Features of MRP Live in S/4HANA

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SAP Run Simple

Target Audience

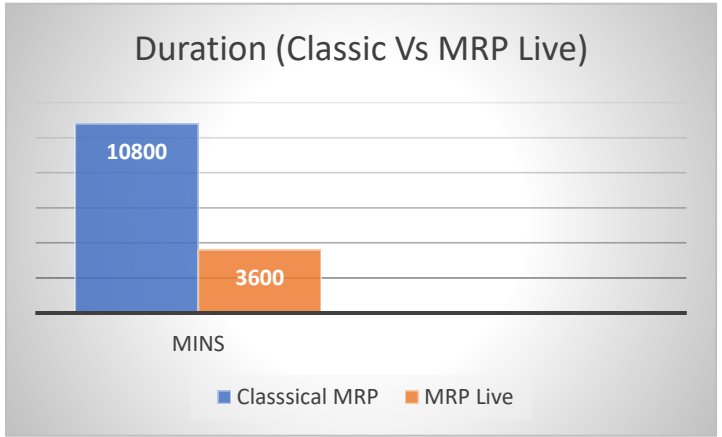
- Project manager
- SCM Consultant
- SME’s
- SAP PP beginners
- Business owner’s

Contents

- Technical changes in MRP Live
- Optimization of MRP Run time duration
- Flexible Source determination
- Fiori App for MRP Live

Features of MRP Live (DB changes)

- Many calculations in MRP Live are implemented in SQLScript/CDS views/AMDPs running on the database server as opposed to classic ABAP code, which is performed on the application server. Enhancements or BAdI implementations of the classic MRP run does not work with MRP Live if the material is supported/planned within MRP Live.
- MRP Live can force materials into classic MRP if materials use a setup which is not supported in MRP live
- The simplified data model that comes with SAP S/4HANA has played a big role in achieving this end. The underlying SAP HANA database eliminates many of the tables otherwise needed to facilitate lookups and reporting with traditional databases. Running in memory, SAP S/4HANA Live also completes computational tasks in a fraction of the time.



Features of MRP Live (DB changes)

- A new set of AMDP BAdIs will be available for MRP Live from SAP S/4HANA on-premise edition 1603. BAdI implementations of the classic MRP have to be translated into AMDP.
- In the classic Business Suite, reports RMMDVM10 and RMMDVM20 made a first setup of planning file entries and checked planning file consistency for operative planning. In SAP S/4HANA, run report PPH_SETUP_MRPRECORDS instead.

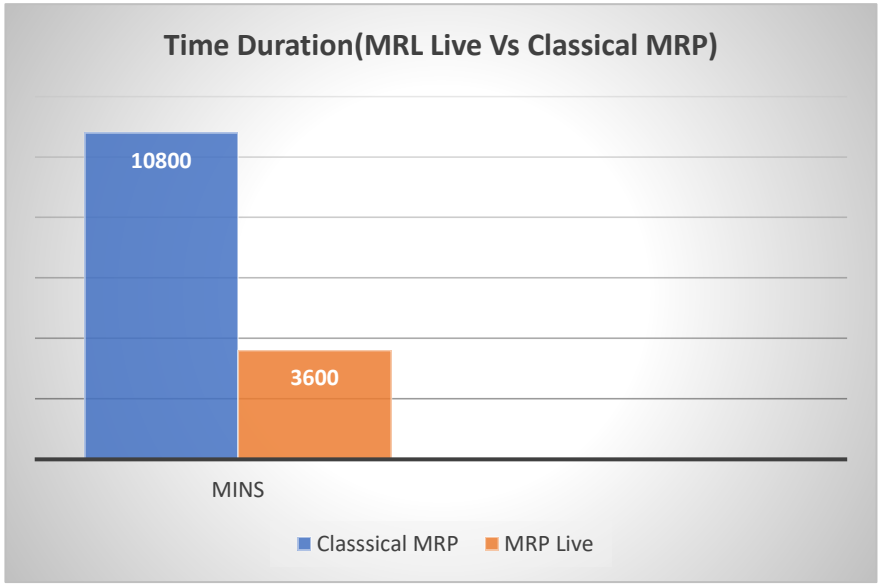
Planning File	
Classic MRP	MRP Live
RMMDVM20	PPH_SETUP_MRPRECORDS
RMMDVM20	
RMMDVL10	PPH_SETUP_MRPRECORDS_SIMU
RMMDVL20	

Features of MRP Live (DB changes)

- The original planning files MDVM/MDVL and DBVM/DBVL no longer exist. They were replaced by the new planning file PPH_DBVM.
- If your custom code creates planning file entries directly by updating or inserting into tables MDVM, MDVL, DBVM, or DBVL, then you have to adapt the custom code and call function module DISPSATZ_ERSTELLEN instead. If your custom code only reads from the tables DBVM or DBVL, no adaption is necessary. Queries from table DBVM or DBVL will be redirected to the new planning file PPH_DBVM by compatibility views. See note 2227059.
- Planning Horizon restriction

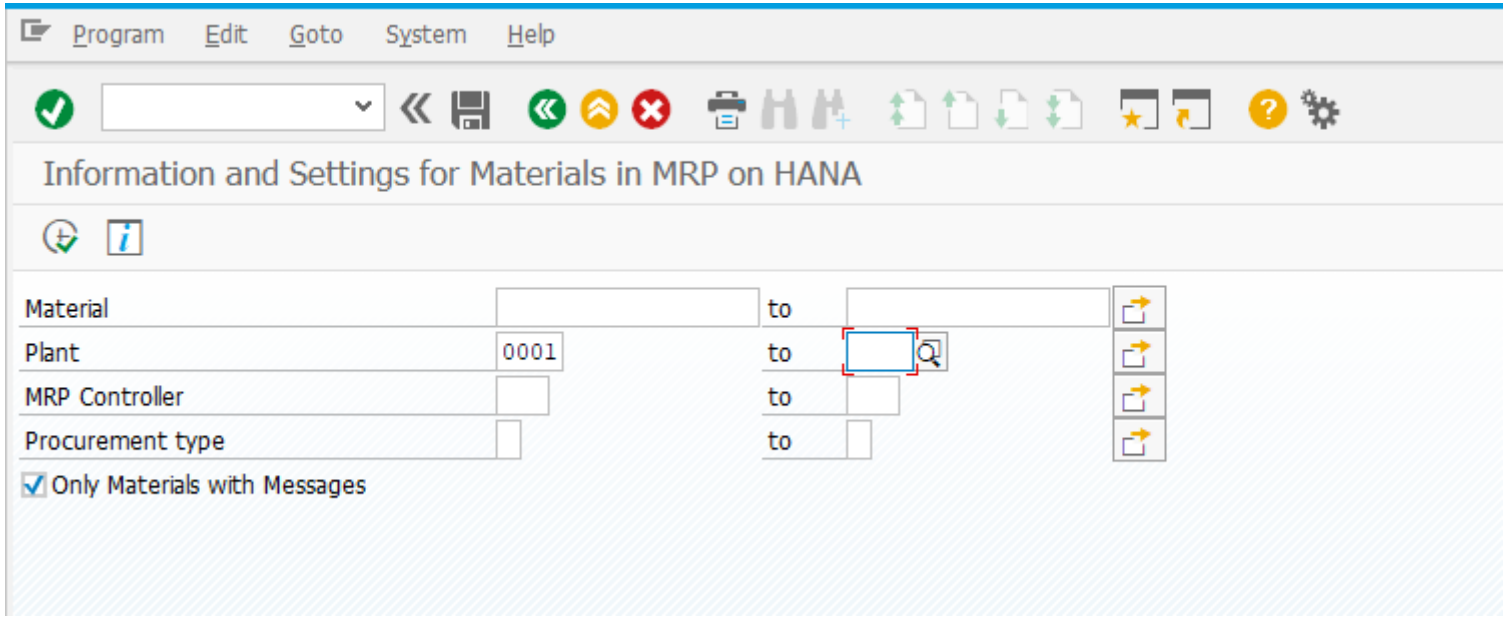
Features of MRP Live (Supply chain)

- Faster reaction to demand changes reduces the risk of stock-outs and means that you can reduce safety stocks
- The planning of a selected material in a selected location and its supplying locations and the components in the production location or locations, multilevel across the complete supply chain.



Features of MRP Live (Supply chain)

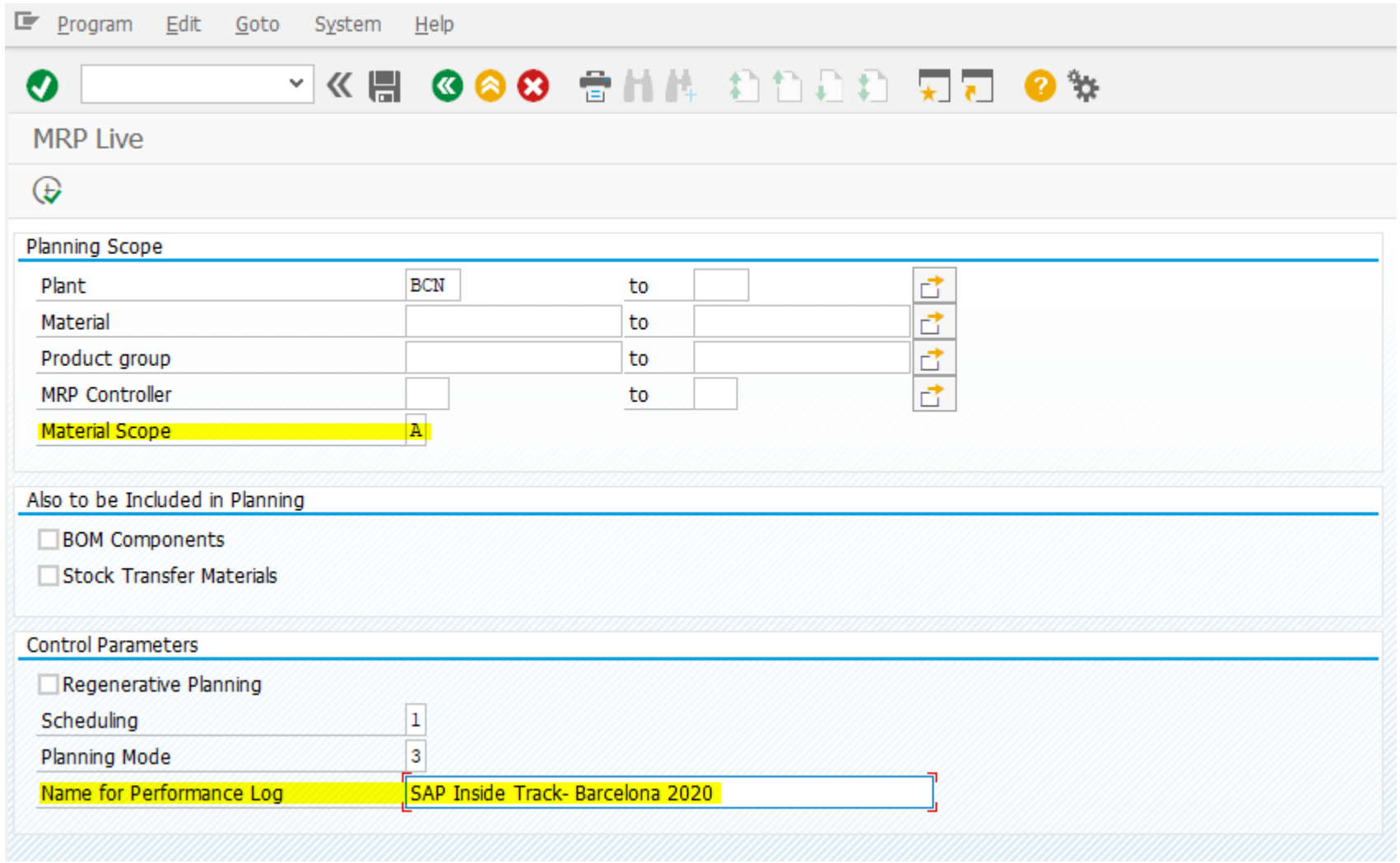
- This T code will have option know the material which are planned in Classical MRP and MRP Live also if any Issue with any material can be fixed through this t code
- MD_MRP_MATERIAL_INFO



Features of MRP Live (Supply chain)

- Influencing the parallelization of MRP Live in Hana (PPHMRPSET)
- The definition of the planning scope is more flexible.MRP Live allows you to plan a set of materials with all components, materials for which a certain production planner is responsible, or one material across all plants (Screen -2)
- If a material is transferred from one plant to another then the stock-transfer requirement is not known in the supplying plant until after the material has been planned in the receiving plant. MRP Live determines the sequence in which materials have to be planned across several plants. (Screen-3 & Screen-4)
- MRP Live is a prerequisite for the future production planning and detailed scheduling PP/DS solution in SAP S/4HANA.

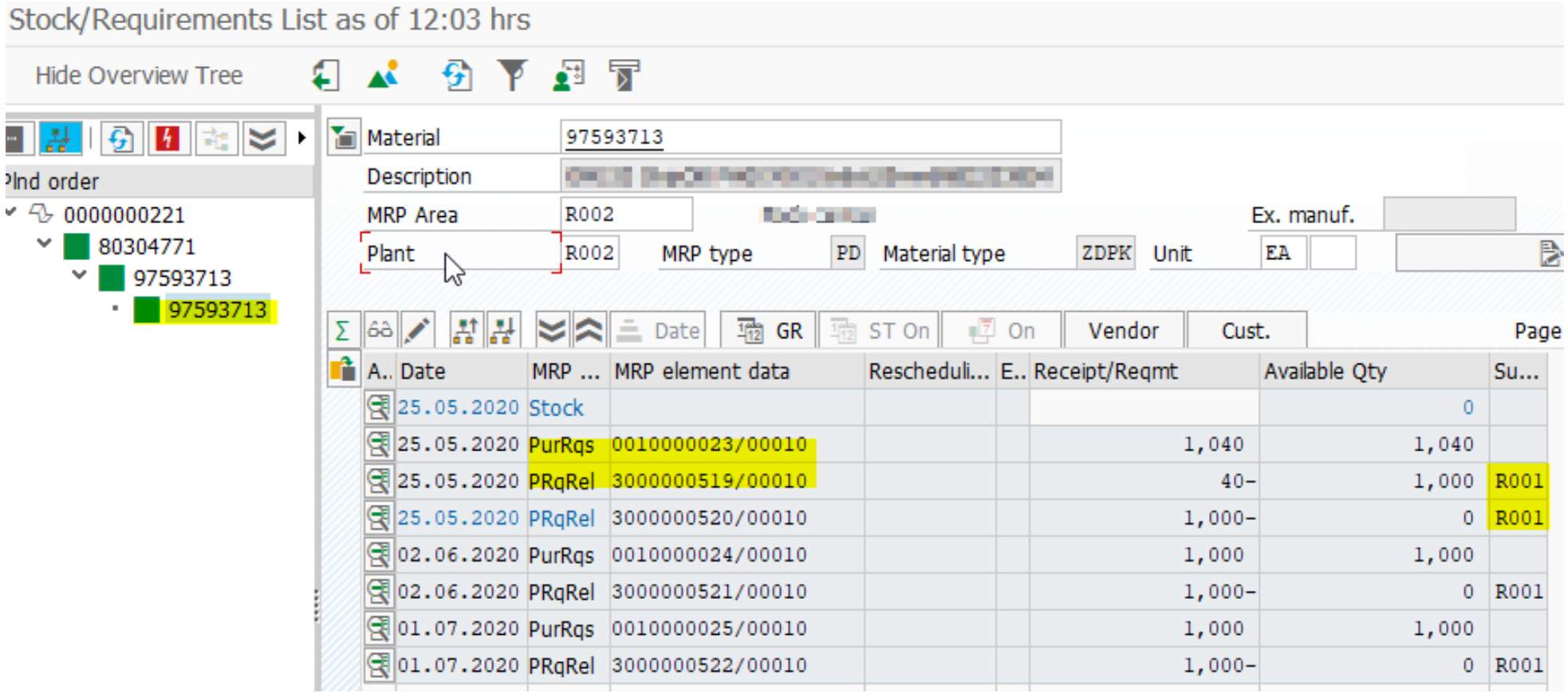
MRP Live (MD01N- Screen)



Back

Stock-transfer requirement

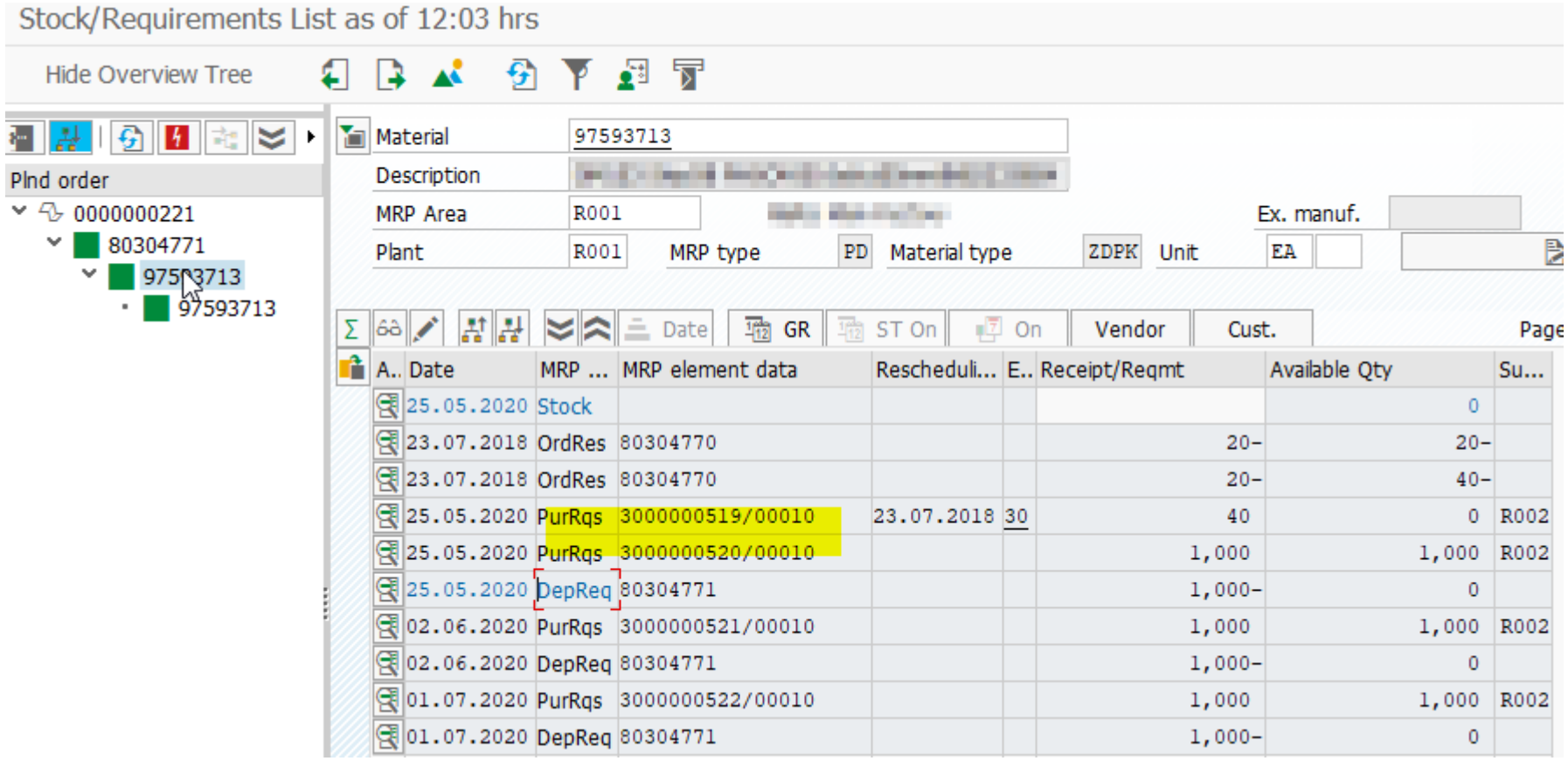
Screen-2



A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available Qty	Su...
	25.05.2020	Stock					0	
	25.05.2020	PurRqs	0010000023/00010			1,040	1,040	
	25.05.2020	PRqRel	3000000519/00010			40-	1,000	R001
	25.05.2020	PRqRel	3000000520/00010			1,000-	0	R001
	02.06.2020	PurRqs	0010000024/00010			1,000	1,000	
	02.06.2020	PRqRel	3000000521/00010			1,000-	0	R001
	01.07.2020	PurRqs	0010000025/00010			1,000	1,000	
	01.07.2020	PRqRel	3000000522/00010			1,000-	0	R001

Back

Stock-transfer requirement

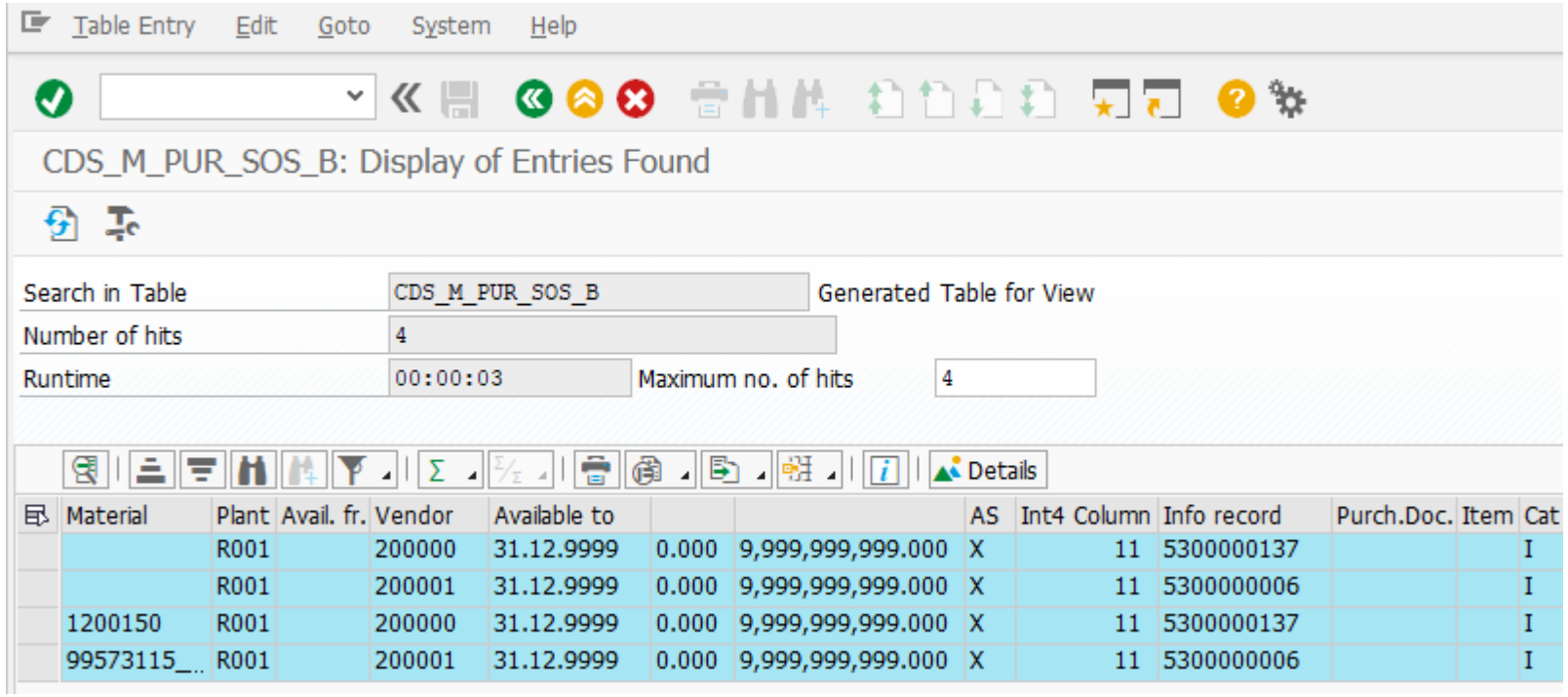


A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available Qty	Su...
	25.05.2020	Stock					0	
	23.07.2018	OrdRes	80304770			20-	20-	
	23.07.2018	OrdRes	80304770			20-	40-	
	25.05.2020	PurRqs	3000000519/00010	23.07.2018	30	40	0	R002
	25.05.2020	PurRqs	3000000520/00010			1,000	1,000	R002
	25.05.2020	DepReq	80304771			1,000-	0	
	02.06.2020	PurRqs	3000000521/00010			1,000	1,000	R002
	02.06.2020	DepReq	80304771			1,000-	0	
	01.07.2020	PurRqs	3000000522/00010			1,000	1,000	R002
	01.07.2020	DepReq	80304771			1,000-	0	

Features of MRP Live(Optimized Sourcing)

- Sourcing priority has been optimized
- MRP Live always creates delivery schedule lines for externally procured material with valid delivery schedules and it creates purchase requisitions for all other externally procured material
- External source of supply determination logic at generic article level and regular vendor determination logic.
- The simplified data model that comes with SAP S/4HANA has played a big role in achieving this end. The underlying SAP HANA database eliminates many of the tables otherwise needed to facilitate lookups and reporting with traditional databases. Running in memory, SAP S/4HANA Live also completes computational tasks in a fraction of the time.
- One concrete advantage of this setup is much faster materials requirements planning (MRP)

Features of MRP Live(Optimized Sourcing)



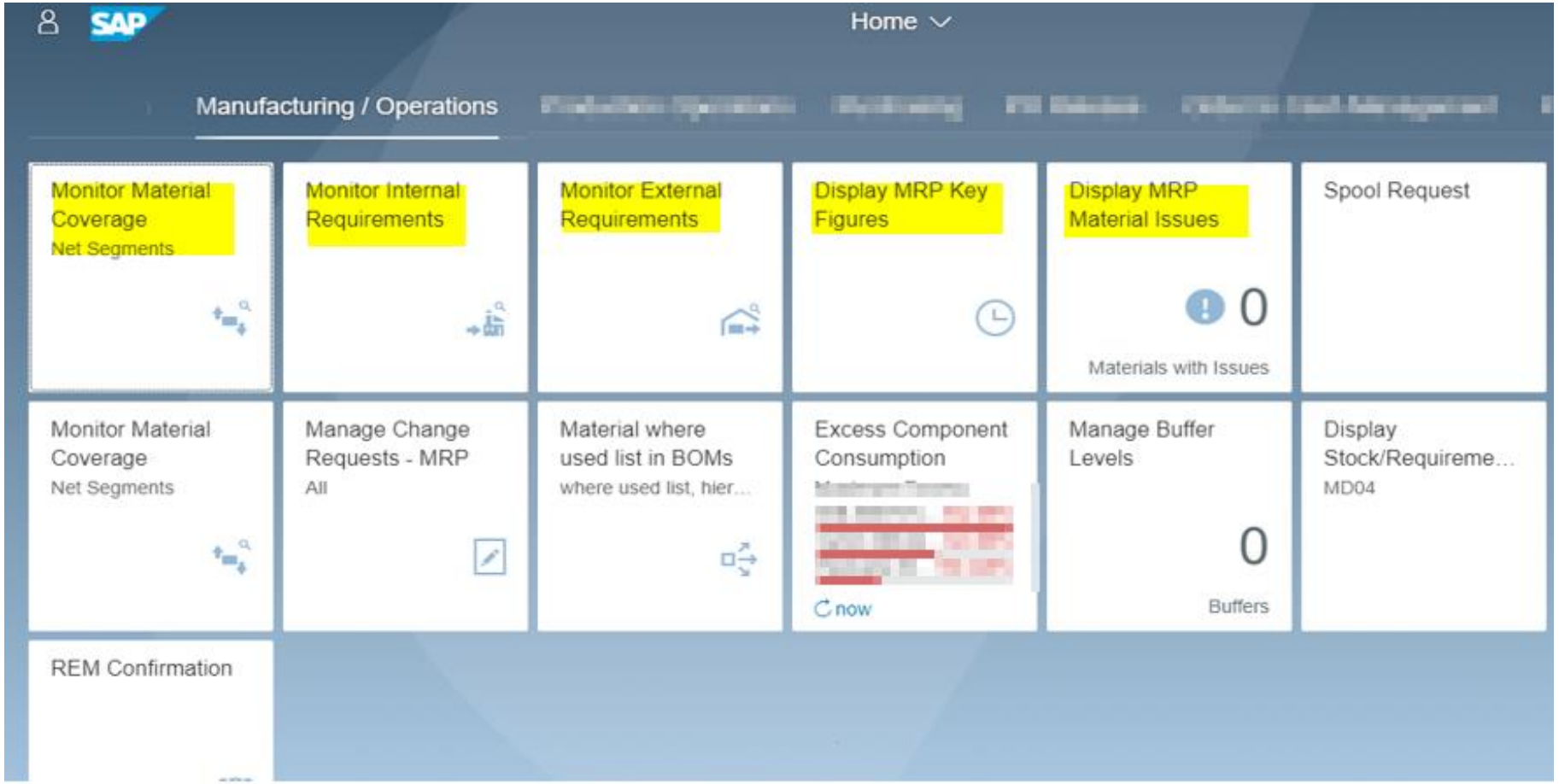
Material	Plant	Avail. fr.	Vendor	Available to			AS	Int4 Column	Info record	Purch.Doc.	Item	Cat
	R001		200000	31.12.9999	0.000	9,999,999,999.000	X	11	5300000137			I
	R001		200001	31.12.9999	0.000	9,999,999,999.000	X	11	5300000006			I
1200150	R001		200000	31.12.9999	0.000	9,999,999,999.000	X	11	5300000137			I
99573115_..	R001		200001	31.12.9999	0.000	9,999,999,999.000	X	11	5300000006			I

Priorirty=1 for scheduling agreements with given plant.
Priorirty=2 for scheduling agreements without given plant
Priorirty=3 for contracts with given plant
Priorirty=4 for contracts without given plant
Priorirty=5 for contracts with given plant but with reference org
Priorirty=6 for contracts without given plant but with reference org
Priorirty=11 for inforecord with given plant
Priorirty=12 for inforecord without given plant

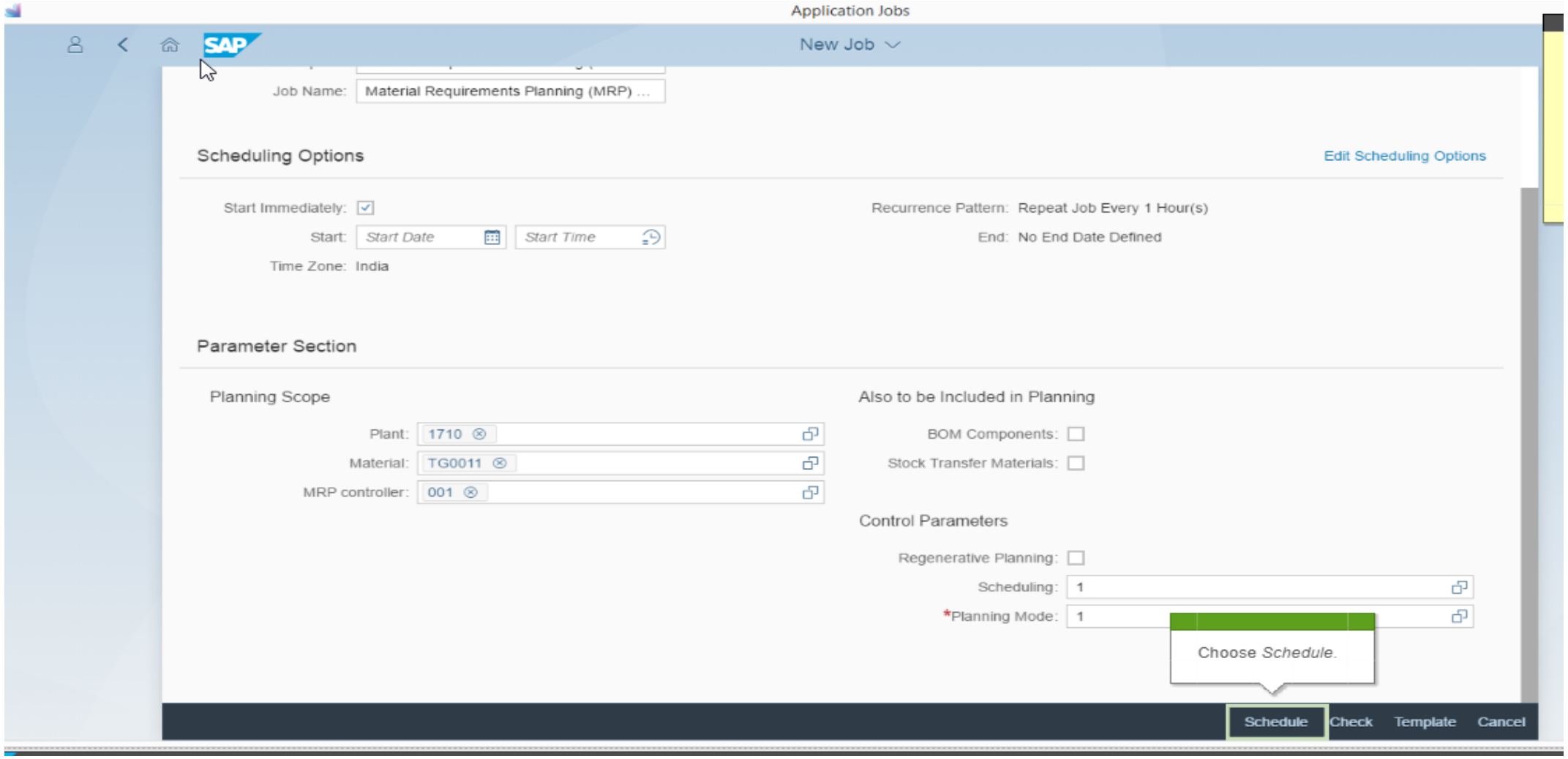
Fiori Apps of MRP Live

- With this app you can create and schedule a job for executing your MRP runs.
- To automate the planning process, the MRP run is carried out on a regular basis so you can use this app to create a job that performs this task for you; reducing your workload by running this task smoothly in the background.
- During the MRP run, the system checks whether current material demand can be covered by current inventory and expected material receipts.

Fiori Apps of MRP

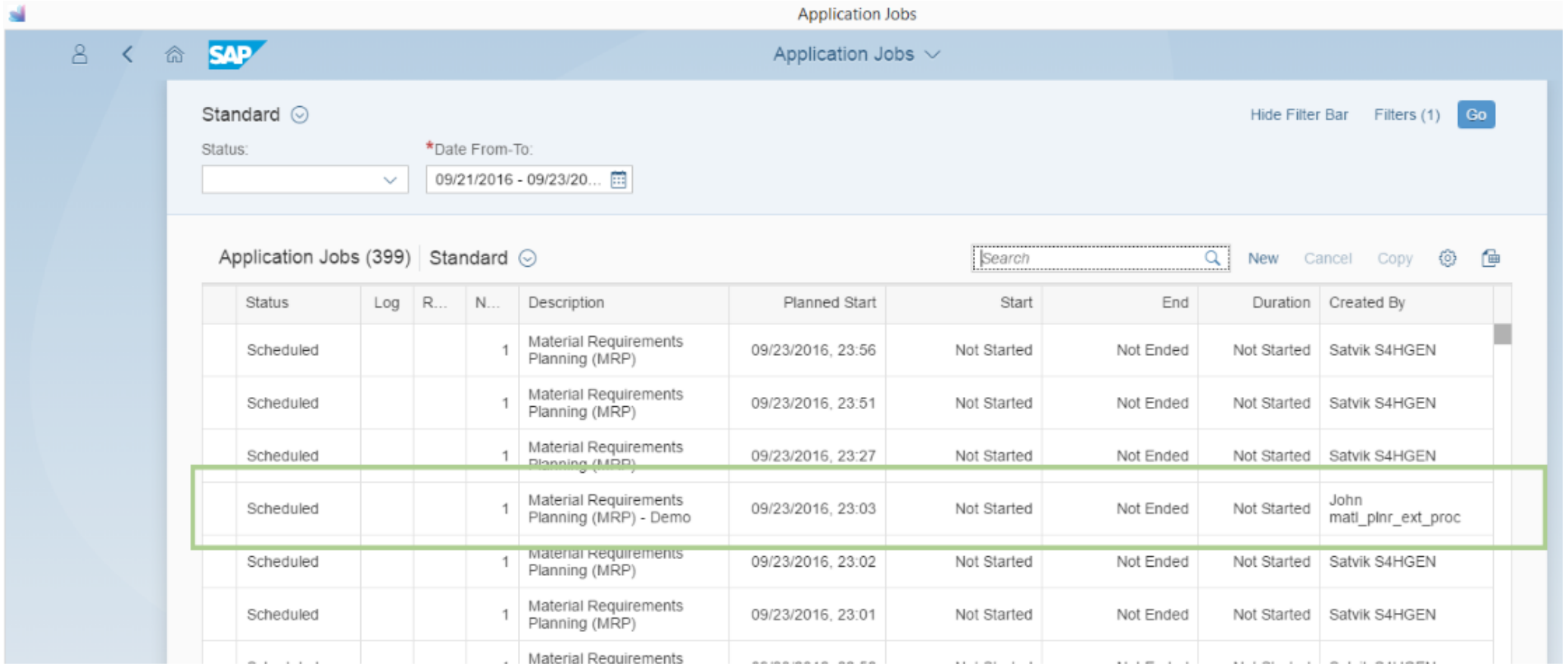


Fiori Apps of MRP Live

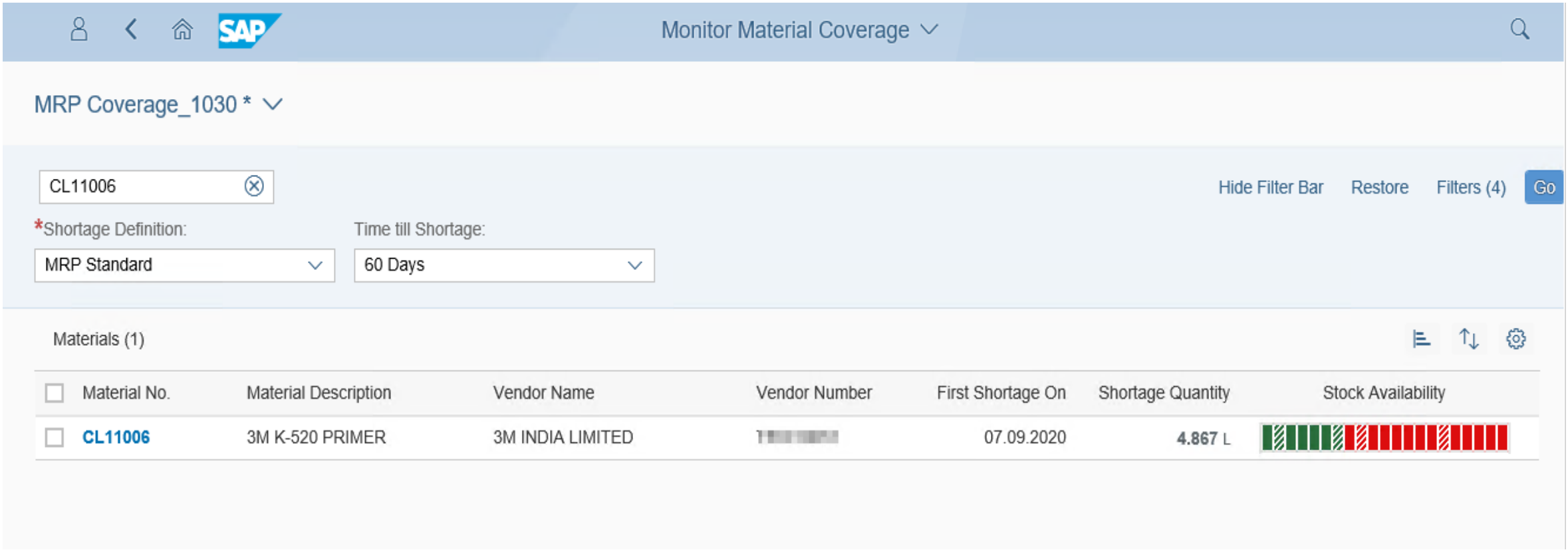


Fiori Apps of MRP Live

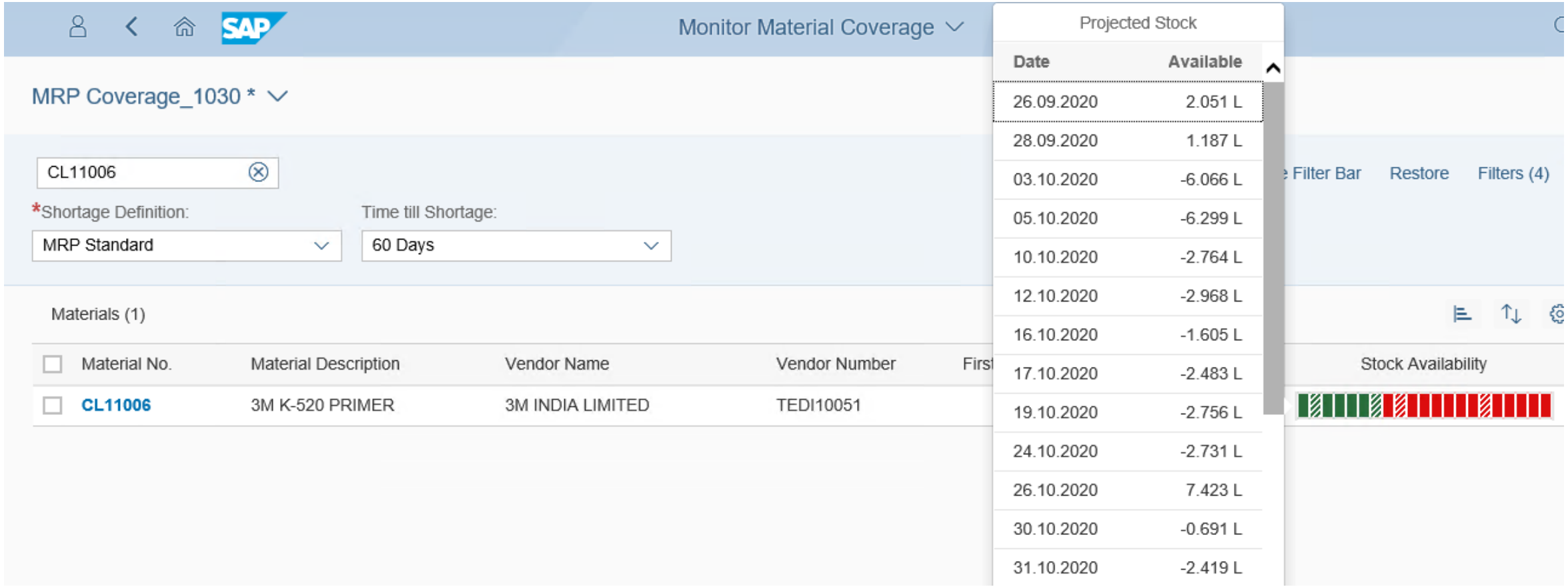
- Each MRP Controller can schedule the MRP its own.



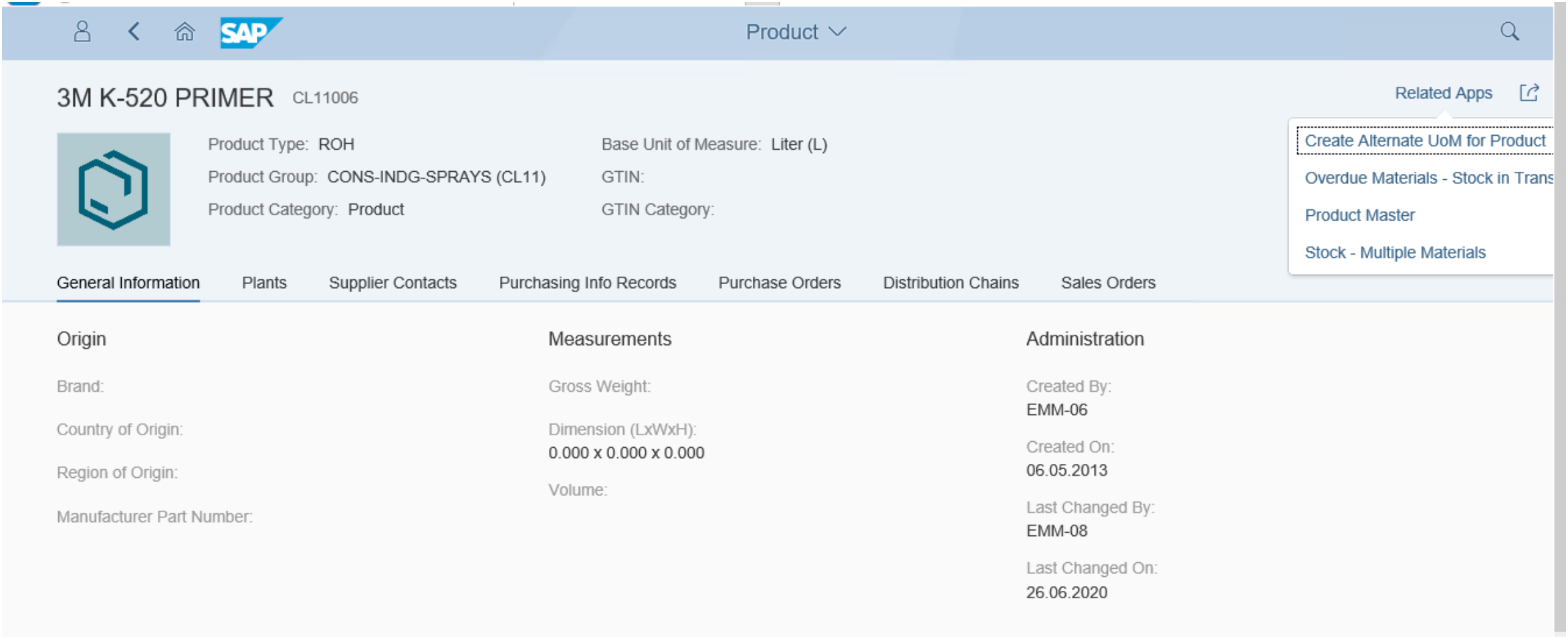
Fiori Apps of MRP(Monitor material coverage)



Fiori Apps of MRP(Material coverage-Projected stock)



Fiori Apps of MRP(Product structure)



Limitations in MRP Live

- Restrictions for lot-sizing procedures (Refer KBA 1914010)
  - Reorder point planning with period or cost-based lot-sizing procedures not supported.
  - Cost-based lot-sizing procedures such as the Groff reorder procedure or part-period balancing are not supported in MRP Live on HANA. MRP Live calls the classic MRP procedures to plan materials with cost-based lot-sizing procedures.
  - Overlapping in lot-sizing procedures is not supported. MRP Live calls the classic MRP procedures to plan materials with overlapping defined in lot-sizing procedures.
  - Optimum lot-sizing procedures are not supported. MRP Live calls the classic MRP procedures to plan materials with optimum lot-sizing procedures.
- MRP Live on HANA does not support parameter effectivity.
- MRP Live does not write MRP List (MD05).
- Multi-level, make-to-order planning (transaction MD50) is not optimized for HANA.
- Individual project planning (transaction MD51) is not optimized for HANA

Road Map on MRP

Innovations	Product	Planned for
Simulate the impact of master data changes on production planning with predictive material and resource planning (on premise)	SAP S/4HANA	2022
Advanced variant configuration - Loose coupling	SAP S/4HANA	2021
Enable supplier collaboration in a demand-driven environment through demand prediction (on premise)	SAP S/4HANA	2021
Advanced variant configuration - enabling further scenario and modelling	SAP S/4HANA	Q4 2020
Reduce data maintenance efforts by assigning a default material requirements planning (MRP) area in the material master when posting materials for storage locations (on premise delivery)	SAP S/4HANA	Q4 2020
Advance the SAP Fiori apps for predictive material requirements planning (on premise)	SAP S/4HANA	Q4 2020
Deliver flexible integration by OData API for batch master records (create, update, delete)	SAP S/4HANA	Q4 2020

Any Question

Thank You

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