SAP TM and EWM improve interface communication

TM And EWM Integration

Since February 24, 2021, the new FPS01 of SAP S/4 Hana 2020 is available. Thanks to the intensive exchange of our Leogistics-internal S/4 community, we evaluate the new possibilities of the solution from all perspectives and present the most interesting features.

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The announcement of Advanced Shipping Receiving is the biggest and most exciting news from our point of view. Behind the name ASR lies the long-awaited option for TM and EWM integration. Anyone who has worked on an S/4 project knows the pitfalls. SAP promises a remedy with a revised concept: The EWM document Transport Unit will become obsolete, and the EWM now also works with the Freight Order; there is a new UI that maps TM and EWM processes; dropshipping and multipick capabilities are being addressed and should be possible in the next releases; and direct communication between TM and EWM without LDAP message will be possible.

Shipment summary

Also exciting is a new document, the so-called Consignment Order. This can be used to group transport requests. The Consignment Order is assigned to the freight order similar to a Freight Unit. From a cost calculation and billing perspective, it is exciting that the cost calculation can now be calculated on either the freight order or the consignment. Billing on the latter will be particularly advantageous in the area of general and groupage freight, as it has created a demarcation from physical transport, which is still mapped with freight order.

Users who now fear that their previous application will become obsolete can relax: SAP announced that the integration via the transport unit and the new solution can run side by side in the system. For now, Advanced Shipping Receiving is only available for embedded use. A decentralized solution is planned for 2022, according to the roadmap.

Basic or advanced licensing?

The FPS01 release has abolished yet another hurdle: The need to purchase both advanced licenses for a TM and EWM integration. Now, customers can opt for basic license for both TM and EWM. Unfortunately, there is currently no report that shows whether certain features and settings belong to the basic or advanced license. In SAP EWM, checking whether you're compliant has been possible for a long time via the report /SCWM/RP_COMPLIANCE_CHECK. The report in TM will be rolled out this year.

TM features worth mentioning

We consider the following news relevant for the areas of planning and billing. For one, there's warehouse loading stops. These are now displayed more specifically in the freight orders and freight units including the possibility of loading gate display.

This is helpful in EWM integrations and simplifies the mapping of warehouses. A new print document allows to print the 3D views of the Loadplanner as a PDF. In addition, a new planning rule has been implemented that reduces the number of stacks during planning. The planning rule ensures to save loading meters by stacking the goods evenly.
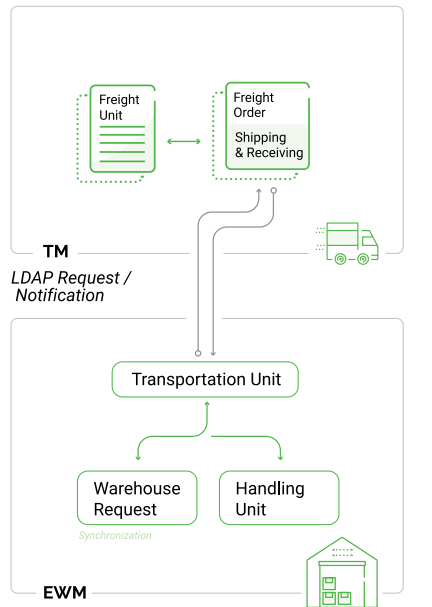
In the event of disputes, there should be a new option for contacting the service provider or receiving changes (SOAP message). We see this as a benefit, especially for customers who work with credit note procedures, to communicate changes faster and more transparently for all sides. Furthermore, a new app gives freight forwarders the ability to respond directly to RFPs in Excel. Carriers do not need to use SAP TM to access and respond.

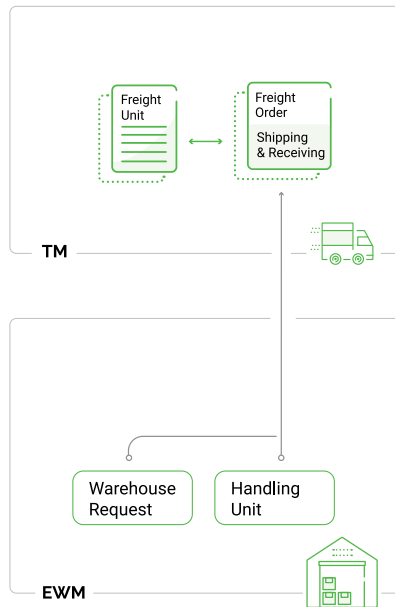## New functionalities for S/4 Hana EWM

On the other side of the warehouse gates, i.e. in EWM, there are a number of interesting enhancements, too. For example, SAP is addressing many an important point that we have stumbled over so far.

We have already described above the facilitated collaboration through the improved data synchronization between SAP TM and SAP EWM under the keyword ASR. This
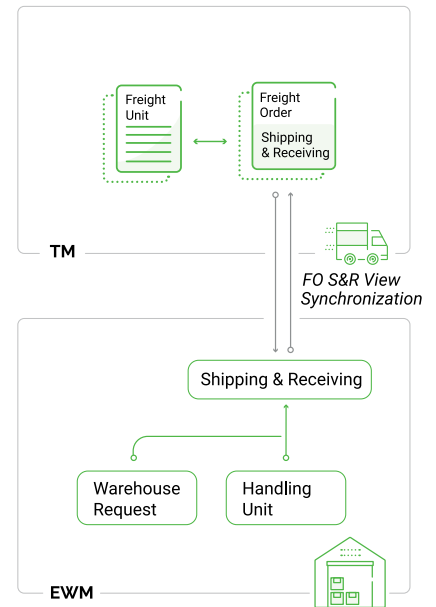
| Before SAP S/4Hana 2020FPS01 | With FPS01: TM and EWM running on the same system (embedded) | Planned: TM and EWM running on separate systems (side-by-side) |

The evolution of SAP Transport Management (TM) und Extended Warehouse Management (EWM) of its Supply Chain Management Suite.

means that replicating freight orders as transport units is no longer necessary. Instead, we can work directly on the TM Freight Order. For now, however, this is only possible on an embedded system. It will be exciting in 2022 when this object division is also to run on standalone systems.

Freight Order now has the effect that a truck can both unload and load at a loading point. In addition, the freight order can now also contain an EWM and at the same time an MM-IM managed storage location, e.g., in order to supply production sites according to demand. Both storage locations share a loading point in this scenario.

Warehouse logisticians can perform booking activities via new or adapted user interfaces. SAP promises not only suitable GUI and Fiori transactions to assign a gate, for example, but also new RF transactions for the still-popular MDE devices. By processing the freight orders in the warehouse, these objects are also enhanced with EWM-specific fields to match the tasks of the warehouse staff. All relevant changes can also be viewed directly in TM by editing on the freight order.

Even more improvements

FPS01 2020 helps EWM to communicate not only with TM, but also with ERP and QM. SAP seems to have responded to many wishes of its customers.

In the future, the standard transaction MIGO will synchronously post a goods receipt in EWM for external procurement. If this posting runs into an error, it will no longer appear in the queue, but will be displayed to the employee directly in MIGO as

an error message. Another clever feature is the possibility to mix the goods receipt in an MM-IM storage location with an EWM storage location in one posting.

Users of Logistics Execution will be happy to hear that the exact delivery quantities from EWM are updated by direct synchronization. This means that end users already see the corresponding change in the system when the quantity is adjusted and not, as was previously the case, only when the goods issue is posted.

For quality management on decentralized EWM systems, there is now a feature that previously only ran on embedded systems: „Scrap to cost center" and „Post as sample consumption" can now be defined as follow-up actions for usage decisions.

The following enhancements are intended to facilitate batch management in decentralized EWM and improve data consistency between ERP and EWM: Newly created and changed batch masters are distributed directly via the ALE framework without the use of change pointers. The trigger for the distribution is the change on the database itself and not the transaction or job in which the batch is processed. Integrative batch processing goes even further: In EWM, the MSC1N and MSC2N transactions are provided for creating and changing batch masters. Finally, warehouse employees can add a new batch during inventory that was not previously in the system - of course with synchronization to the ERP batch master.

Anyone who has ever dealt with pack specifications will like the new feature pack, as it allows for mass changes to finally be made to PackSpecs. The grueling repe-

titions of hundreds of identical entries are now a thing of the past.

Conclusion

Overall, we see the new features as useful and practical enhancements for SAP TM and EWM. Both new implementations, process optimization, and day-to-day business will benefit. Advanced Shipping Receiving in particular will have a major impact on future projects. SAP is thus passing an important milestone in the development and merging of transport and warehouse processes and is taking the next step towards an integrated supply chain.

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Optimizing your Supply Chain