FORCAM™ FORCE

Functional Release Notes

Version 5.12.11

Release Information

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Content

1 Overview

FORCAM provides companies with all the information they need to control and optimize their production. The modular IIoT solution FORCAM FORCE IIOT is as flexible as the needs of customers. With a variety of production apps, FORCAM helps companies to make their processes more transparent and improve their workflows. In this way, companies create the basis for optimization measures and sustainable success, thereby ensuring their competitiveness.

FORCAM is always endeavored to optimize the solution FORCAM FORCE IIOT further, to enrich it with functions, offering customers consistent growth and greatest possible use. For this purpose, several releases are published throughout the year.

This document lists functions that have been added or changed during the **5.12.11** release. It serves as an overview of the most important features to use FORCAM FORCE IIOT in the best possible way.

Detailed descriptions of the individual functions can be found in the respective product documentation.
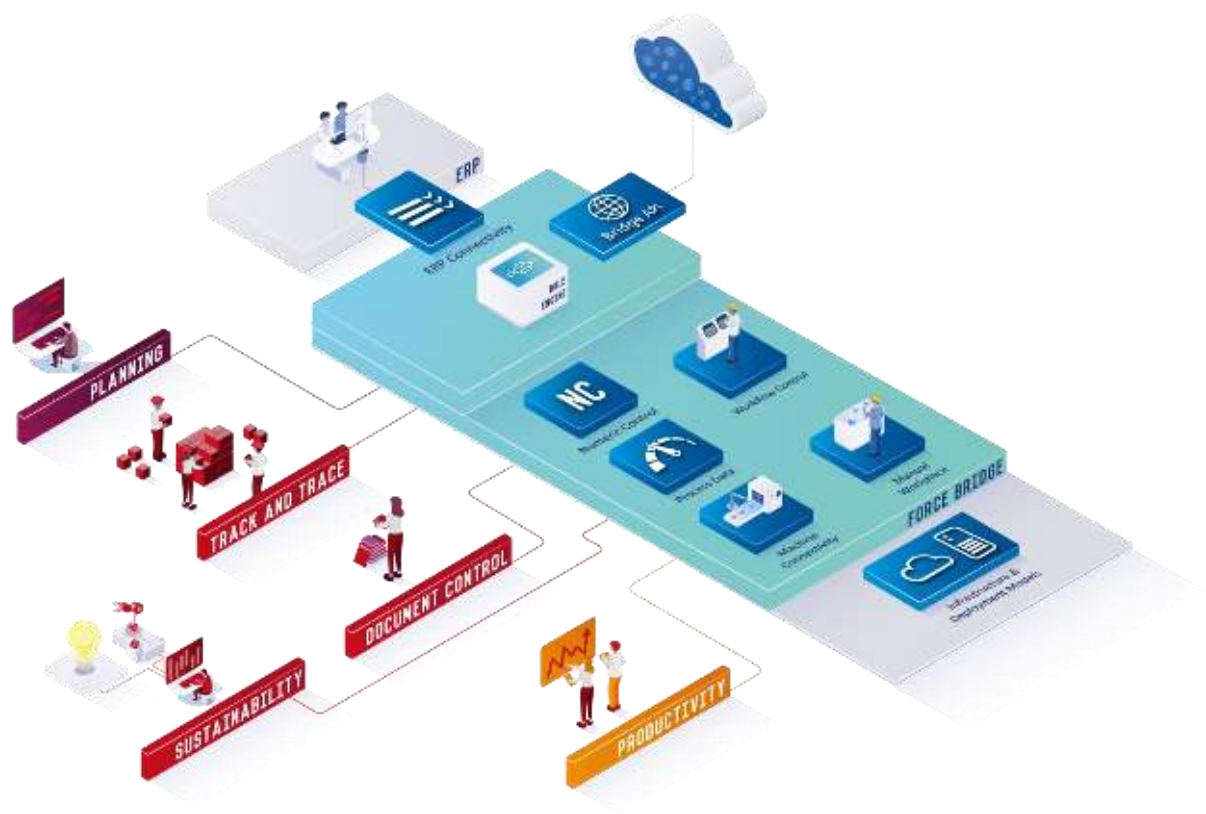
2 FORCE Common

## 2.1 Implementation of Deletion Confirmation

Affected module	Affected area	Status
Master Data	Script Configuration	New

Path: Master Data > Workplace Configuration > Script configuration
When the user right-clicks on the Script under Script Configuration, the user is shown two options (Add Script, Delete Script). As in the figure below:
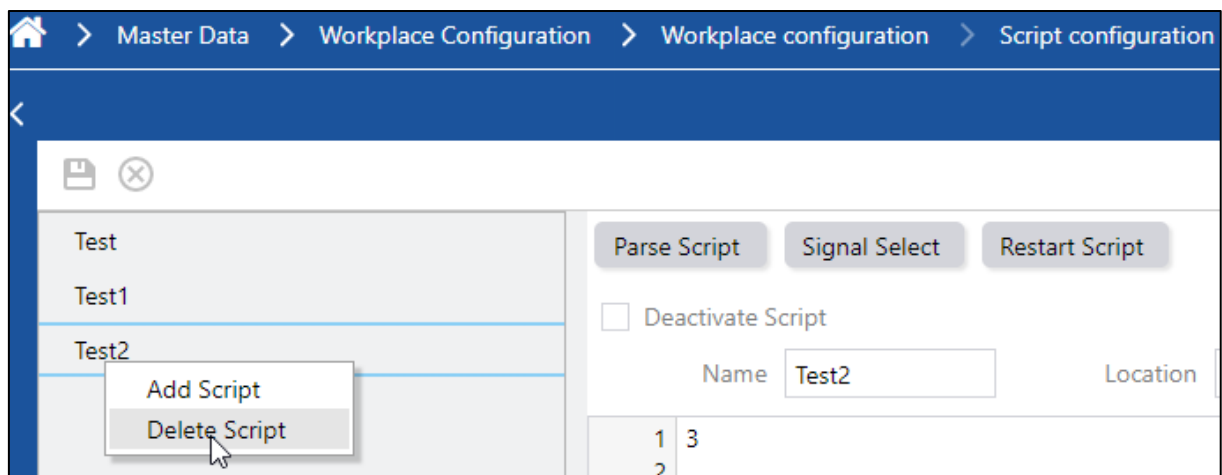
Before, if the user selected **Delete Script**, the user did not have a chance to revert the script deletion without rolling back the complete page changes. With this implementation, the user is asked to confirm if the user really wants to delete the script and also given some useful hints as information. As shown in the figure below:
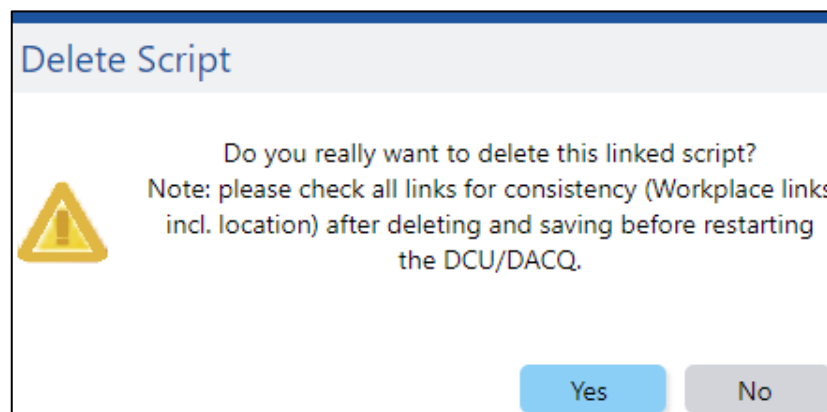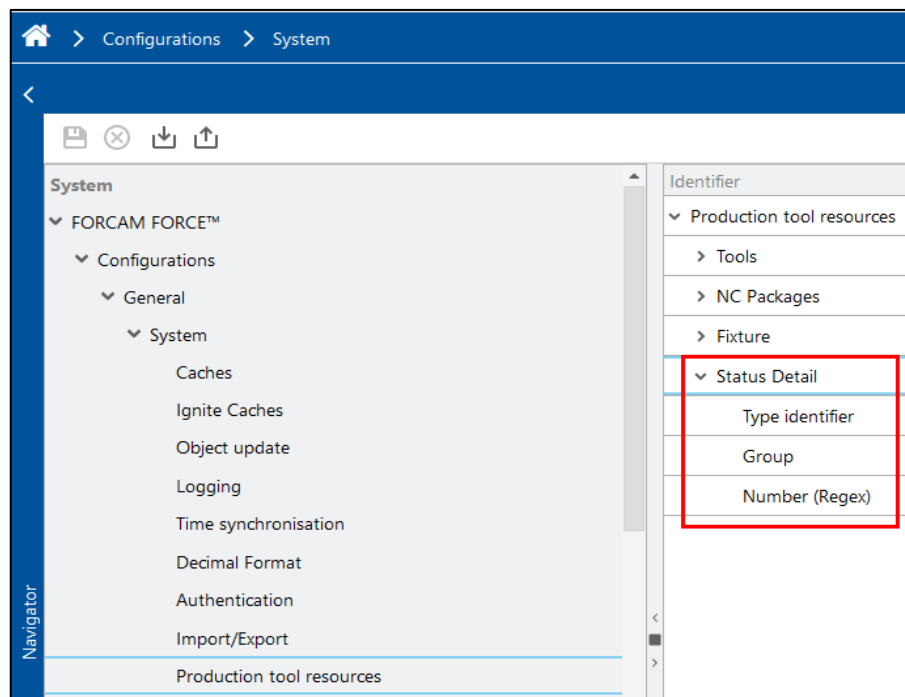
2.2   Configuration to configure Production Tool Resources

Affected module	Affected area	Status
Workbench/FFERP	Configurations	New

FFWorkbench

Path: Configurations > System > Production tool resources > Status Detail
New configuration to configure which **Production tool resources** are additionally maintained as **Status Details**.

Multiple type or groups can be defined separated by commas. Type, Group, and number (regex) are combined as **AND** conditions. Comma separated values are combined as **OR** condition.

FFERP

If a Production tool resource matches the configuration it is also created as **Status Detail** with following properties:

- The code is a random negative number.
- The mnemonic is the Production Tool Resource number.
- The short description and the description are the Production Tool Resource description.
- Splitable, recode-able and annotatable is true.
- The Color is #FFFFFF.

2.3   New Activity Step to Select Operation

Affected module	Affected area	Status
Workbench	Shopfloor Terminal Configurator	New

FFWorkbench

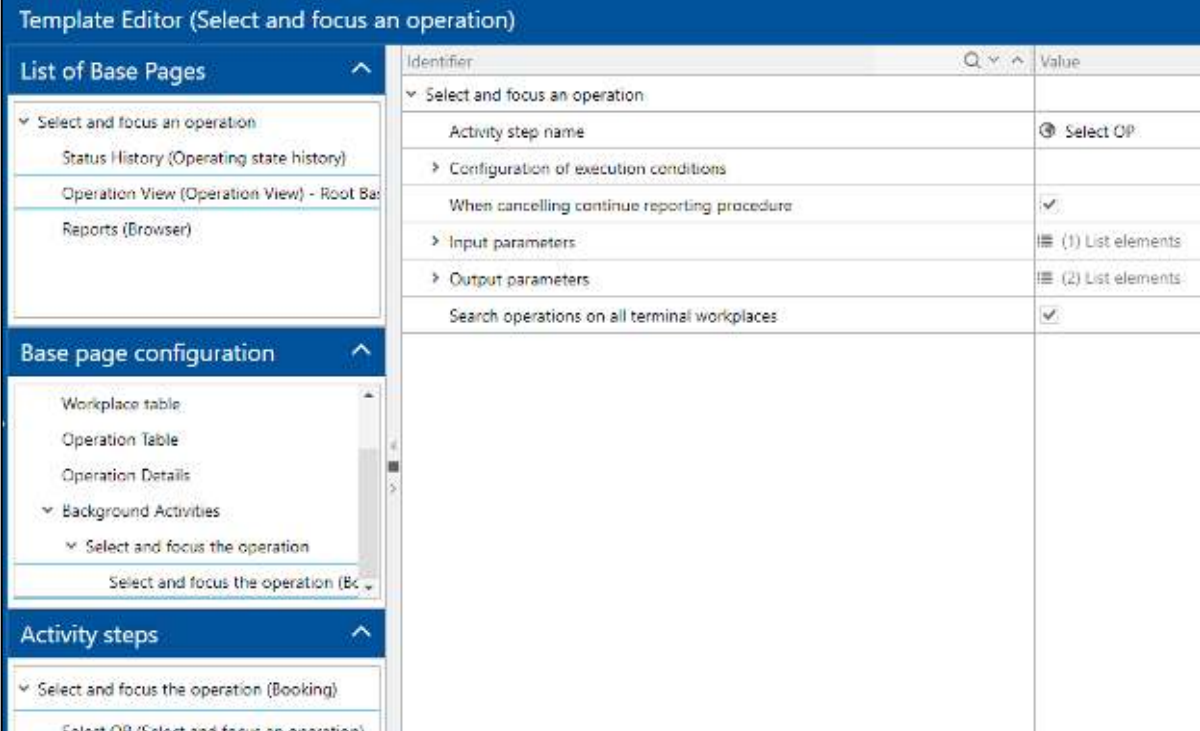**Shopfloor Terminal Configurator: Select and focus an operation**
New activity step implemented which takes the operation as input parameter and if the operation is found, the focus is set for the respective operation in the terminal base page operation table.
New dark step to Select and focus an operation (**SelectAndFocusOperationActivityStep**) is created which is responsible for:

  – Auto selection and auto focus of a given operation in the operation table of terminal basepage Operation View.
  – Search for the given operation in all the terminal workplaces, if configured.

Step configuration:

  – **Search operations on all terminal workplaces** - Enables the searching of operation in all terminal workplaces.

2.4 Extension of the ticket system

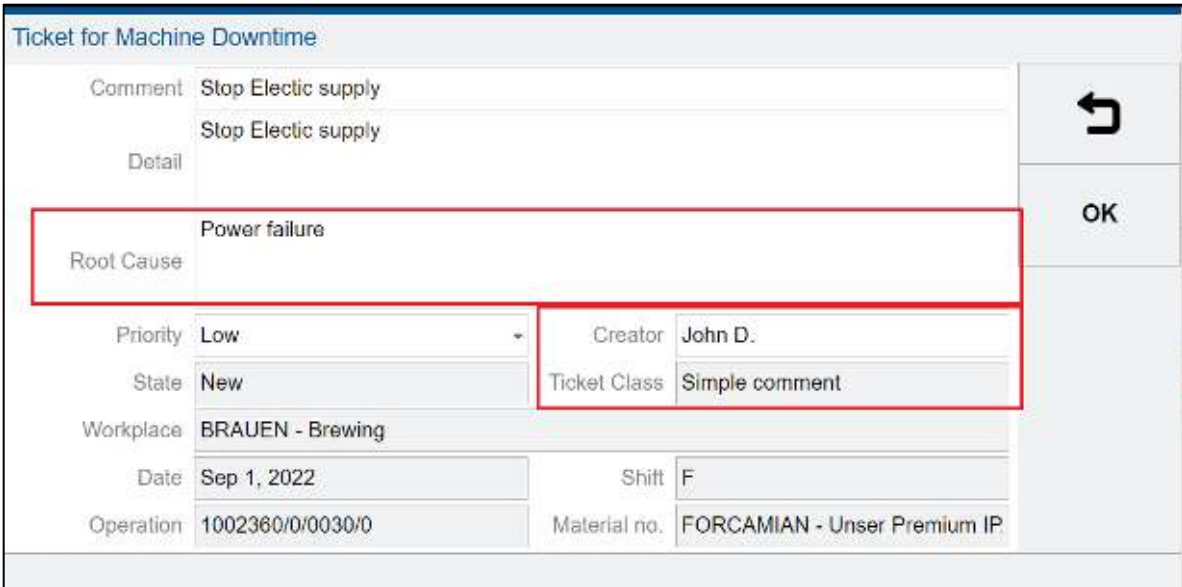| Affected module	Affected area	Status
FFWorker	CreateTicketActivityStepUI	changed

FFWorker

CreateTicketActivityStepUI

From SFT – via using the activity step **Dialog for the submission of a ticket**, user can create a new ticket with providing comment, detail and priority. While creating the ticket, it is not possible to identify who has created the ticket. For updating the root cause, user has to login to Office-client > Ticket management and update there.

With this update the following new attributes are added to this activity step:

- Root cause – free text user input
- Creator – free text user input
- Ticket class – Read only and show based on configuration in activity step

ⓘ For existing template configuration, the size of dialog is needed to be manually adjusted

3 Productivity

3.1 Wrap Long-Text in Report

Affected module	Affected area	Status
Workbench	Report Editor	New

Reporting

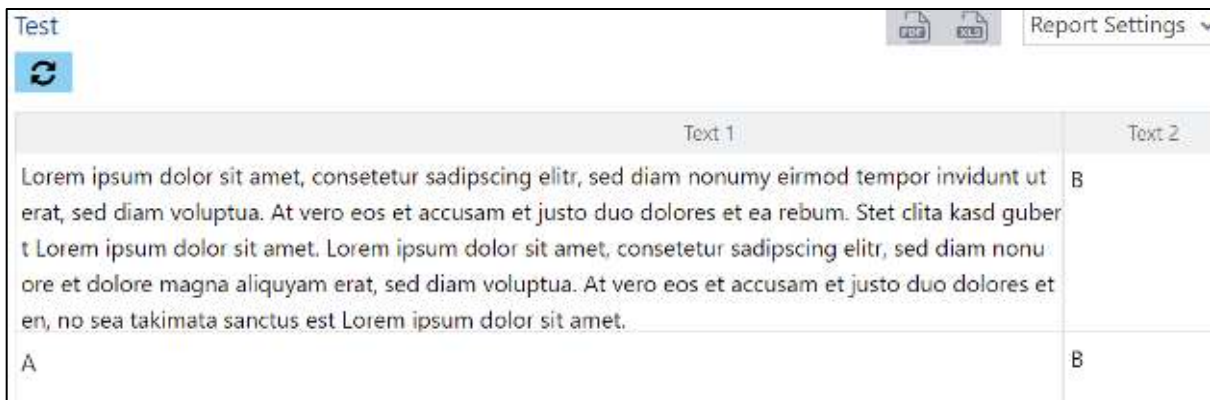In the report editor, a column of a table report can be configured to use multiple lines instead of one:
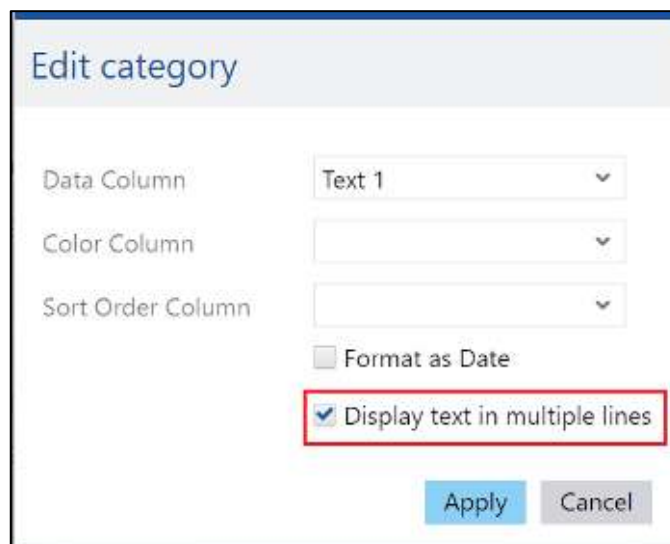
If a column is configured to use multiple lines, the row height of the table will be increased and the text will be split into multiple lines if it does not fit into the column.

ⓘ Due to restrictions of the **Vaadin** framework, it is not possible to give each row an individual height. If the height of one row is increased, it will also be applied to the other rows (see screenshot above).

ⓘ The configuration is not applied, when the table is transposed, as transposed tables use the full width.

PDF Export

In the PDF export, the line breaks are already added when the text does not fit into the column. However, having tables with multi line columns will still influence the look of the exported table. The available width of the PDF page will be distributed among the single line columns of the table, the multi-line columns will only get the remaining space. Multi-line columns are also not considered when it is checked if the table width exceeds the page width.

3.2 Production Lines with one operation from ERP

Affected module	Affected area	Status
Master Data/FFERP	Workplace Configuration/FFWorker//Digital Planning Board/Detailed Order Scheduling (FLS)	New

FFWorkbench

Path: Master Data > Workplace Configuration > Workplace Hierarchy
New attribute behavior **Serial Auto Split** has been added in case of ERP hierarchy.

New attribute **Target setup time** added for attribute behavior **Auto Split** and **Serial Auto Split** in case of ERP hierarchy. This attribute **Target setup time** can have a value from below list:
- Time is assigned to all split operations
- Time is equally divided to all operations
- Assign time to first operation
- Assign time to last operation

The default value for the attribute **Target setup time** is **Time is assigned to all split operations**.

ⓘ For existing attribute **Auto Split**, the value of **Target Setup Time** is empty and will not be migrated. However, in this case, the functional behavior is not changed, and the empty value is considered as default value as in **Time is assigned to all split operations**.

Below is the example:

User can move the workplace nodes of a ERP hierarchy through these context menu actions:
- Move node to top
- Move node to bottom
- Move node up
- Move node down

ⓘ When user presses any move action without saving, user will not be able to delete the workplace hierarchy nodes in case of ERP hierarchy. The delete button remains disable in this case. Only after pressing save or revert button, the delete button is enabled.

⚠ When user add or edit the ERP hierarchy for **Serial Auto Split** (For e.g., change the Workplace position), the changes will take place in approximately 15 minutes. It means if user want to create or update the production order, user should wait for 15 minutes in order to have new configuration.

FFERP

When the attribute behavior **Serial Auto Split** is selected for an ERP hierarchy. Quantities are transferred to the generated splits without changes. Every **Split Operation** has the original Target Quantity, coming from ERP.

When the attribute behavior "Time is assigned to all split operations", the **Target Setup Time** will be transferred to the generated splits without change. Every Split Operation has the original **Target Setup Time**, coming from ERP.

When the attribute behavior "Time is equally divided to all operations", the **Target Setup Time** will be transferred to the generated splits dividing the original **Target Setup Time** by the number of splits.

When the attribute behavior "Assign time to first operation", the **Target Setup Time** will be transferred to the first generated split without change, the **Target Setup Time** of all other splits is set to zero.

When the attribute behavior "Assign time to last operation", the **Target Setup Time** will be transferred to the last generated split without change, the **Target Setup Time** of all other splits is set to zero.

The sequence of operation splits used, depends on the sort order in the respective ERP-Hierarchy node.

⚠ When the order of the ERP-Hierarchy has been changed, the split number of already existing operations will not be updated with the new sort order.

FFWorker

With the new attribute added in the ERP Hierarchy, this attribute is adapted in the **Creating split operation** activity step of FFWorker module. Here, if the operation has serial auto split type, in this case, the split is not allowed. So, when a workplace in the ERP group has the Behavior of split attribute as **Serial Auto Split**, then the user will not be allowed to perform the split operation.

Digital Planning Board

Serial Auto Split behaves same as **Auto Split** i.e., no reschedule on other workplaces & no splits are allowed if restrictive mode is active. If the restrictive mode is deactivated no restrictions are applied. **Serial Auto Split** mode is visualized as new icon and tool-tip similar as the existing modes.

Detailed Order Scheduling (FLS)

There is no consideration of **Serial Auto Split** in this module. Therefore, the results in **Detailed Order Scheduling** will not correct for **Serial Auto Split** as the total target quantities do not fit anymore.

3.3   Security Function Labor Auto sign Off

Affected module	Affected area	Status
FFRuntime	Labor Time	New/Changed

FFRuntime

AutoSignOff

When the worker logs in the first time on the Workplace, the auto sign-off timer starts and the person will automatically sign off from all workplaces and operations when the timer will reach to defined hours/minutes from the first logged in workplace. Inside this timeframe the worker can log on/off multiple times on different workplaces/operations.

ⓘ   The auto sign-off timer does not consider shift or day changes and runs until it expires.

⚠   For workplaces with different booking logic, they have a separate auto sign off timer.

3.4   Assembly plan Optimization

Affected module	Affected area	Status
Workbench/FFWorker	Assembly Plan	New

FFWorkbench

Assembly Plan Activity Step
A new configuration **Auto Assembly** in Assembly Plan Activity Step (Dialog) to perform the auto assembly is added.

FFWorker

With this new configuration user will open the assembly dialog once. After the assembly is done (100% done) once then it will automatically send the assembly message to trace processing and open the same dialog again for the new assembly. The dialog can only be closed once user clicks on cancel button.

4   Appendix

Abbreviation/Term	Meaning
ERP	Enterprise Resource Planning
FLS	Fertigungsleitstand (Detailed Order Scheduling)