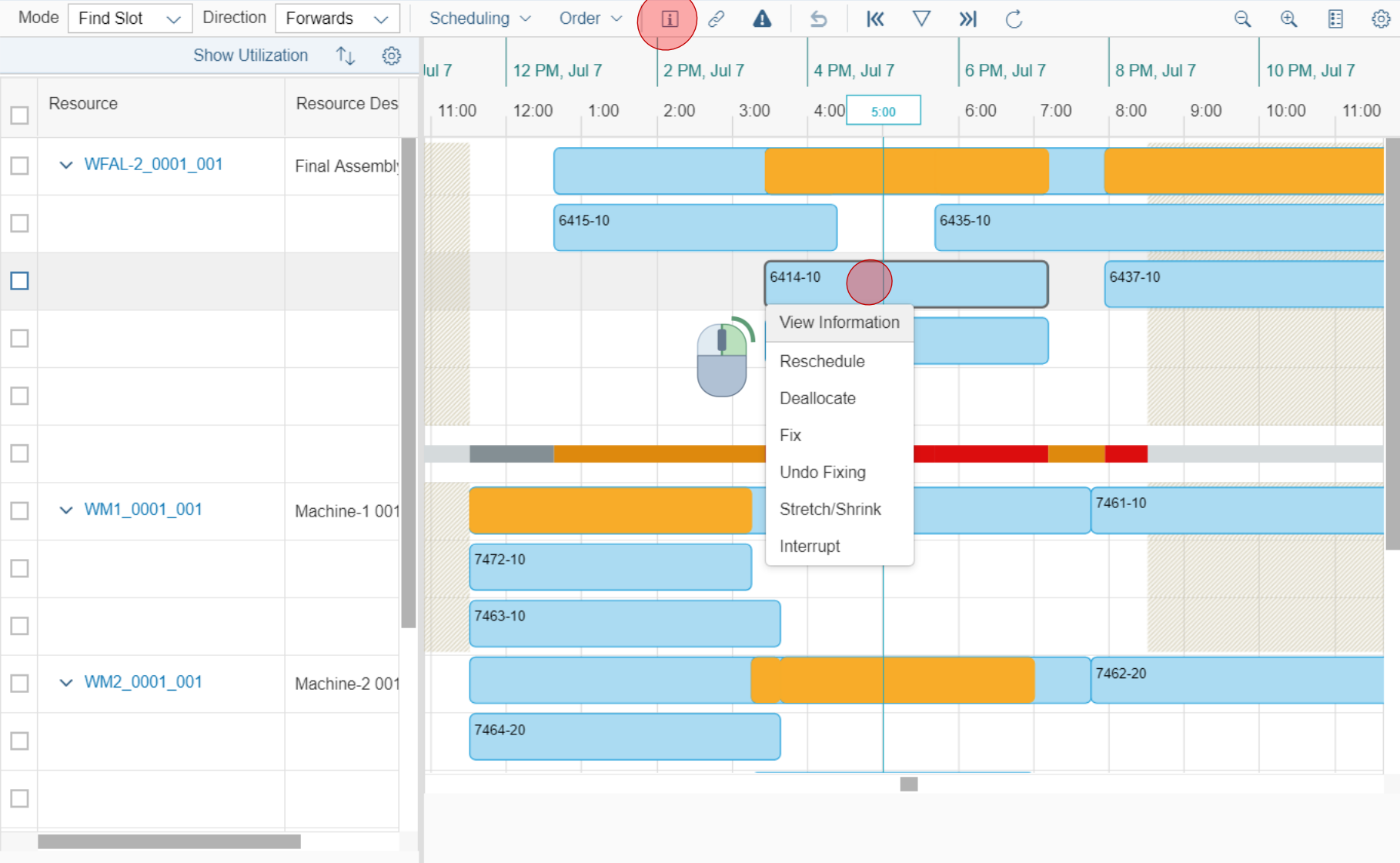
Standard

*Time Profile:
SAP001

Resource:
WFAL-2_00... 3 More

Side Panel
Opened via context menu or information button

Hide Filter Bar Filters (2) Go



Operation Information Close

Overview

Operation Number:
6414-10

Operation Start Date:
07.07.2017 03:26 PM

Operation End Date:
07.07.2017 07:11 PM

Status:
-

Product:
FG-1

Product Description:
Finished Product 1

Quantity:
10.00 EA

Component Issues

Missing Component	Quantity	Late Receipt
PA-1		04h 32mins

- Alternative Resources
- Order
- Setup
- Pegged Requirement

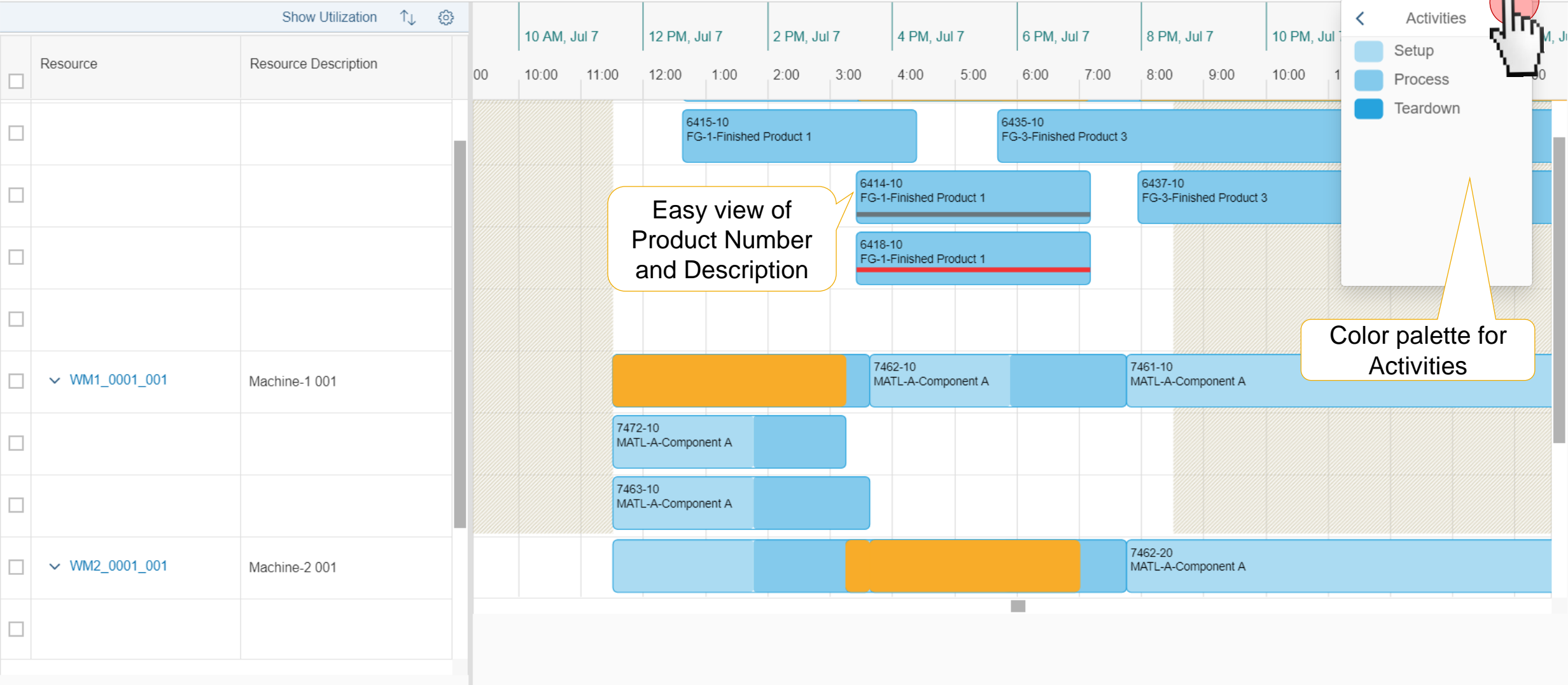
Standard *

Hide Filter Bar Filters (2) Go

*Time Profile: Resource:

SAP001 WFAL-2_00... 3 More

Mode Find Slot Direction Forwards Scheduling Order



Easy view of Product Number and Description

Color palette for Activities

Activities

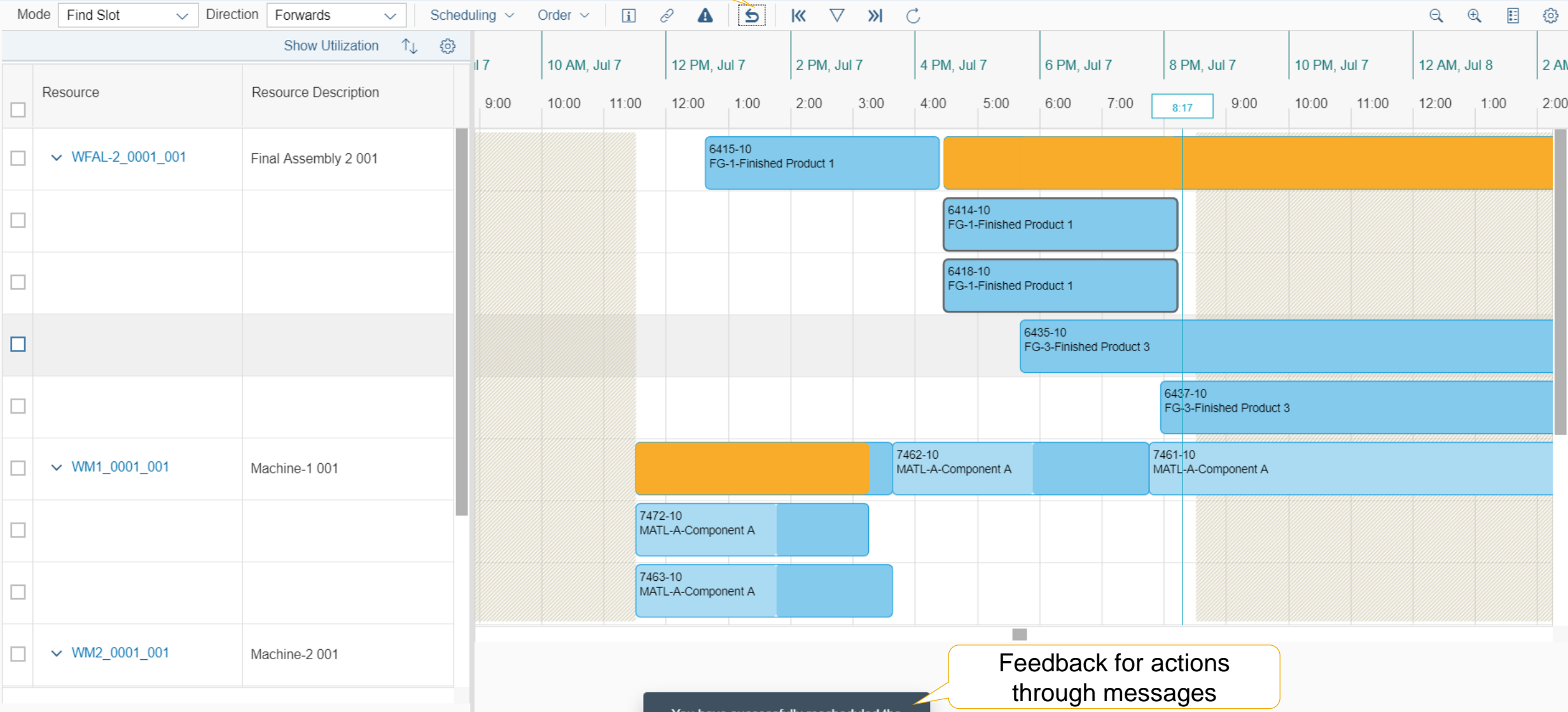
- Setup
- Process
- Teardown

Standard *

Hide Filter Bar Filters (2) Go

*Time Profile: SAP001 Resource: WFAL-2_00... 3 More

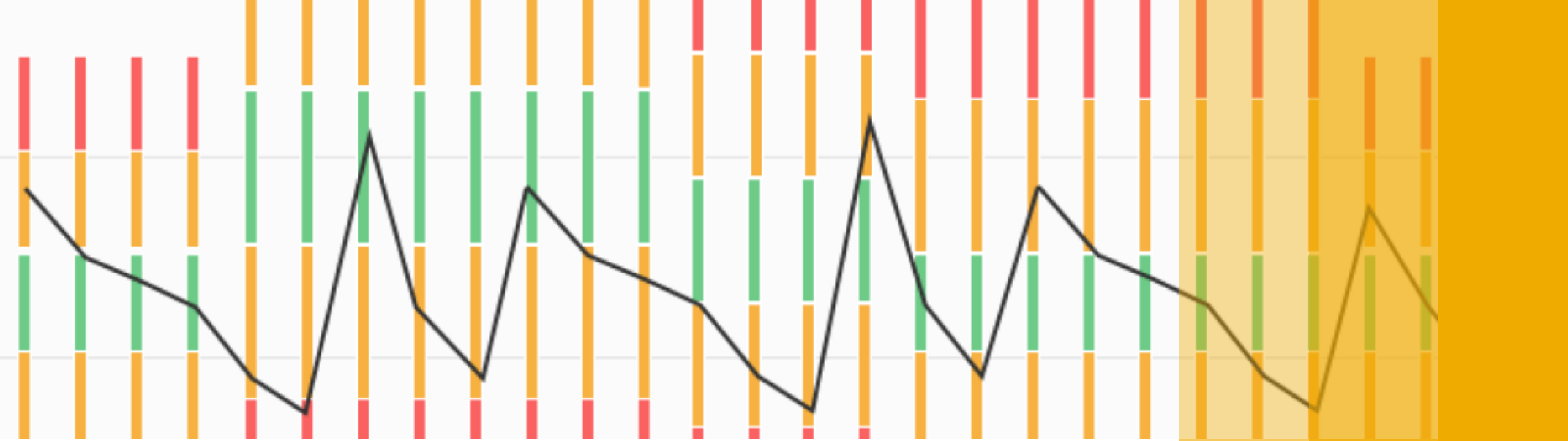
Undo option for some scheduling actions



Feedback for actions through messages

You have successfully rescheduled the operations 6414-10, 6418-10

- **SAP S/4HANA for Manufacturing planning and scheduling**
aka. PP/DS
- **Demand-Driven Replenishment**
aka. DDMRP

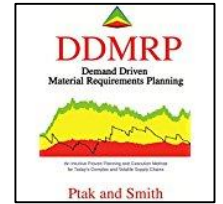


Demand Driven Replenishment in SAP S/4HANA

PUBLIC

DMRP Philosophy - A New Planning Paradigm

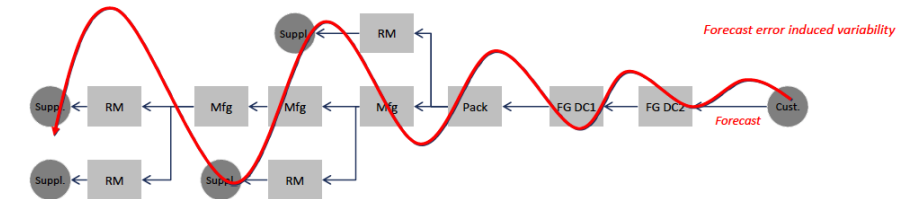
Enable stable material Flow



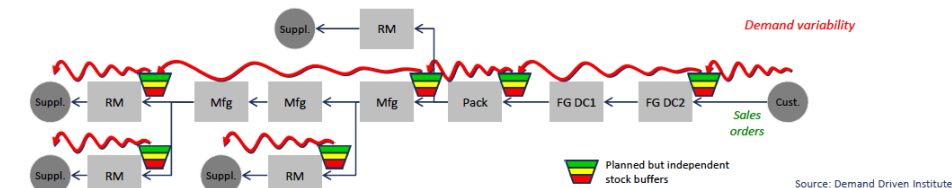
Core principles of FLOW:

- **Dampening the effect of variation** by **decoupling** lead-times **through buffers** & identifying placement and size of buffer(s) to ensure
 - the shortest possible lead-time and optimal amount of inventoryto deal with variation at minimum cost.
- **Pull replenishment on actual demand**, not forecasts.
 - the best use of our assets is to make what is needed
 - ever increasing volatility in demand makes accurate forecasting challenging
- Achieving **visibility and prioritization of activities** by exposing downstream inventory and demand status to upstream sources to facilitate demand-driven prioritization of supply.

Traditional planning facilitates the amplification of variability in the supply chain



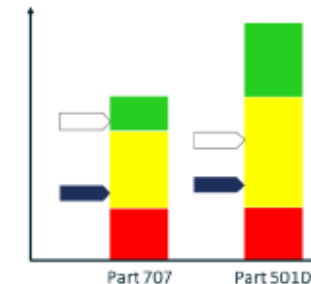
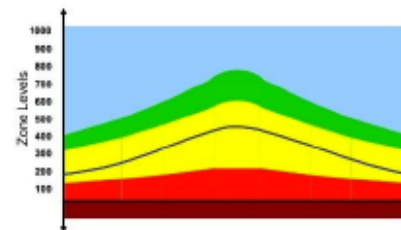
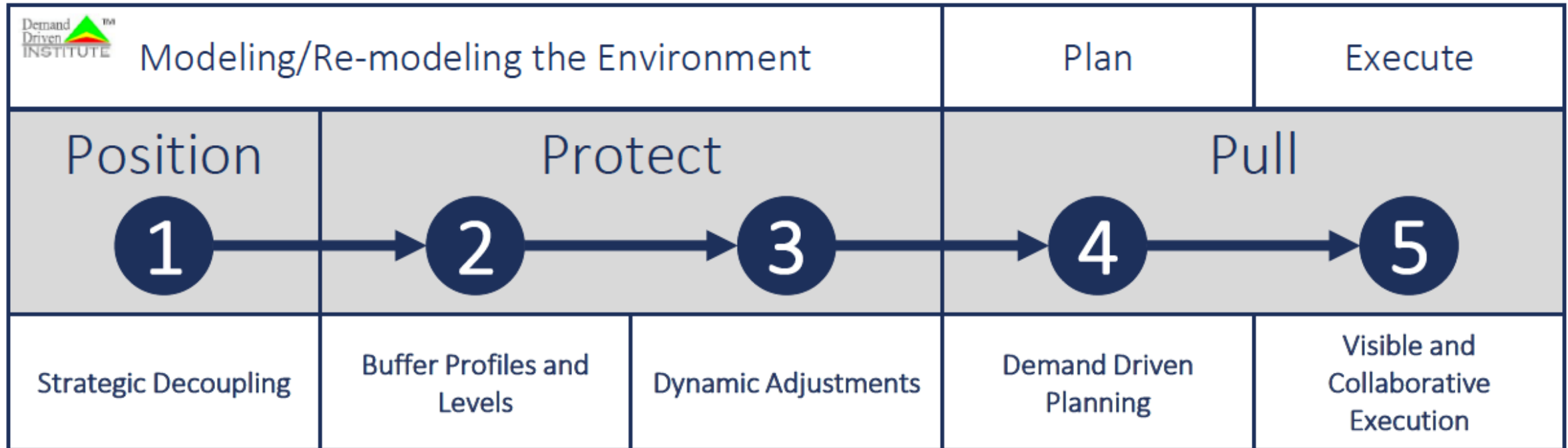
Demand Driven planning uses strategically positioned stock buffers and pull replenishment to achieve stable material flow



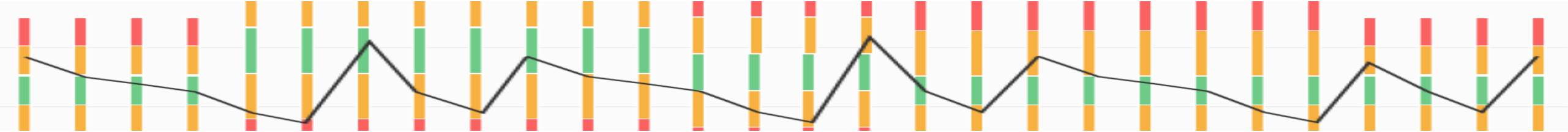
Source: Demand Driven Institute

DDMRP Methodology

The Steps



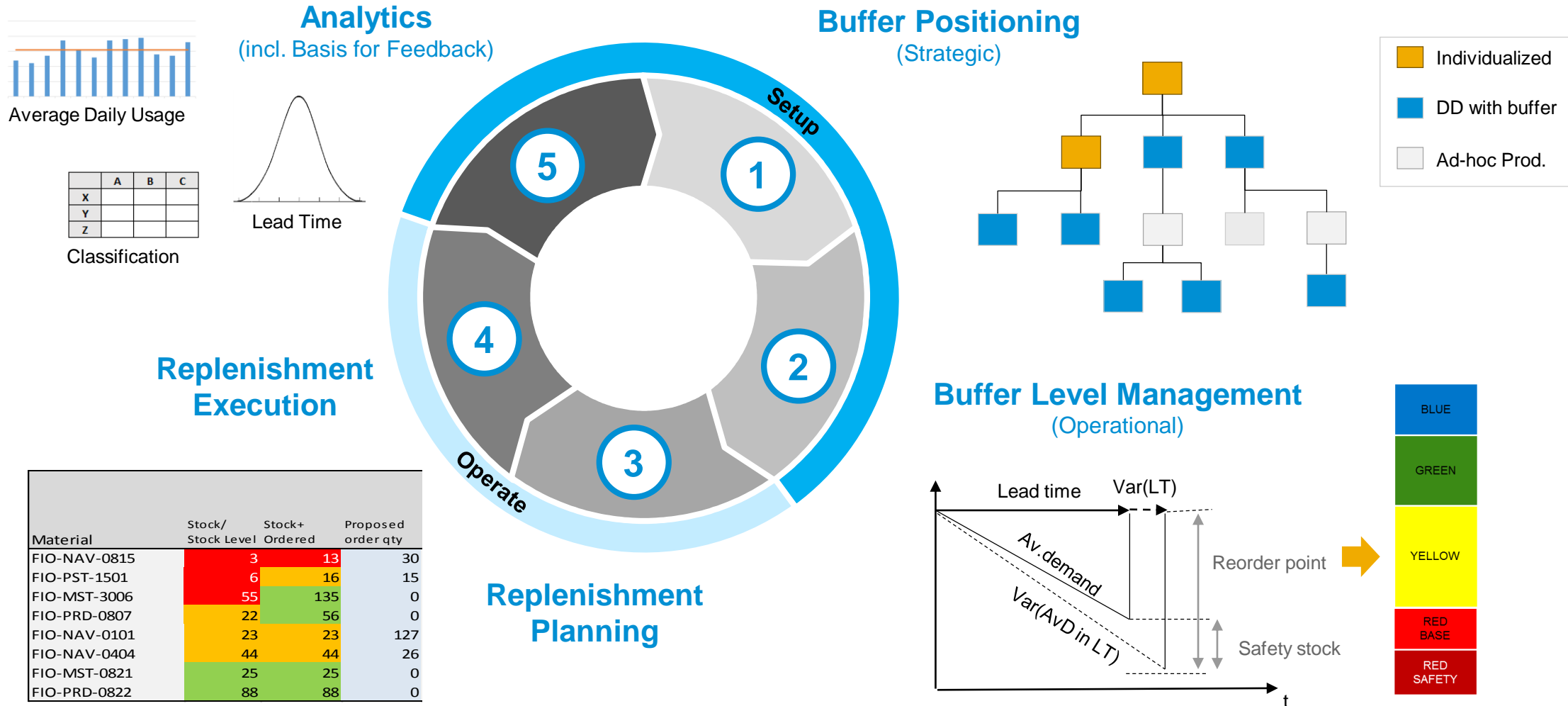
Order #	OH Buffer Status
MO 12379	
MO 12401	12% (RED)
MO 12465	27% (RED)
MO 12367	33% (YELLOW)
MO 12411	41% (YELLOW)



Demand-Driven Replenishment in SAP S/4HANA 1709

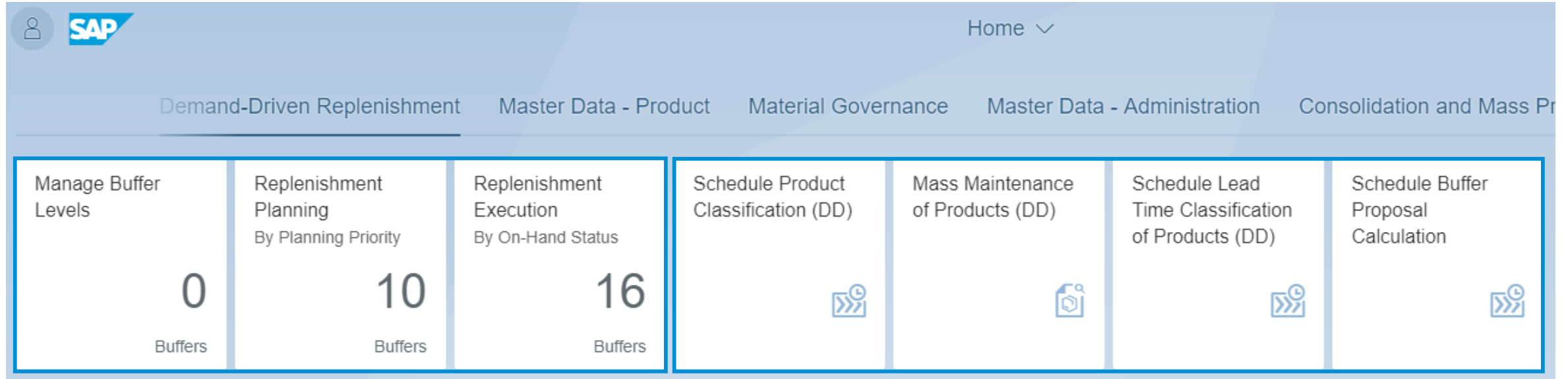
SAP Demand-Driven Replenishment

Planned End-to-End Process Flow in S4HANA



SAP Demand-Driven Replenishment Solution Overview

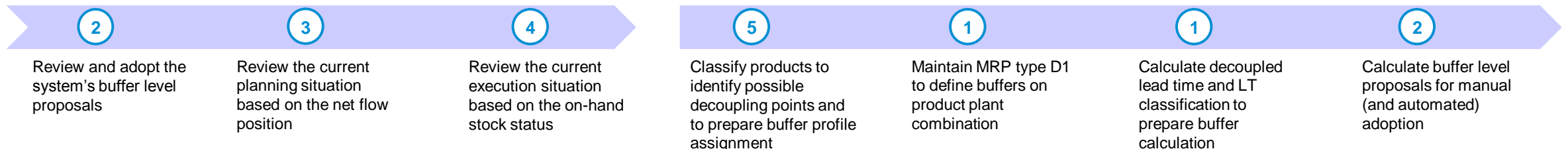
Fiori Launchpad

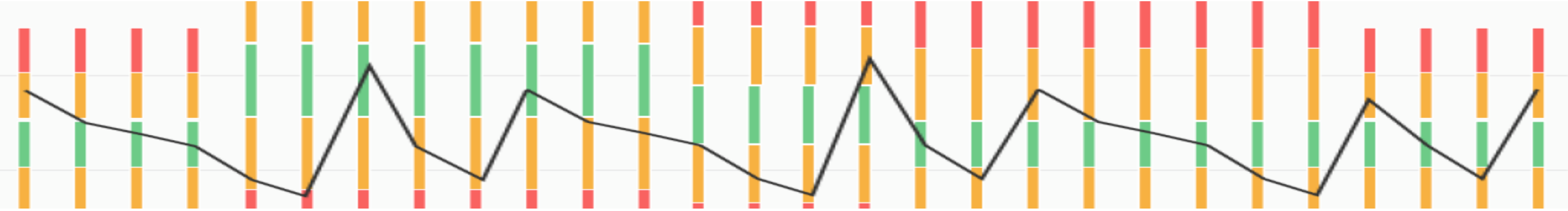


Business Applications with User Interaction

Configuration & Setup Apps

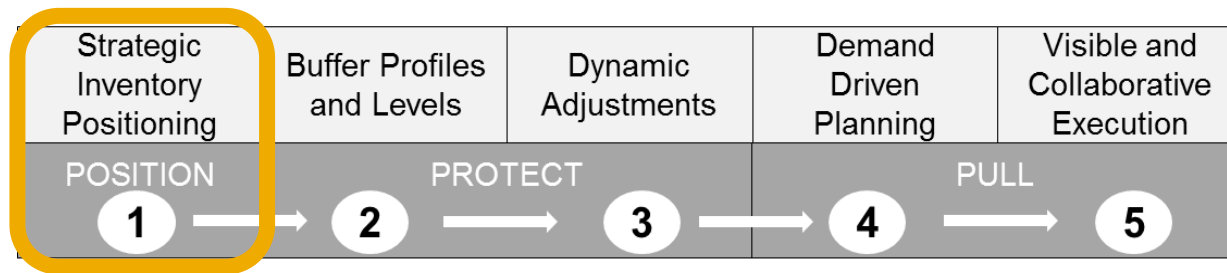
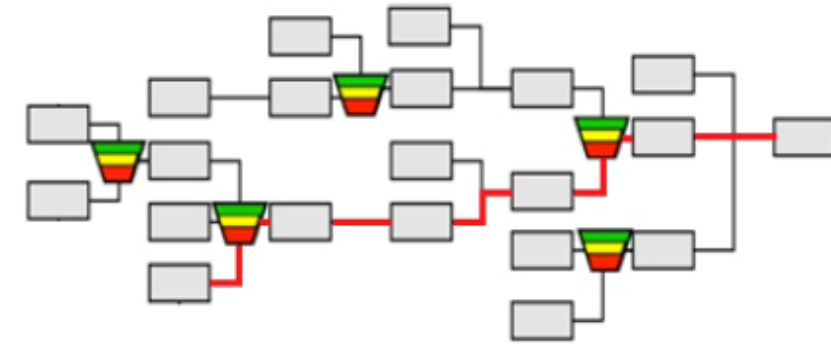
Mapping to the End-to-End Process





1 Strategic Decoupling

- ▶ Definition of optimal stock buffer decoupling points
- ▶ Determination of decoupled lead times



Prepare Buffer Positioning

Product Classification for Demand-Driven Replenishment

Product Classification for Demand-Driven Replenishment

New

General Information

Job Template:

Product Classification for Demand-Driven Replenishment

Job Name:

Product Classification for Demand-Driven Replenishment

Scheduling Options

Add More Scheduling Options

Start Immediately:

☒

Recurrence Pattern:

Single Run

Start:

Start Date

Start Time

Time Zone:

Walldorf Time

Selection Criteria

Product Selection Criteria

Product:

Product Group:

Plant:

MRP Area:

Number of Days (Past):

Parameters

Thresholds for Value (ABC) Classification

Usage Value in %:

☒

A (High):

B (Medium):

C (Low):

Thresholds for BOM Usage (PQR) Classification

BOM Usage:

☒

P (High):

Q (Medium):

R (Low):

<

Thresholds for Variability (XYZ) Classification

Coefficient of Variation:

☒

X (Low):

Y (Medium):

Z (High):

>

Job Parameters

Maintain Logs:

☒

Parallel Processing:

☐

Schedule

Check

Template

Cancel

Thresholds for Value (ABC) Classification

Usage Value in %: ☒

A (High): 70

B (Medium): 20

C (Low): 10

Thresholds for Variability (XYZ) Classification

Coefficient of Variation: ☒

X (Low): 0,25

Y (Medium): 0,50

Z (High): >

Thresholds for BOM Usage (PQR) Classification

BOM Usage: ☒

P (High): 4

Q (Medium): 2

R (Low): <

Buffer Positioning by MRP Type Assignment

New MRP Type = D1 (Demand-Driven)

Mass Maintenance of Products (DD)

Standard

Product:

Plant:

MRP Area:

MRP Type:

Value Indicator:

Variability Indicator:

Lead Time Indicator:

BOM Usage Indicator:

Horizon for Past (in Days):

Lot Sizing Procedure:

Minimum Lot Size:

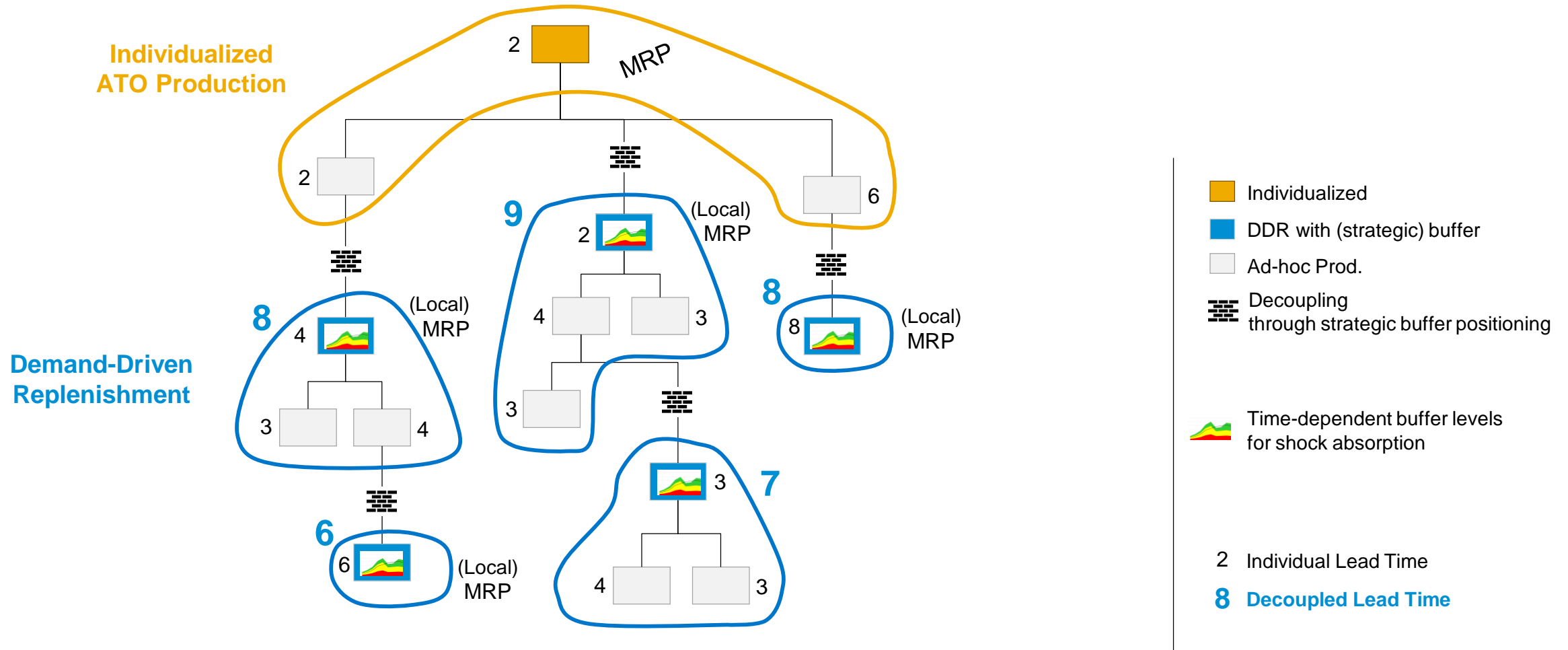
Adapt Filters

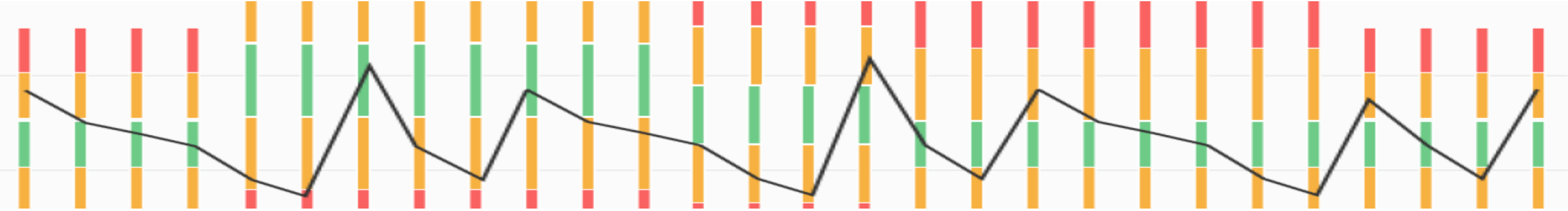
Go

Products (2,754)	Standard	Mass Change								
Product	Plant	MRP Area	MRP Type	Value Indicator	Variability Indicator	Lead Time Indicator	BOM Usage Indicator	Horizon for Past (in Days)	Lot Sizing Procedure	Minimum Lot Size
				C (Low)	Y (Medium)		Q (Medium)	0		0.000
42	1010	1010		C (Low)	X (Low)	E (Short)	R (Low)	0		0.000
43	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	30	EX	0.000
44	1010	1010		C (Low)	X (Low)	E (Short)	R (Low)	0		0.000
45	1010	1010	M0	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	1.000
47	1010	1010	M0	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
48	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
54	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
55	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
56	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
57	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
58	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (Low)	0	EX	0.000
59	1010	1010	PD	C (Low)	X (Low)	E (Short)	R (High)	0	EX	0.000

Decoupled Lead Time

Input for buffer sizing





2

Buffer Profiles and Levels

- ▶ Segmentation-based stock sizing approach
- ▶ Definition of safety zone, cycle stock zone and lead-time/re-order zone



Buffer Sizing

Based on Decoupled Lead Time & DLT Classification

Decoupled Lead Time (EFG) Classification of Products (DD) New

General Information

Job Template: Decoupled Lead Time (EFG) Classification of Products (DD)

Job Name: Decoupled Lead Time (EFG) Classification of Products (DD)

Scheduling Options Add More Scheduling Options

Start Immediately: ☒ Recurrence Pattern: Single Run

Start: Start Date Start Time

Time Zone: Walldorf Time

Selection Criteria

Product Selection Criteria

Product:

Product Group:

*Plant:

MRP Area:

*Number of Days (Past):

Parameters

DLT Thresholds for Make (in Days)

E (Short):

F (Medium):

G (Long):

DLT Thresholds for Buy (in Days)

E (Short):

F (Medium):

G (Long):

DLT Thresholds for Transfer (in Days)

E (Short):

F (Medium):

G (Long):

Job Parameters

Parallel Processing: ☐

Maintain Logs: ☒

Schedule Check Template Cancel

DLT Thresholds for Make (in Days)

E (Short):

F (Medium):

G (Long):

DLT Thresholds for Transfer (in Days)

E (Short):

F (Medium):

G (Long):

DLT Thresholds for Buy (in Days)

E (Short):

F (Medium):

G (Long):

Buffer Sizing

Calculation Rules

SAP Material Master

Maximum Stock

[MARC-MABST]

Reorder Point

[MARC-MINBE]

Safety Stock

[MARC-EISBE]

Min Safety Stock

[MARC-EISLO]



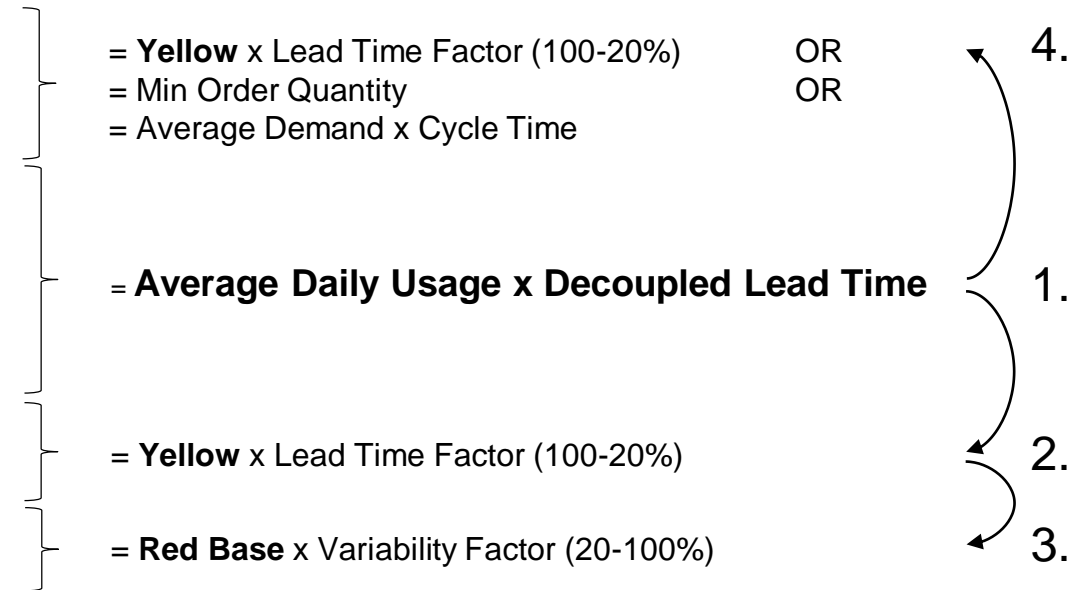
Demand Driven Institute

OTOG – Over Top of Green

TOG – Top of Green

TOY – Top of Yellow

TOR – Top of Red



Buffer Sizing

Create Buffer Level Proposals

SAP Material Master

Maximum Stock
[MARC-MABST]

Reorder Point
[MARC-MINBE]

Safety Stock
[MARC-EISBE]

Min Safety Stock
[MARC-EISLO]



Demand Driven Institute

OTOG – Over Top of Green
TOG – Top of Green

TOY – Top of Yellow

TOR – Top of Red

New Job ▾

Buffer Proposal Calculation for Demand-Driven Replenishment New

General Information

Job Template: Buffer Proposal Calculation for Demand-Driven Replenishm... ▾

Job Name: Buffer Proposal Calculation for Demand-Driven Replenishment

Scheduling Options Add More Scheduling Options

Start Immediately: ☒

Recurrence Pattern: Single Run

Start: Start Date Start Time

Time Zone: Walldorf Time

Parameter Section

Selection Criteria

Product:

Product Group:

*Plant:

MRP Area:

Parameters for JOB

Decoupled Lead Time: ☒

Average Daily Usage: ☒

Calculate DLT on First Run: ☒

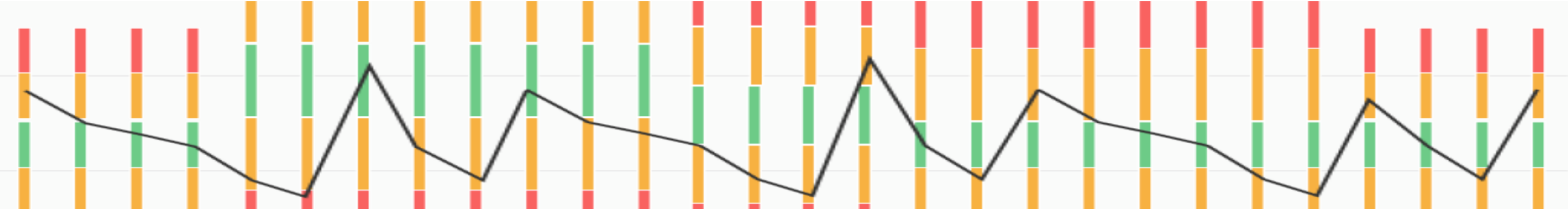
Adopt Buffer Proposals: ☐

Overwrite in Product Master: ☐

Parallel Processing: ☐

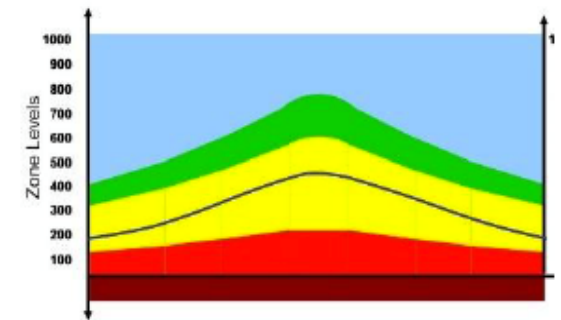
Maintain Logs: ☒

Schedule Check Template Can







3 Dynamic adjustments


- ▶ Time-phased buffer stock levels
- ▶ Anticipation of seasonality, trends & significant promotions







Manage Buffer Level


Worklist - Review and Adopt Buffer Level Proposals




Manage Buffer Levels 




Standard * 





Editing Status:


All 

Proposal Status:


ALL 

Product: 


Product Group: 

Plant: 


Procurement Type:




Value Indicator:




Lead Time Indicator:




Variability Indicator:





BOM Usage Indicator:



Max Stock Deviation:

I(=0) 

Adapt Filters (2)  

Products (3) | Standard 

Adopt

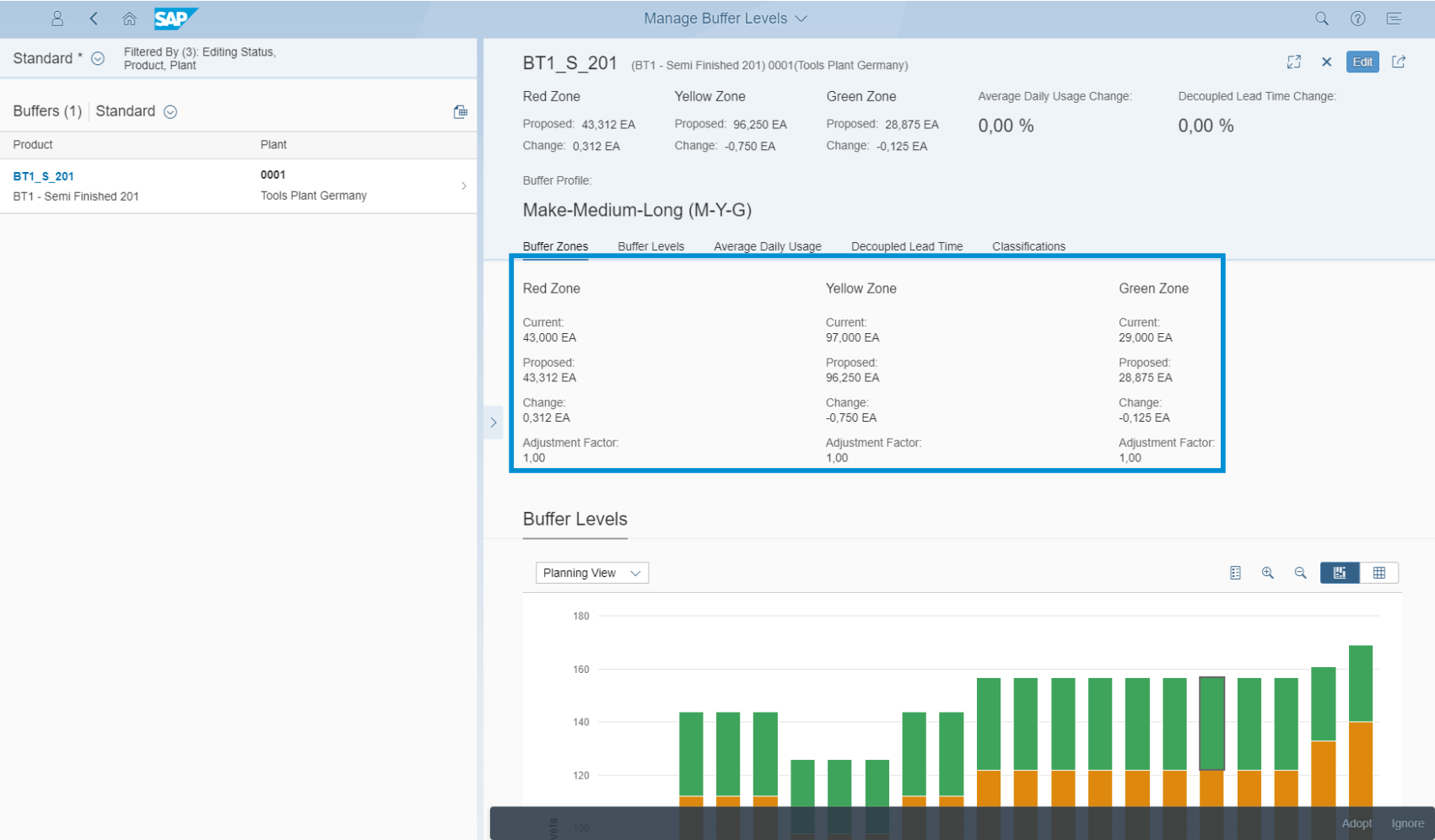
Ignore





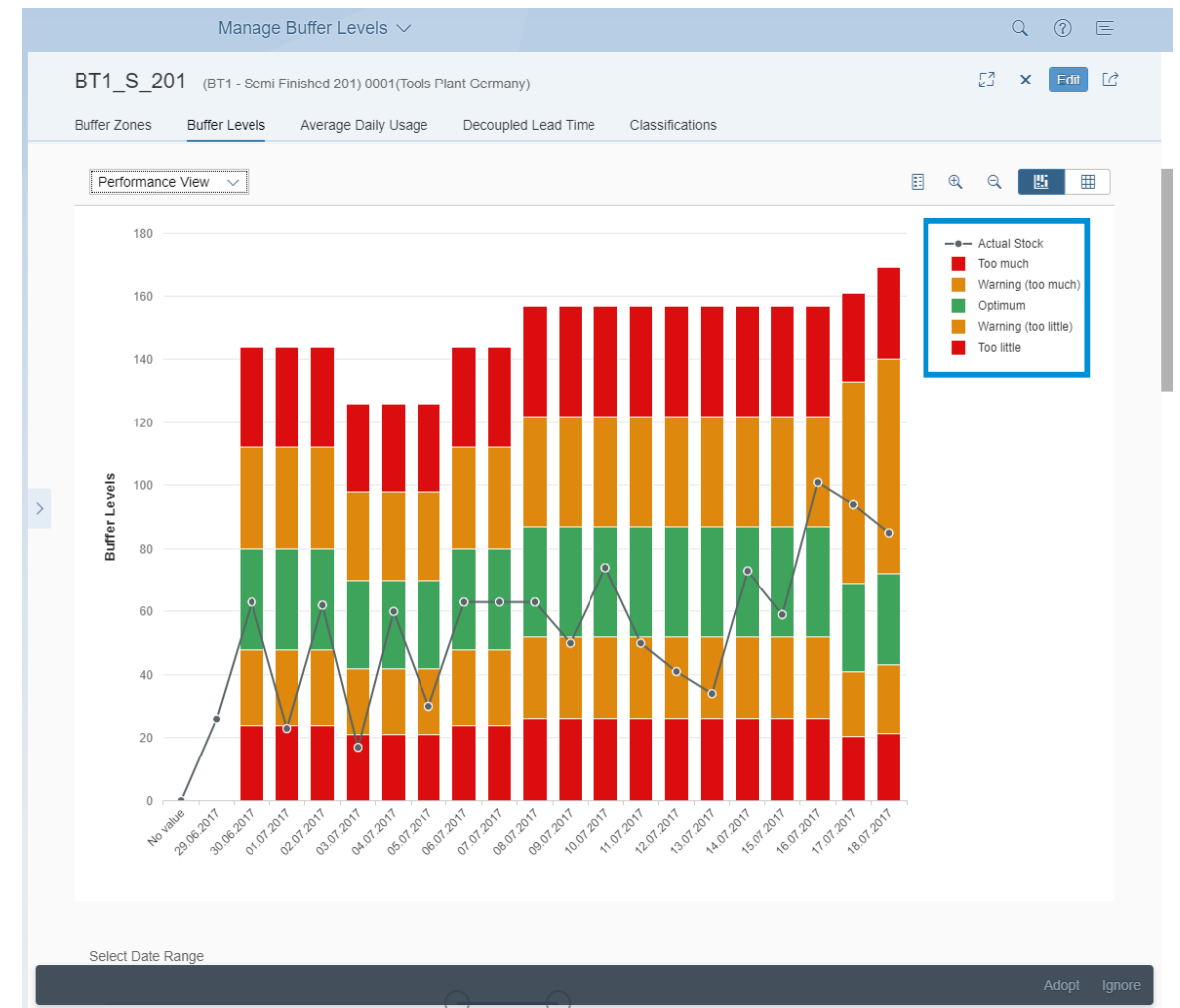
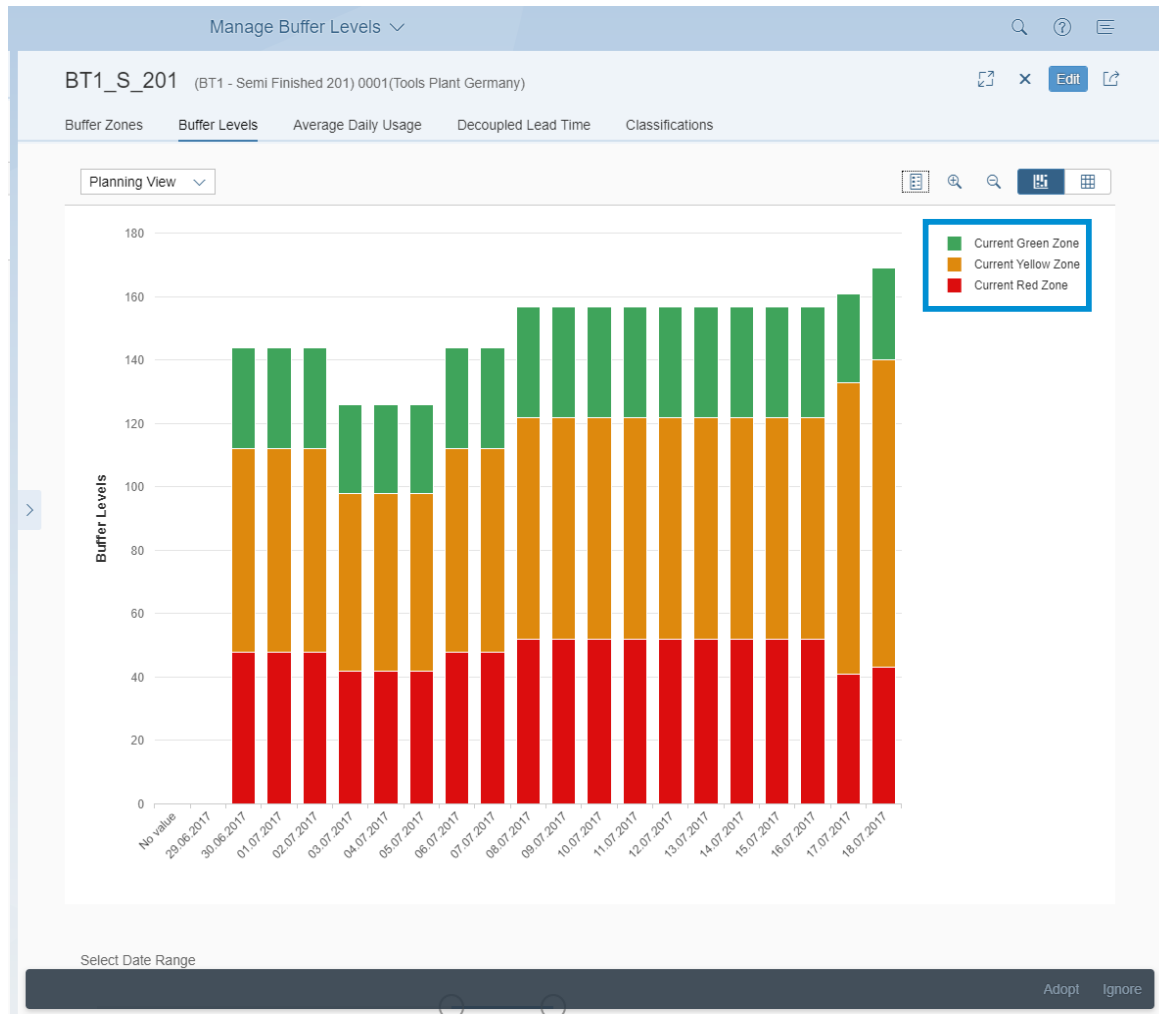
Buffer Proposal Details

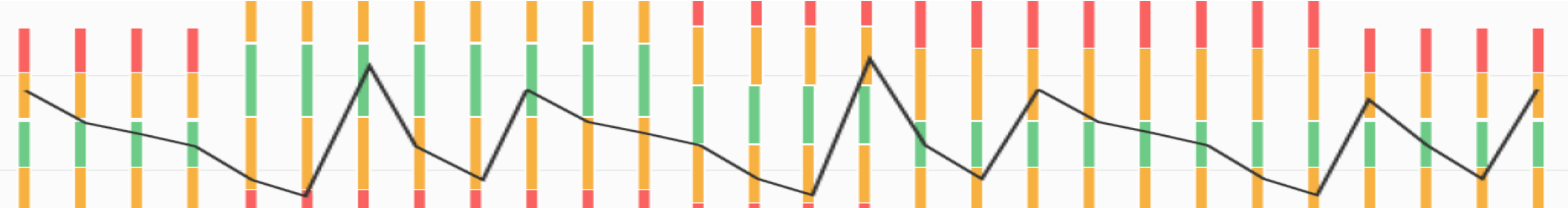
Buffer Zones & Zone Adjustment Factors



Buffer Proposal Details

Buffer Levels and On-Hand Performance





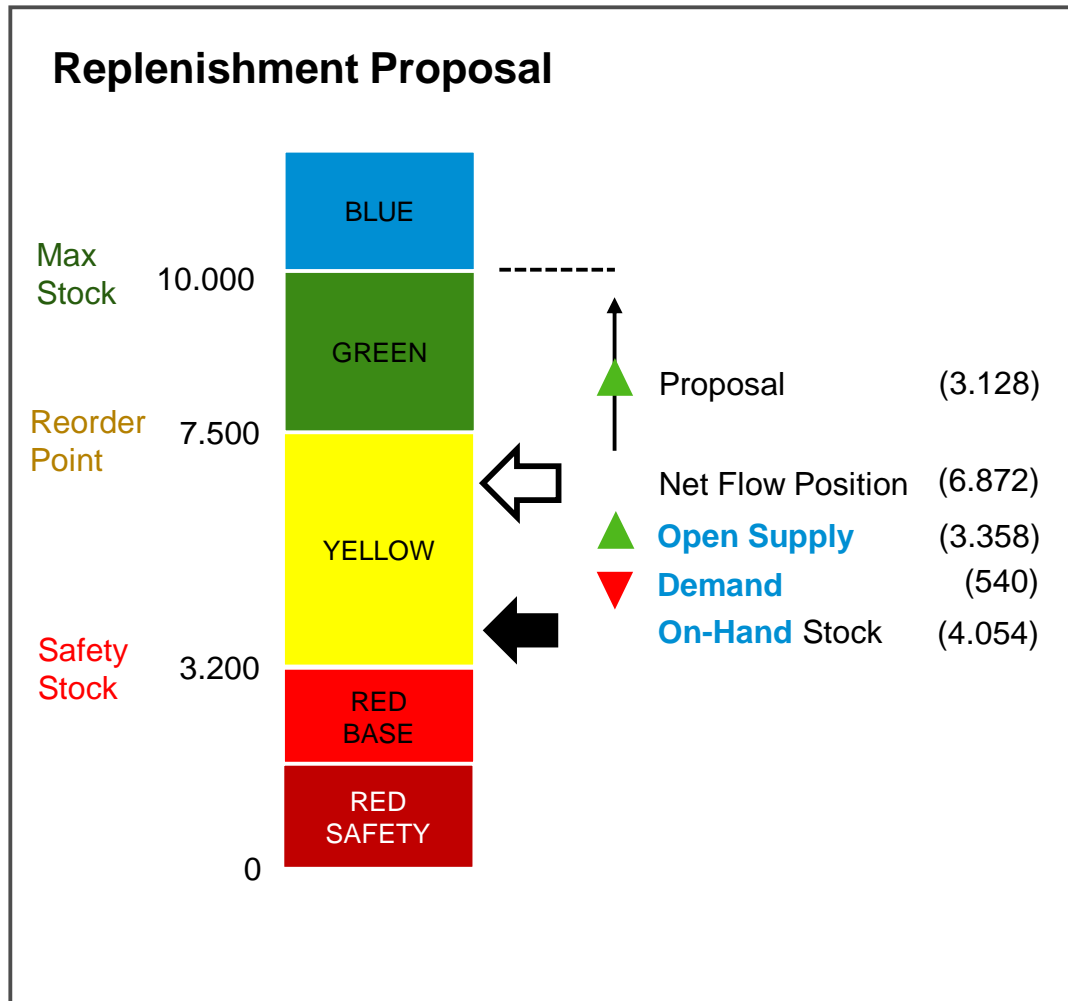
4

Demand Driven Planning

- Supply elements are triggered if the available stock drops into the rebuild zone (yellow zone)

Basics

Operational Replenishment: Net Flow Position, Spike Handling



On-hand balance (**On-hand** stock)

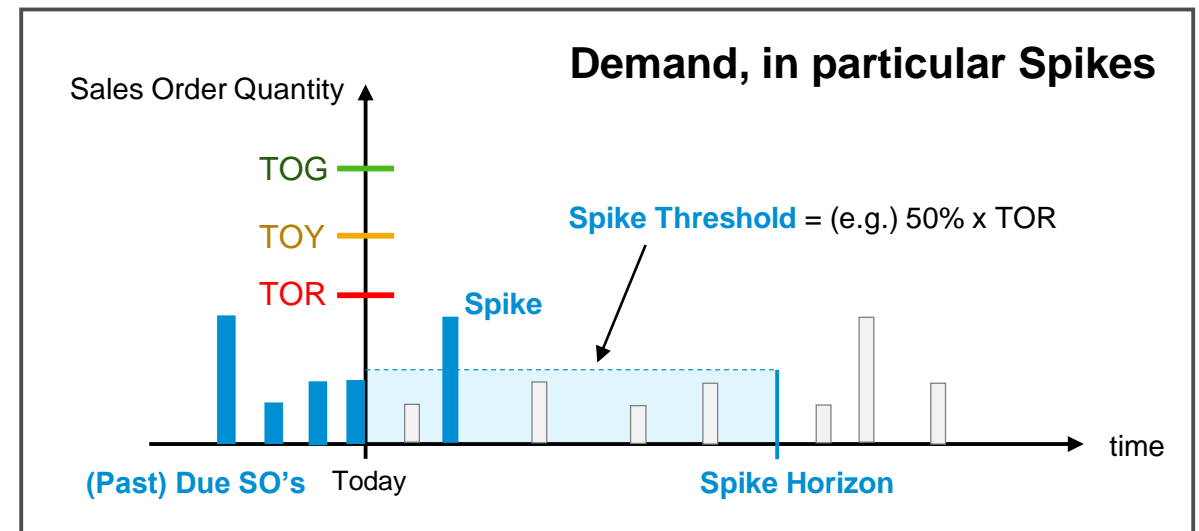
- Quantity being physically in stock

On-order stock (**Open Supply**)

- Total of all outstanding replenishment orders

Actual demand (**Demand**)

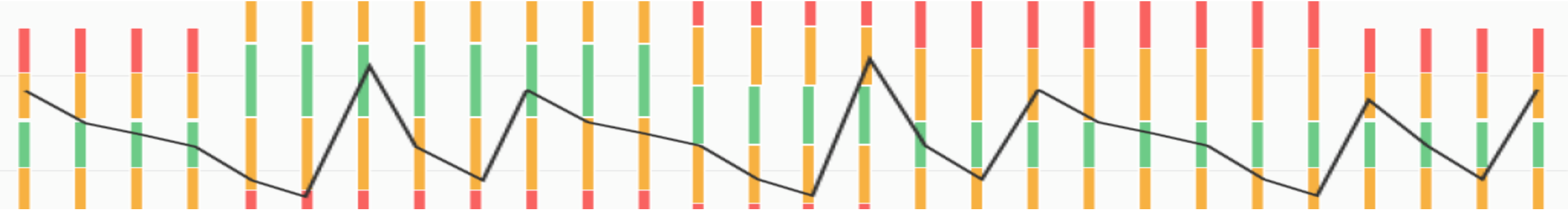
- Sales orders** past-due or due today + **qualified spikes**



Monitor the Planning Priority

(Net Flow Position vs. Reorder Point)

Demand-Driven Replenishment							
Standard * Filtered By (2): Planning Priority Status, Product							
Products (4)							
Product	Product Description	Planning Priority	Net Flow Position	Proposed Quantity	On-Hand Buffer Status	On-Hand Stock	Open Supply
BS_DDR_SF_M1	DDR SF1	10.00 %	2 EA	18 EA	33.00 %	2 EA	0 EA
SEMIFIN_008_DD_2	SemiFin_008_DD_2_DESC	22.00 %	2 EA	7 EA	74.00 %	2 EA	0 EA
BT1_S_201	BT1 - Semi Finished 201	50.00 %	85 EA	84 EA	198.00 %	85 EA	0 EA
BT1_S_202	BT1 - Semi Finished 202	75.00 %	150 EA		200.00 %	150 EA	0 EA



SAP S/4HANA Demand-Driven Replenishment

Replenishment Execution

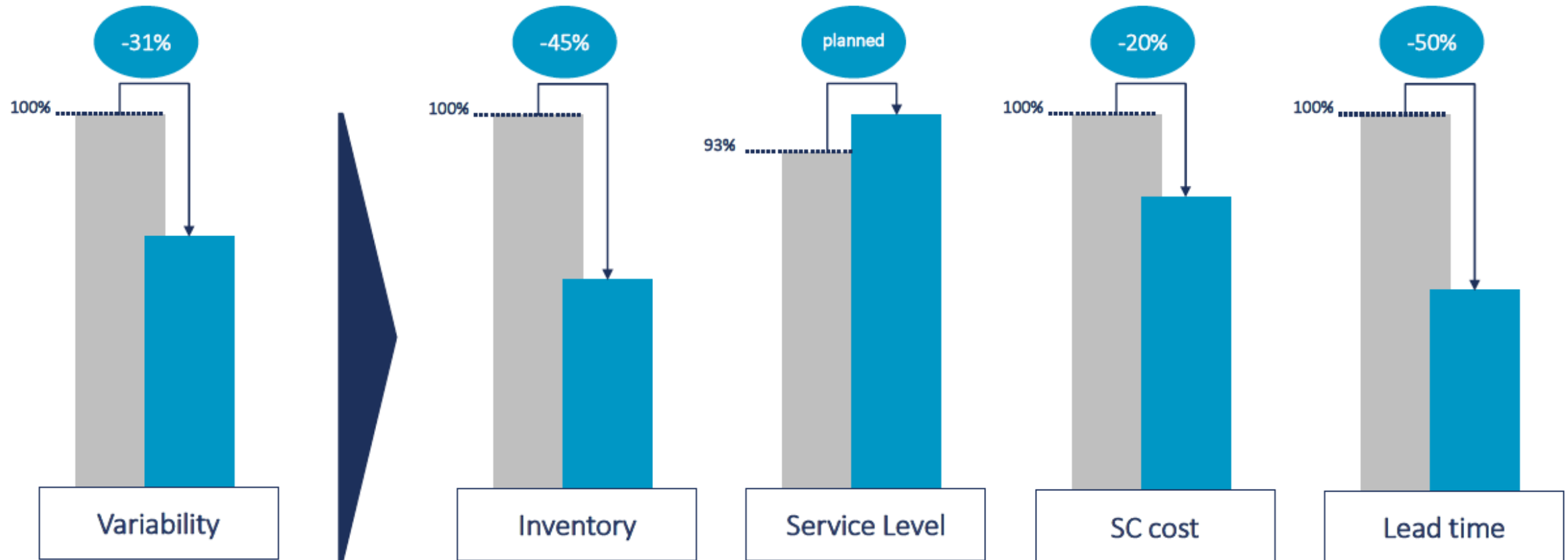
Monitor the On-Hand Buffer Status

Demand-Driven Replenishment					
Standard * Filtered By (2): On-Hand Stock Status, Product					
Products (6)					
Product	Product Description	On-Hand Buffer Status	On-Hand Stock	Open Supply	
BS_DDR_SF_M1	DDR SF1	! 33.00 %	2 EA	0 EA	
SEMIFIN_0012_DD_1	SemiFin_0012_DD_1_DESC	! 35.00 %	7 EA	493 EA	
SEMIFIN_009_DD_3	SemiFin_009_DD_3_DESC	! 23.00 %	7 EA	112 EA	
SEMIFIN_009_DD_5	SemiFin_009_DD_5_DESC	! 23.00 %	7 EA	63 EA	
SEMIFIN_008_DD_2	SemiFin_008_DD_2_DESC	! 74.00 %	2 EA	0 EA	
SEMIFIN_005_DD_1	SemiFin_005_DD_1_DESC	! 70.00 %	7 EA	193 EA	

Recap

Why DDMP?

DDMRP – Achieving outstanding results



Ďakujem za pozornosť

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