

User Manual

Aptean Food and Beverage ERP

Production Scheduling

Product Documentation



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Release notes

Article • 11/26/2025 • 2 min read

To view what's new or changed in each release of the Aptean Production Scheduling extension, select the specific release version.

Date	Release version	Description
November 2025	2502.2.0.0	Stability release
October 2025	2502.1.0.0	Stability release
September 2025	2502.0.0.0	Feature release
July 2025	2501.1.0.0	Stability release
July 2025	2501.0.0.0	Feature release
May 2025	2403.19.0.0	Stability release
April 2025	2403.18.0.0	Stability release
March 2025	2403.17.0.0	Stability release
March 2025	2403.16.0.0	Platform release
March 2025	2403.15.0.0	Platform release
February 2025	2403.14.0.0	Stability release
February 2025	2403.13.0.0	Stability release
December 2024	2403.12.0.0	Stability release
October 2024	2403.11.0.0	Stability release
October 2024	2403.10.0.0	Platform release
October 2024	2403.9.0.0	Stability release
September 2024	2403.8.0.0	Feature release
August 2024	2402.8.0.0	Stability release
August 2024	2402.7.0.0	Stability release
August 2024	2402.6.0.0	Stability release



July 2024	2402.5.0.0	Stability release
July 2024	2402.4.0.0	Stability release
June 2024	2402.3.0.0	Stability release
June 2024	2402.2.0.0	Stability release
May 2024	2402.1.0.0	Stability release
April 2024	2402.0.0.0	Feature release
April 2024	2401.2.0.0	Stability release
March 2024	2401.1.0.0	Stability release
March 2024	2401.0.0.0	Feature release
February 2024	2301.2.0.0	Stability release
November 2023	2301.1.0.0	Stability release
August 2023	1.15.114193.0	Stability release
August 2023	1.14.113205.0	Stability release
August 2023	1.13.112698.0	Stability release
August 2023	1.13.112478.0	Stability release
August 2023	1.13.112273.0	Stability release
August 2023	1.13.111482.0	Stability release
July 2023	1.12.110147.0	Stability release
July 2023	1.11.108162.0	Stability release
July 2023	1.11.107856.0	Stability release
May 2023	1.10.101071.0	Stability release
May 2023	1.9.98872.0	Stability release
April 2023	1.8.93765.0	Stability release
April 2023	1.7.92310.0	Stability release
February 2023	1.6.79612.0	Feature release



January 2023	1.5.76446.0	Stability release
May 2022	1.4.48483.0	Stability release
February 2022	1.3.44295.0	Stability release



2502.2.0.0

Release Note • 11/26/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
307683	The system incorrectly displays the production time when using the Split Production Order action on the Production Order Scheduler page, resulting in the run time defined on the production order line and the corresponding scheduler line is not reflected correctly, preventing users from splitting production orders based on time.



2502.1.0.0

Release Note • 10/22/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension, the translation file for the Swedish (sv-SE) language has been updated with standard texts for better readability.



2502.0.0.0

Release Note • 9/24/2025 • 1 min read

Features

With the feature added in this release of the Aptean Production Scheduling extension, the system restricts the **Downtime Duration** field value to two decimal places. This is applicable only when the **Downtime Scheduling UOM** field value is set to *HOURS*, *DAYS*, or *100/ HOURS* on the **Downtime Scheduling Matrices** page. This works similarly for the **Total Downtime** field on the **Add Downtime** page associated with the **Production Order Scheduling** page. For more information, see [Downtime Scheduling Matrices](#).



2501.1.0.0

Release Note • 7/30/2025 • 1 min read

Resolved issues

The following issues have been resolved in this release.

ID	Description
300696	The system incorrectly updates the Initial Due Date field value with the Due Date field value on the Production Order Scheduling page when executing the Change Production Scenario action. This issue occurs only when the Aptean Production Scenarios extension is installed.
301658	When the language is set to Dutch, the system incorrectly translates the caption of the Initial Due Date field on the Production Order Scheduling page.



2501.0.0.0

Release Note • 7/2/2025 • 1 min read

Features

With the features added in this release of the Aptean Production Scheduling extension,

- You can change the production scenario on the **Production Order Scheduling** page, in which only the routing number differs, and the system updates only the routing lines, and retains the production BOM and component lines to avoid unnecessary recalculations.
- The system automatically applies the correct production scenario based on item, location, and variant code when changing production scenario on the **Production Order Scheduling** page.

For more information, see [Move production orders to another work/machine center](#).

Enhancements/Modifications

This extension has been updated to ensure interoperability with the recent changes in the Aptean Production Scenarios extension. To know more, see [What's new in Production Scenarios, version 2505.0.0.0](#).



2403.19.0.0

Release Note • 5/22/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension,

- The translation file for the Chinese (zh-CN) language has been added.
- The translation file for the Swedish (sv-SE) language has been updated with standard texts for better readability.



2403.18.0.0

Release Note • 4/23/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
279223	The system fails to schedule production orders for the first week when the Move Selection field value is set to <i>Before</i> on the Manual Scheduling page. This issue occurs when the Schedule Per field value is set to <i>Week</i> and the Start Day of the Week field value is set to <i>Monday</i> on the associated Work Center Card page.



2403.17.0.0

Release Note • 3/26/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
275554	The system fails to filter the Prod. Order No. field values correctly when searching multiple times in the search box on the Production Order Scheduling page.



2403.16.0.0

Release Note • 3/6/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension, common warnings in various objects have been removed or marked as obsolete, as part of a code cleanup activity.



2403.15.0.0

Release Note • 3/4/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension, common warnings in various objects have been removed or marked as obsolete, as part of a code cleanup activity.



2403.14.0.0

Release Note • 2/27/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
257135	The system incorrectly schedules subsequent production orders at the calendar start time, causing overlaps when a prior order extends beyond its planned schedule. This issue occurs upon executing the Manual Scheduling or Automatic Scheduling on the Production Order Scheduling page.



2403.13.0.0

Release Note • 2/12/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
261815	The system allows entering an item number in the Production Downtime Item field of the Add Downtime page even when the associated item does not exist on the Production Downtime Items page. Additionally, the system incorrectly creates a production order for the item when selecting OK on the Add Downtime page.



2403.12.0.0

Release Note • 12/12/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
249837	An error occurs upon executing the Automated Scheduling action on the Production Order Scheduling page. This issue arises when the Order Type for Downtime Prod. Order field on the Production Scheduling Setup page is blank and the Downtime Scheduling Matrices page doesn't have any lines.



2403.11.0.0

Release Note • 10/29/2024 • 1 min read

Enhancements/Modifications

The translation file for the Danish (da-DK) language has been updated with standard texts for better readability.



2403.10.0.0

Release Note • 10/24/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension, the *EntryLength* parameter has been removed from the *InstallIconSetup15FDW* codeunit to ensure compatibility with Business Central, version 26.



2403.9.0.0

Release Note • 10/21/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
240133	The system fails to execute the Scheduling on Sorting No. action on the Production Order Scheduling page for machine centers.



2403.8.0.0

Release Note • 9/20/2024 • 1 min read

Features

With this release of the Aptean Production Scheduling extension, you can perform batch size optimization while changing the production scenario on the **Production Order Scheduling** page. For more information, see [What's new in Process Manufacturing, version 2408.0.0.0](#). The system does not support automatic optimization for batch size when using the split production order functionality.

Note

In this release, the version number has advanced directly to 2403.8.0.0, skipping versions 2403.0.0.0 to 2403.7.0.0. All relevant updates are included in this release.



2402.8.0.0

Release Note • 8/20/2024 • 2 min read

Enhancements/Modifications

With this release of the Aptean Production Scheduling extension, modifications have been made to accommodate the following changes:

- Enhanced application interaction: Procedures have been added to enhance the application interaction, improve upgrade tag management, streamline upgrade and installation processes, and provide additional flexibility by managing upgrades on a per-company and per-database basis.
- Application area refresh: Updates have been implemented to improve the application area refresh process by integrating a new procedure into the *Enable* codeunit.
- Improved management of install and upgrade code: The *Install* and *Upgrade* codeunits have been updated to streamline the handling of installation, reinstallation, and upgrade processes, ensuring smoother transitions and minimizing disruptions during these operations.
- Centralized license management procedures: The existing license management codeunit has been modified to use centralized license management procedures, further reducing the need for application-specific adjustments.
- Enhancements have been made to update the process within the application to handle the *User Group* and *User Group Permission Set* tables. This change ensures compatibility with current and future versions of Business Central, even when the *User Group* and *User Group Permission Set* tables are deprecated.

! Note

> The *User Group* and *User Group Permission Set* tables are deprecated in Business Central, version 25.



2402.7.0.0

Release Note • 8/7/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
225698	An error occurs when selecting a machine center number containing spaces or special characters in the No. Filter field on the Production Order Scheduling page.



2402.6.0.0

Release Note • 8/6/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
222704	An error occurs when selecting a work center with spaces or special characters in the No. Filter field on the Production Order Scheduling page.



2402.5.0.0

Release Note • 7/19/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
219128	The Aptean Production Scheduling extension accesses fields from the Aptean Process Manufacturing extension directly through the foundation layer, even if the extension is not installed.



2402.4.0.0

Release Note • 7/16/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
217041	An error occurs when entering second shift timings in the Starting Time After Scheduling field on the Scheduling on Sorting No. page for a work center with multiple work shifts configured on the associated Calendar Entries page.



2402.3.0.0

Release Note • 6/7/2024 • 1 min read

Enhancements/Modifications

The translation files for the following languages have been updated with standard texts for better readability:

- Danish (da-DK)
- Dutch (nl-NL)
- Swedish (sv-SE)



2402.2.0.0

Release Note • 6/4/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
205917	An error occurs on the Manual Move Routing Lines page when the Starting Time field contains a calendar entry after the break time.



2402.1.0.0

Release Note • 5/10/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
199783	An error occurs when attempting to manually remove the value from the Item No. field on the released production order line.



2402.0.0.0

Release Note • 4/17/2024 • 1 min read

Features

With the features added in this release of the Aptean Production Scheduling extension, you can:

- Use the **Downtime Scheduling Matrices** page to configure the downtime necessary to perform various tasks within the work centers or machine centers. To know more, see [Downtime Scheduling Matrices](#).
- Delete the downtime production orders via the **Delete Downtime Production Orders** report.
- Perform the **Automated Scheduling** and **Manual Scheduling** actions by considering the downtime specified on the **Downtime Scheduling Matrices** page. To know more, see [Automated Scheduling with Scheduled Downtime](#).

UI/UX changes

The following UI/UX changes have been made in this release:

- The **Downtime Scheduling Matrices** page is added.
- The **Delete Downtime Production Orders** report page is added.
- The **Downtime Orders Deletion Date** and **Order type for Downtime Prod. Order** fields are added to the **Production Scheduling Setup** page.
- The **Scheduled Downtime** checkbox is added to the **Production Order Scheduling** page.



2401.2.0.0

Release Note • 4/3/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
189950	Unable to select multiple records or clear the selected records on the Production Order Scheduling page.



2401.1.0.0

Release Note • 3/6/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
180935	On the Production Order Scheduling page, when overtime is added to resolve an overlap and then subsequently deleted, the overlap reappears with incorrect formatting in the Time Overlap/Slack field.



2401.0.0.0

Release Note • 3/6/2024 • 1 min read

Enhancements/Modifications

The Automated Scheduling in Production Order Scheduling started on Monday at 00:00, even when the work center week began on Sunday, causing scheduling discrepancies (reference Ticket No. 02966197). This is addressed by introducing the **Start Day of the Week** field to specific pages to align scheduling with the specified start day and consider calendar entries on Sundays during the execution of Automated, Manual, and Schedule Sorting actions.

UI/UX Changes

The **Start Day of the Week** field is added to the **Work Center Card**, **Machine Center Card**, and **Production Order Scheduling** pages.



2301.2.0.0

Release Note • 2/14/2024 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
159580	After adding and subsequently deleting an overtime entry to eliminate the overlap, the system incorrectly displays the overlap in the Time Overlap/Slack field.



2301.1.0.0

Release Note • 11/29/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
159157	Upon adding overtime entries on the Shop Calendar Working Days page, the system fails to register all the entries on the Calendar Entries page.



1.15.114193.0

Release Note • 8/23/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
140705	If an attribute value is set on the Item Attribute Values page before configuring it on the Production Scheduling Attribute Values page, the attribute value will be deleted from the Production Scheduling Attribute Values page when you revisit the Item Attribute Values page or open the corresponding Item Attributes FactBox.



1.14.113205.0

Release Note • 8/17/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
141025	Upon creating a production order using a Work Center with Capacity in decimal values, the system fails to provide access to the Production Order Scheduling page and throws an error.



1.13.112698.0

Release Note • 8/11/2023 • 1 min read

Enhancements/Modifications

Modifications were made to this extension to keep it in line with the *updated* coding guidelines for Business Central.



1.13.112478.0

Release Note • 8/9/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
131686	On the Production Order Scheduling page, the system fails to calculate the correct value for Time Overlap based on the settings done on the Shop Calendar Working Days page.



1.13.112273.0

Release Note • 8/8/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
135885	Upon executing the Split Production Order function on the Production Order Scheduling page for a Firm Production Order with more than one work center registered on the Routing page, the system displays the incorrect values in the Quantity field of the associated Split Production Order .



1.13.111482.0

Release Note • 8/3/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
135749	Upon changing the value in the Show Column As field on the Workload page, the system resets the defined filters.



1.12.110147.0

Release Note • 7/24/2023 • 1 min read

Resolved issues

The following issues have been resolved in this release:

ID	Description
132891	When the value in the Name or Values field is changed on the Item Attribute page, the references to them on the Production Scheduling Attribute Values do not get updated.
134369	On the Production Order Scheduling page, the No. Filter dropdown list is enabled, and shows a list of values, even when the Show Line As field is empty.



1.11.108162.0

Release Note • 7/12/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
132884	An error occurs while changing the production order status to <i>Released</i> on the Production Order Scheduling page for the nl-BE, es-ES, de-DE, and de-CH translations.



1.11.107856.0

Release Note • 7/10/2023 • 1 min read

Resolved issues

The following issues have been resolved in this release:

ID	Description
131142	The production order quantity is calculated incorrectly when executing the Split Production Order action on the Production Order Scheduling page.
131148	An error is thrown when executing the Split Production Order action on manually created orders on the Production Order Scheduling page.



1.10.101071.0

Release Note • 5/31/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
120884	When multiple users access the Production Order Scheduling page and apply the same filters in the No. Filter or Date Filter field on the General FastTab, selecting Automated Scheduling from the action bar on the Actions menu may result in an error for some users, except for the user who most recently opened the page.



1.9.98872.0

Release Note • 5/18/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
117772	On the Production Order Scheduling page, the values in the selected line get inherited from the previously selected line.



1.8.93765.0

Release Note • 4/29/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
114337	On the Production Order Scheduling page, when the Split Production Order action is executed, the order is duplicated instead of splitting the quantity.



1.7.92310.0

Release Note • 4/29/2023 • 1 min read

Resolved issues

The following issue has been resolved in this release:

ID	Description
110547	When a user logs in as a Simultaneous User, an error message <i>The Prod. Order Scheduling Session does not exist</i> is displayed when trying to execute any action on the Production Order Scheduling page. Additionally, the user details are not displayed in the Simultaneous Users section of the FactBox.



1.6.79612.0

Release Note • 4/3/2023 • 1 min read

Features

With this release of the Aptean Production Scheduling extension, you can access the **Scheduling** navigation menu from the Role Center page for the Manufacturing Manager role. This enables you to perform the following activities:

1. Production Order Scheduling
2. Workload



1.5.76446.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

Modifications were made for this extension to accommodate the changes in the Aptean Process Manufacturing extension (1.14.77123.0). To know more, see [What's new in version 1.14.77123.0](#).



1.4.48483.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

The enhancements in this release are listed below:

- A localized version of the Production Scheduling extension is made available for the Switzerland market with the addition of German language code [de-CH].
- Minor technical changes were made to keep our apps in line with *updated* coding guidelines for Business Central.



1.3.44295.0

Release Note • 4/3/2023 • 1 min read

Enhancements/Modifications

Minor technical changes were made to keep our apps in line with *updated* coding guidelines for Business Central.

Resolved issues

The following issues have been resolved in this release:

ID	Description
41137	An error message stating " <i>Production Order record can not be saved</i> " occurs when adding downtime.
41135	An overflow error occurred when overtime was added.
32999	An overflow error occurred when the Split Production Order function was executed.



Introduction

Article • 4/3/2023 • 1 min read

The Aptean Production Scheduling (PSG) extension enables you to schedule production orders efficiently. The Workload page gives an insight into the workload assigned to multiple Work Centers/Machine Centers for the near future. This page shows if a Work Center or Machine Center is overloaded or underloaded.

The **Production Order Scheduling** page displays the crucial information that assists in making the right scheduling decisions. This page offers different functionalities to move production orders. After moving, the changes in the complete production plan can be seen. For example, you can view any overlapping issues between orders and know if all production orders will fit in one day. You can view the relationship between the sales order and their due dates. You can sort the production orders using the item attributes.

The Production Scheduling Attributes are several dedicated item attributes that can be used when scheduling production orders. They can be set up to achieve a sequence of production orders on the Production Order Scheduling page.



Setup

Article • 10/24/2024 • 1 min read

The following setups are required.

- [Manage permission sets](#)
- [Set up production scheduling](#)



Manage permission sets

Article • 10/24/2024 • 3 min read

Permission sets in Business Central define a user's access level to various features and data within this extension.

We provide the following system permission sets:

- Direct
- Indirect

Direct permission sets

Users with this permission set can perform specific actions directly without requiring additional approvals or workflows. These sets include permissions to read, modify, delete, and create data.

The direct permission set ID for this extension is *PRODSCHEDULINGFDW*.

Indirect permission sets

Users with this permission set can perform specific actions. This is used in conjunction with other permission sets to allow you to perform certain actions. These permissions typically involve additional conditions or approvals before the action can be completed.

The indirect permission set ID for this extension is *PRODSCHEDBASICFDW*.

User-defined permission sets

In addition to the system permission sets we provide, you can create new permission sets or copy system permission sets and modify or delete access to specific entities according to your requirements. For more information, see [Assign permissions to users and groups](#).

Assign a permission set



1. Select the Search icon , enter **Users**, and then choose the related link.
The **Users** list page opens.
2. Navigate to the username for which you want to assign the permission set and select it.
The **User Card** page opens.



3. On the **User Permission Sets** FastTab, in the **Permission Set** field, enter the valid permission set for this extension.

The associated fields are automatically updated based on the entered value.

The user has the necessary permissions to use the features of the Aptean Production Scheduling extension, ensuring secure and role-based access.



Set up production scheduling

Article • 6/24/2025 • 10 min read

Setup to show Work Center and/or Machine Center in Workload

The Workload page gives you insight into the assigned workload to multiple Work Centers/Machine Centers for the near future. The page signals if a Work Center or Machine Center is overloaded or underloaded.

Only Work Centers and Machine Centers with the setting 'Show in Scheduling Pages = Yes' are shown on the Workload and Production Order Scheduling page.



1. Select the Search icon , enter **Work Centers** and then choose the related link.

The **Work Centers** list page opens.

2. Select the desired **No.** from the list.

3. On the **Scheduling** FastTab, turn on the **Show in Scheduling Pages** toggle.

The Work Center is displayed on the scheduling pages. The setup is the same for a Machine Center.

The Work Center or Machine Center can be set up to sort the production orders per day or week based on the linked Production Scheduling Attributes.

4. In the **Schedule Per** field, select one of the following options:

- Day: Orders are sorted per day using the automated scheduling and manual scheduling functions.

Note

Use this option only when scheduling orders for a single day, not multiple days.

- Week: Orders are sorted per week when using the automated scheduling and manual scheduling functions.

Setup Production Scheduling Attributes

The Production Scheduling Attributes are several dedicated item attributes that can be used when scheduling production orders. For example, when chocolate is produced, it is efficient to produce white chocolate first, then milk and then dark chocolate. In this way, the production line does not have to be cleaned when switching between batches because black chocolate would contaminate the white chocolate batch. As a result, production orders must be planned in the order of white, milk, and dark chocolate. The Production Scheduling Attributes can be set up to achieve this sequence of production routing lines via the function Automated Scheduling on the Production Order Scheduling page.



You can assign a maximum of five item attributes as production scheduling attributes. Each production scheduling attribute (e.g., 'Color') must be assigned to a hierarchical level. The same applies to the attribute values of those production scheduling attributes, every value (e.g., 'White') must be assigned to a hierarchical level.



1. Select the Search icon , enter **Production Scheduling Attributes**, and then choose the related link.
The **Production Scheduling Attributes** page opens.
2. On the action bar, select **New**.
A new line is inserted.
3. In the **Item Attribute** field, select the desired option from the list.
4. With the attribute line selected, on the action bar, select **Attribute Values**.
The **Production Scheduling Attribute Values** page opens.
5. On the action bar, select **New**.
6. In the **Item Attribute Value** field, select the desired value from the list.
7. In the **Hierarchy** field, enter the desired value.
The Item Attribute Value with the lowest hierarchy, will be planned first. A hierarchy with the number 0 is also included in the scheduling. If the same hierarchy is assigned several times to different values, the production orders with the earliest creation date will be planned first.
The Production Scheduling Attribute Values and Hierarchy are now set up for the Item Attribute Color.
A maximum of five Item Attributes can be assigned as Production Scheduling Item Attributes.
8. On the **Production Scheduling Attributes** page, on the action bar, select **New**.
9. In the **Hierarchy** field, enter the value.
10. In the **Item Attribute** field, select an option from the list.
The Item Attributes and Values are later used as the sequence in which the production orders must be planned.
The lowest number in the hierarchy will be planned first.

Icon Setup

The Production Order Scheduling page supports production planners in their work, showing an overview of all Production Order Routing lines. The Scheduling Flexibility of each Routing line is visualized through an image on the page Production Order Scheduling. When installing the module, a set of default images will be set up for this functionality. When desired, it is possible to change these default pictures to your own set of pictures.



1. Select the Search icon , enter **Production Scheduling Setup**, and then choose the related link.
The **Production Scheduling Setup** page opens.
There are four Scheduling Flexibility-icons that must be set up: Free, Restricted, Locked, and Fixed.
The **Free Flexibility** status indicates that a Production Order Routing line in the page Production Scheduling can be moved with the functions Automated Scheduling, Manual Scheduling, and Manual Move. The Planning



Flexibility of the line is Unlimited, and no entries (Consumption, Output, and Capacity) exist.

The **Restricted Flexibility** status indicates that a Production Order Routing line in the page Production Order Scheduling can be moved with the functions Automated Scheduling, Manual Scheduling and Manual Move. The Planning Flexibility of the line is Unlimited and no entries (Consumption, Output, and Capacity) exist. Production Order Routing lines with a Scheduling Flexibility= Restricted Flexibility deviate from lines with 'Free Flexibility' because Reservation entries exist for the specific Production Order line. When Reservation entries exist, the restriction is that the due date of the Production line can't be moved after the shipment date of the linked sales line.

The **Locked Flexibility** status indicates that a Production Order Routing line in the page Production Order Scheduling can't be moved with the functions Automated Scheduling, Manual Scheduling and Manual Move. No entries (Consumption, Output, and Capacity) exist and the Planning Flexibility of the Production Order line is None.

The **Fixed Flexibility** icon indicates that a Production Order Routing line in the page Production Order Scheduling can't be moved anymore because entries (Consumption, Output, and/or Capacity) exist for the Production line.

2. On the **Icons** FastTab, select **Fixed Flexibility**.

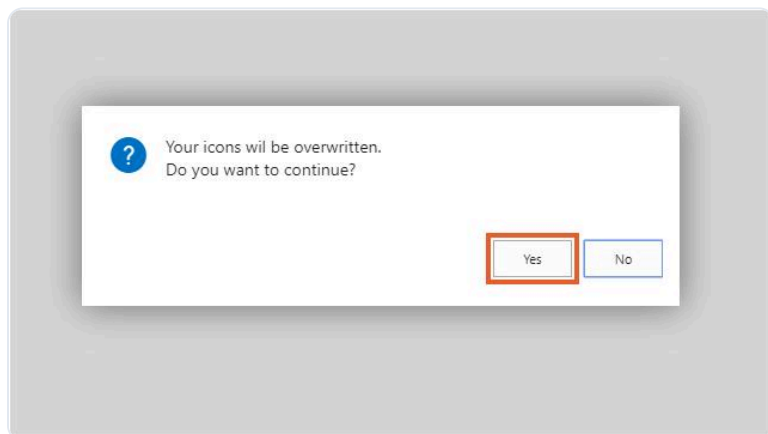
3. Select **Choose...**

4. Select an image.

The steps above are the same for the other icons. It is possible to reset all icons to their standard image.

5. On the action bar, select **Actions > Set Icons to Default**.

6. A dialog box opens with the following message:



7. Select **Yes**.

All icons are now reset to their default image.

The Production Preparation and Scheduling Setup is now completed.

Scheduling Setup

With this feature, you can allocate the required time to assist in scheduling and planning production orders with flexibility.

1. On the **Production Scheduling Setup** page, on the **Scheduling** FastTab, in the **Downtime Orders Deletion Date**



Production Scheduling

field, enter the date formula determining when downtime production orders will be deleted. The calculated date is derived from the system date minus the specified date formula.

Any downtime production orders with a due date equal to or earlier than this calculated date can be removed via the **Delete Downtime Production Orders** report.

You can also use the **Set up Production Scheduling** wizard to create a job queue entry and manage the periodic deletion of downtime production orders.

2. In the **Order type for Downtime Prod. Order** field, select the production order type to be utilized when creating downtime orders through downtime scheduling.



Downtime Scheduling Matrices

Article • 9/24/2025 • 3 min read

You can configure the downtime necessary for various operations, such as changing machine center or work center settings or performing maintenance tasks.



1. Select the Search icon  , enter **Downtime Scheduling Matrices**, and then choose the related link.
The **Downtime Scheduling Matrices** page opens.
2. On the **Filters** FastTab, fill in the fields as follows:

Field	Description
Type Filter	Select whether the downtime schedule applies to the work center or the machine center.
No. Filter	Select the work center or machine center number to filter the routing lines.

Based on the specified filters, you can access the following fields:

Field	Description
Downtime Scheduling Type	Select the type of downtime scheduling, determining whether it applies to the item or specific attribute values.
Item Attribute Name	Select the description of the specified downtime scheduling type, providing context for the downtime scheduling. This field is editable only when the Downtime Scheduling Type field is set as <i>Scheduling Attribute</i> , which establishes its own hierarchy for attribute values.
From Code	Select the attribute value or item number initiating the downtime scheduling process.
From Code Description	Indicates the description corresponding to the selected attribute value or item number initiating the downtime scheduling process.
To Code	Select the attribute value or item number to which the downtime is applied.
To Code Description	Indicates the description corresponding to the selected attribute value or item number to which the downtime is applied.
Production Downtime Item	Select the item number set up as a downtime item.
Downtime Duration	Enter the time required to schedule the downtime for the specified attribute or item.



	If the Downtime Scheduling UOM field value is set to, • <i>HOURS, DAYS, or 100/HOUR</i>: The system allows integers and two decimals places in this field. • <i>MINUTES, MILLISEC, or SECONDS</i>: The system allows only integer values in this field.
Downtime Scheduling UoM	Indicates the unit of measure for the downtime sourced from the selected work center or machine center.

The downtime scheduling matrix has been set up.



Show workload of Work Centers and Machine Centers

Article • 4/3/2023 • 4 min read

The Workload page gives insight into the assigned workload of multiple Work Centers/Machine Centers soon. The page signals when a Work Center or Machine Center is overloaded or underloaded.

Only Work Centers and Machine Centers with 'Show in Scheduling Pages = Yes' setting is shown on the Workload page. For more information, see [Production Scheduling Setup](#).



1. Select the Search icon , enter **Workload**, and then choose the related link.

The **Workload** page opens. The Workload page can be filtered based on Location.

2. On the **General** FastTab, in the **Location Filter** field, select a desired value.

3. In the **Show Line As** field, select *Work Center* or *Machine Center*.

This filters and displays the work centers or machine centers based on the selected location.

4. In the **No Filter** field, select the AssistEdit button to select the desired value.

The Work Center or Machine Center page opens based on the option selected in the **Show Line As** field.

5. Select **OK**.

6. In the **View By** field, select *Day*, *Week*, *Month*, *Quarter*, or *Year* to view the Workload page accordingly.

7. In the **Show Column As** field, select *Capacity*, *Allocated Quantity*, *Load(%)*, or *Availability After Orders*.

- The *Capacity* shows the available capacity values in the defined unit of measure.
- The *Allocated Quantity* shows the total capacity needed for the planned operations.
- The *Load (%)* shows the percentage of how much of the total capacity is used.
- The *Availability After Orders* shows how much capacity is left when the allocated quantity is reduced from the total capacity.

8. In the **Date Filter** field, enter the value that specifies the period in which the workload is shown.

9. On the **Workload** FastTab, the following fields are displayed.

- a. In the **No.** field, the work center or machine center is specified.
- b. In the **Name** field, the description of the work center or machine center is specified.
- c. In the **Unit Of Measure Code** field specifies how each unit of the Work Center or Machine Center is measured, such as in minutes or hours.
- d. The last columns on the page shows the capacity, allocated quantity, load (%), or availability after orders. Depending on the date filter set, it is possible to move through columns or sets.

10. On the action bar, select **Next Column** or **Previous Column** to move between the columns on the Workload FastTab.



11. Select **Next Set** or **Previous Set** to move between the set of records on the Workload FastTab.

If too much capacity is planned, the values for the Load (%) and Availability After Orders are colored red.

12. On the **Workload** FastTab, navigate to the desired line.

13. On the action bar, select **Scheduling** > **Production Order Scheduling**.

The Production Order Scheduling page displays the planned production orders and the ones causing the overload.



Production Order Scheduling page

Article • 12/18/2023 • 7 min read

Production Order Scheduling page

The Production Order Scheduling page gives insight into the assigned workload to Work Centers or Machine Centers per Production Order. The page can be used to analyze the capacity overloads at Work Centers or Machine Centers and gives options to move production orders to avoid capacity bottlenecks. Capacity requirements are generated in Work Centers and/or Machine Centers. The system automatically works with infinite capacity and plans everything on a Work Center or Machine Center without considering any capacity constraints. Therefore, it is needed to level the capacity at the Work Center or Machine Center, which can be done using specific functions on this page. For more information about these functions, see [Production Order Scheduling functions](#).

Only Work Centers and Machine Centers with the 'Show in Scheduling Pages = Yes' setting are shown on the Production Order Scheduling page. For more information, see [Production Scheduling Setup](#).



1. Select the Search icon , enter **Production Order Scheduling**, and then choose the related link.
The **Production Order Scheduling** page opens.
The Production Order Scheduling page can show Work Centers or Machine Centers. The Production Order Scheduling page can be filtered on a specific Work Center or Machine Center.
2. In the **Show Line As** field, select *Work Center* or *Machine Center*.
3. In the **No Filter** field, select the AssistEdit button to open the **Work Centers** or **Machine Centers** page. You can also choose multiple Work/Machine Centers.
4. Select the desired **No**.
5. Select **OK**.
6. In the **Start Day of the Week** field value is auto-populated based on the selected work center or machine center in the **No. Filter** field. It inherits the value from the option selected in the **Start Day of the Week** field on the **Work Center Card** or **Machine Center Card** page. You can only view the field, and it's non-editable.
7. In the **Date Filter** field, enter the desired date. It specifies the period in which the Production Order Routing lines are shown.
The page shows detailed information on the Production Order Routing lines, such as the Work or Machine Center and the Start and End Date/Time. The **Date Filter** value is adjusted based on the day specified in the **Start Day of the Week** field.
8. The **Scheduling Flexibility** field displays the per Production Order Routing Line. It gives quick insights into the possibility of moving the line. For more information, see [Production Scheduling Setup](#).
9. The **Time Overlap/Slack** field shows if there is any overlap or slack between one and the previous production order on a specific work center or machine center.



- If a production order is planned to start before the preceding production order is finished (on that same work center or machine center), it will cause an overlap. In this case, the system displays the number of minutes that overlap in red. This is your signal that re-planning is necessary.
 - If a production order is not started directly after the previous production order has been finished (on that same work center or machine center), it will cause slack time. This is the time when the production process was intended to run, but is out of action if no production order is planned. The system shows in grey how many minutes the work center or machine center contains slack time. This gives you a signal that re-planning might be necessary.
10. Only Production Orders with **Status** *Planned*, *Firm Planned*, or *Released* are shown on the page.
 11. In the **Prod. Order No.** field, select the value to open the production order.
 12. The **Item No.** and **Item Description** fields show the number and the description of the item that is to be produced.
 13. In the **Needed Capacity** field, select the value to open the production order capacity need.
 14. The **Capacity UOM Code** field specifies the Unit of Measures Code of the needed capacity.
 15. The **Remaining Quantity** specifies the difference between the finished and planned quantities of the production order.
 16. The **Item UOM Code** specifies the Unit of Measure Code of the remaining quantity.
 17. The **Reserved Quantity** field shows if there is a reserved quantity for the produced item on the production order. When you select the Reserved Quantity field, the reservation entries page opens. This shows how many items are reserved for which sales order and from which document they are reserved. From this page, it is possible to cancel the reservation.
 18. Select **Back**.
 19. The **Planning Flexibility** field specifies whether the production order has the planning flexibility unlimited or none. This is influenced by changing the Scheduling Flexibility.
 20. The **Due Date** field specifies the date when the produced item must be available.

When moving a production order in time via the Automated or Manual Scheduling actions, the Due Date of the Production Order can be changed. The system signals when the changed **Due Date** (due to moving the Production Order forward or backward in time) falls after the **Initial Due Date**. The system automatically populates the **Initial Due Date** upon refreshing the production order with an associated routing.
 21. The **Number of Production Scenarios** field shows the number of production scenarios that exist for the item in the production order. This information can be useful if the production order must be rescheduled to another work center or machine center. You can open the Production Scenarios by selecting the value defined on the **Number of Production Scenarios** field.

This page gives insight into the production scenarios and the information per scenario, such as location, Production BOM number, and Routing number.
 22. Click **Back**.

The page shows the Production Scheduling Attributes that are set up for the item that is produced, for example, Color or Storage Condition.



 Note

On the **Production Order Scheduling** page, the **Availability After Orders** FactBox provides information about the availability of the selected work centers for the next 7 days. Additionally, the **Simultaneous Users** FactBox displays the status of functions being utilized on the page and the list of users concurrently accessing those functions.

1. The **Scheduled Downtime** checkbox indicates whether the line includes the downtime and is created from the **Downtime Scheduling Matrices** page.



Production Order Scheduling functions

Article • 4/17/2024 • 17 min read

The Production Order Scheduling page makes it possible to move the production orders and see the direct impact on the production plan. It will show, for example, if there are any overlapping issues and if all production orders fit in one day. The direct relations to the sales order and their due date can be viewed. It is also possible to use item attributes to ease sorting production orders. For more information about the fields on the page, see [Production Order Scheduling](#).



- 1. Select the Search icon , enter **Production Order Scheduling**, and then choose the related link.
The **Production Order Scheduling** page opens.



- 2. Select the icon to expand the FactBox pane.

Availability After Orders

Work/Machine Center No.	W000001
1st Day	-260
2nd Day	330
3rd Day	480
4th Day	480
5th Day	
6th Day	
7th Day	-400

The FactBox on the **Production Order Scheduling** page shows the **Availability After Orders** and **Simultaneous Users**. The **Availability After Orders** FactBox shows how much capacity is left (on the selected work center or machine center) when the capacity needed for the planned operations is reduced from the total capacity. The **Simultaneous Users** FactBox shows which users are simultaneously planning Production Order Routing lines on the same work center or machine center. It's useful when multiple users are working on the page at the same time.

The 1st Day represents the entered start date in the date filter of the page. It shows the workload (overload and underload) of the selected Work Center/Machine Center. Based on this insight, the assigned workload can be moved to another starting date or another Work Center/Machine Center.



Automated Scheduling

The function Automated Scheduling changes the sequence of the production orders based on the setup of the Production Scheduling Attributes. The Production Scheduling Attributes can be set up to achieve a specific sequence of production routing lines. For more information on this setup, see [Production Scheduling Setup](#).

When changing the sequence of the execution of the production order routing lines, various checks exist regarding Scheduling Flexibility. The function won't change the Start Date/Time for Production Order Routing lines that have Scheduling Flexibility Fixed or Locked (these lines will be skipped). When using the function for a Production Order Routing line with Scheduling Flexibility Restricted, the Start Date/Time is only changed if the reservation entries do not conflict with the new Start Date/Time.

1. Navigate to the **Production Order Scheduling** page.
2. On the action bar, select **More options** > **Actions** > **Scheduling** > **Automated Scheduling**.
3. In the **Schedule per** field, select Day or Week per Work Center/Machine Center.
 - Schedule per Day: Orders are sorted per day based on the linked Production Scheduling Attributes.
 - Schedule per Week: Orders are sorted per week based on the linked Production Scheduling Attributes. Only the production order within the function's date filter is adjusted.
4. Select the **Open the date picker** field.
5. Select a date in the calendar.

6. Select **OK**.



7. Select the  icon to expand the FactBox pane. The Availability After Orders for the 1st Day is now zero, which means that there is no overload for this Work Center anymore.





Availability After Orders	
Work/Machine Center No.	W000001
1st Day	0
2nd Day	70
3rd Day	480
4th Day	480
5th Day	
6th Day	
7th Day	-400

The function takes the specified working days and hours, shifts, holidays, and absences of the Shop Calendar of the Work Center/Machine Center into account according to its defined efficiency and capacity values.

The function Automated Scheduling has sorted the Production Order Routing lines based on the hierarchy of the Production Scheduling Attributes.

Automated Scheduling with Scheduled Downtime

The downtime is appropriately added to the production schedule based on the downtime scheduling matrices.

After performing the **Automated Scheduling** action for the desired Work Center or Machine Center,

- The system will sort all linked production routing lines based on the linked Production Order Scheduling attribute values.
- The Starting Date-Time is automatically set equal to the Ending Date-Time of the previously sorted production routing line.
- If the defined Production Scheduling Attribute value differs from the previous line for any of the five possible Production Scheduling attributes, an extra production downtime order is inserted. This occurs when the **Downtime Duration** is set up on the **Downtime Scheduling Matrices** page.
- Confirm that the run time of the Production Downtime Order is equal to the assigned Downtime Duration of the selected Downtime Scheduling Matrices line.



 Note

The system ensures that available capacity on the start day of the week is considered during the automated scheduling and not skipped unnecessarily.

The outcome of performing this action may vary depending on the following scenarios:

Scenario 1: Include Downtime for multiple Production Scheduling Attribute changes.

The system incorporates downtime consideration when multiple production scheduling attribute changes occur, utilizing the rebuild time specified on the Downtime Scheduling Matrices.

If multiple Production Scheduling Attribute values differ from the previous line after performing the **Automated Scheduling** action, then it is necessary to create a production downtime order. This order will use the Production Downtime Item and the associated downtime with the biggest scheduled downtime value.

Scenario 2: Include Downtime when switching between individual items.

On the **Downtime Scheduling Matrices** page, you can configure rebuild time to switch between individual items.

Now, the downtime is added as per the downtime scheduling matrix.

If two production routing lines that are sorted in a row have different scheduling attribute values and both of these lines use different item numbers that also have scheduled downtime set up on the Scheduled Downtime Matrices, then the biggest scheduled downtime is used.

Scenario 3: Execution of Automated Scheduling multiple times.

You can also perform the **Automated Scheduling** action multiple times for the same period, whether a day or a week.

After performing the action, if the downtime duration is the same between attributes and items, the production orders created for the downtime, known as the Production Downtime Orders, are marked with the **Scheduled Downtime** checkbox selected.

When you execute the **Automated Scheduling** action multiple times for the same period, such as in the case of scheduling for a week, the new production orders are added after the first execution. When you rerun the **Automated Scheduling** action to integrate these new orders, the initial Scheduled Downtime Orders are deleted, and new downtime orders are created to reflect the changes accurately.

Scenario 4: Time taken in the Downtime Scheduling Matrix is the same between attributes or between attributes and items.

When you perform the **Automated Scheduling** action, the system considers the downtime scheduling, where the downtime duration can be the same between attributes or attributes and items.



In a production order where multiple attributes are changing, and the order has a Downtime Scheduling Matrix with the same Downtime Duration, but the Production Downtime Item used is different, the system will refer to the hierarchy and select the Downtime Item with the highest hierarchy. If both attributes and items are changing in the production order, the system will give priority to the item change over the attribute change. To know more about hierarchy, see [Setup Production Scheduling Attributes](#).

Manual Scheduling

The Manual Scheduling action can be used to change the Start and End Date/Time of one or more Production Order Routing lines by placing it directly before or after another Production Order Routing line. Manually changing the sequence will cause the rest of the Production Order Routing lines within the date filter of the function to be rescheduled.

1. Select one or more Production Order Routing lines.
2. On the action bar, select **More options** > **Actions** > **Scheduling** > **Manual Scheduling**.
3. The **Number of Selected Lines** field shows how many Production Order Routing Lines are selected.
4. The **Total Needed Capacity** field cumulates the Needed Capacity of the selected lines.
The selected lines can be placed directly before or after another Production Order Routing line.
5. Select the **Move Selection** field.

6. Select the item **After** in the list.

The Start and End Date/Time of all the Production Order Routing lines that fall between the Start Date and End Date filter will be automatically changed due to executing the function. They are rescheduled per day or week, depending on the setup of the Work Center/Machine Center. The Start Date/Time of the lines are rescheduled but keep the same chronological order. The Start Date/Time of Production Orders with Scheduling Flexibility Fixed or Locked will not change. The Start Date/Time of Production Orders with Scheduling Flexibility Restricted will only change if the new Start Date/Time does not conflict with the reservation entries.

7. Select the **Open the date picker** field.
8. Select a date in the calendar.
9. Select the Production Order Routing line where the previously selected Production Order Routing lines should be placed after.
10. Select **OK**.

The Production Order Routing lines that fell between the Start Date and End Date filter of the function Manual Scheduling are now rescheduled per day or week, based on the setup **Schedule per** field on the Work Center/Machine Center page.



 Note

You can also perform the **Manual Scheduling** action to create the new downtime order as per the [Downtime Scheduling Matrices](#) setup, which deletes the previously created downtime orders. To know more about Hierarchy, see [Setup Production Scheduling Attributes](#).

Manual Move

The Manual Move action can be used to change the start date and/or time of a Production Order Routing line to solve for example a planning conflict. The function won't change the Start Date/Time for Production Order Routing lines that have Scheduling Flexibility Fixed or Locked. When using the function for a Production Order Routing line with Scheduling Flexibility Restricted, the Start Date/Time is only changed if the reservation entries do not conflict with the new Start Date/Time.

1. Select one or more Production Order Routing lines.
 2. On the action bar, select **More options** > **Actions** > **Scheduling** > **Manual Move**.
 3. In the **Starting Time** field, enter the value.
 4. Select **OK**.
 5. The **Starting Date-Time** of the selected Production Order Routing Line has changed to **1/11/2020 9:40 AM**, which was selected during the Manual Move. Note that if there were already one or more other Production Order Routing lines planned during (a part of) this time period, those lines are not affected.
- If multiple lines were selected when using the Manual Move function, the Production Order Routing line that had the first Start Date/Time will change to the entered starting date/time. The second, third, and subsequent Production Order Routing lines are then placed chronologically after the first one. If the starting time is blank, the system will plan the production order on the assigned starting date and the first available time according to the calendar.

Change Scheduling Flexibility

One or more production orders within a given timeframe can be 'Locked' to ensure that the production order routing line can't be moved anymore when using the function Automated Scheduling, Manual Scheduling or Manual Move. This can be done by changing the Scheduling Flexibility to Locked. It is also possible to 'Unlock' a production order or a set of production orders to make it possible to move these production orders again. For more information about Scheduling Flexibility, see paragraph Icon Setup in the chapter Production Preparation and Scheduling Setup.

When changing the Scheduling Flexibility to *Locked*, it will automatically change the Planning Flexibility of the Production Order line to None. When changing the Scheduling Flexibility back to Free or Restricted, it will automatically change the Planning Flexibility back to Unlimited.



1. Select one or more Production Order Routing lines.
2. On the action bar, select **More options** > **Actions** > **Scheduling** > **Change Flexibility**.
3. Select the item **Locked**.
4. Select **Yes**.

The selected Production Order Routing lines are now changed to Scheduling Flexibility Locked.

A production order routing line with Scheduling Flexibility Fixed cannot be changed to another Scheduling Flexibility since there are already Item Ledger Entries and/or Capacity Ledger Entries for the production order.

Change Status of the Production Order

After scheduling (firm) planned production orders, their status can be changed to *Released* so the consumption items can be picked and output can be posted. It is possible to adjust the status of multiple production orders simultaneously.

1. Select one or more Production Order Routing lines.
2. On the action bar, select **More options** > **Actions** > **Functions** > **Change Status**.
3. In the **New Status** Field, select *Released*.
4. Select **Yes**.
5. In the **Status** field, select the line with the value *Released*.

Create Warehouse Pick

A Warehouse Pick can be created directly from the Production Order Scheduling page.

1. On the action bar, select **More options** > **Actions** > **Warehouse** > **Warehouse Pick**.
2. Select **OK** to create a Warehouse Pick.

Warehouse documents

The Put-Aways, Pick lines, Movement lines and Registered Pick Lines of the Production Order can be opened directly from the page.

1. On the action bar, select **More options** > **Related** > **Warehouse** > **Put-away/Pick Lines/Movement Lines** to view the list of ongoing inventory put-aways, picks, or movements for the order.
2. Select **Registered Pick Lines** to view the list of warehouse picks that have been made for the order.



Production Order Scheduling Functions II

Article • 7/2/2025 • 13 min read

Add downtime

Within food production, cleaning or maintaining production lines is of vital importance. Especially in environments where switching between produced items (different recipes or colored ingredients) is frequent, these cleaning/maintenance time windows can use up a considerable amount of time. To efficiently plan this process, it is possible to set up default time windows per work center and use these within the production scheduling process. These default downtime windows use (dummy) item numbers.

Production downtime items setup

Before being able to plan production downtime, the downtime items must be set up for each work/machine center. It is possible to link multiple production downtime items to one work/machine center, and it is possible to link the same item to multiple work/machine centers. It is, however, not possible to link the same item number to the same work/machine center multiple times with different routings.



1. Select the Search icon , enter **Production Downtime Items**, and then choose the related link.
2. On the action bar, select **New**.
3. In the **Type** field, select *Machine Center* or *Work Center*.
4. In the **No.** field, select a desired number from the list.
5. The **Work/Machine Center UOM** field is automatically populated with the Unit of Measure Code based on the selection of **No.** field.
When selecting the production downtime item, it should be considered that the base unit of measure of the downtime item should be the same as the unit of measure of the selected work/machine center.
6. In the **Item No.** field, select a desired number from the list.
The Unit of Measure Code should be the same for the Work/Machine Center and the Item.
7. The **Item Description** field is automatically populated based on the selection of the Item No.
8. In the **Routing No.** field, select a desired number from the list.
The Production Downtime Items are now set up and can be used on the **Production Order Scheduling** page to add downtime to a production order.

Schedule downtime for cleaning/maintenance

The previously set default cleaning/maintenance items can be used within the production scheduling routine.





1. Select the Search icon , enter Production Order Scheduling, and then choose the related link.
2. Select a production order where downtime needs to be planned before or after.
3. On the action bar, select **More options** > **Actions** > **Scheduling** > **Add Downtime**.
4. Select **Production Downtime Item**.
This specifies what type of downtime is added, such as 'cleaning' or 'maintenance'.
5. Select **OK**.
6. in the **Order Type** field, select an option from the list: *Planned*, *Firm Planned*, or *Released*. This specifies the order type of the production order that is created for downtime.
7. In the **Total Downtime** field, enter the value.
This specifies how much downtime is added, expressed in the unit of measure of the selected work/machine center.
The downtime can be added before or after the routing line that is selected in the next steps.
8. In the **Add Downtime** field, select *Before* or *After*.
9. Select the routing line where the production downtime should be placed before/after.
10. Select **OK**.
A production order has now been created according to the entered information. The system executes the 'Refresh' function after the creation of the production order to create the production line. This created production order represents the scheduled time for maintenance/cleaning of the work center/machine center. Therefore, a routing line is created for this production order that represents that needed time as an allocated time on the work center/ machine center.
When the **Add Downtime** function has been executed, all the routing lines scheduled after the newly created routing line are planned sequentially.
The **Downtime** field on the **Production Order Scheduling** page shows if the production order concerns downtime for maintenance/cleaning.

Assign overtime

Scheduling production orders often results in a situation where specific orders cannot be finalized within one day or shift. Depending on the size of the production run, the production planner may decide to either split the production order into two orders or plan overtime.

When planning overtime, additional capacity in the form of a so-called calendar entry is created. A function exists to easily create these calendar entries, and it is possible to reschedule the production orders, considering the overtime. This makes it possible to finish a production order on that date instead of finishing it on the next date.

1. On the action bar, select **More options** > **Actions** > **Scheduling** > **Add Overtime**.
2. In the **Starting Date** field, enter the value.
This specifies the starting date of the added overtime.



3. In the **Starting Time** field, enter the value.

This specifies the starting time of the added overtime. This starting time must fall outside the regular calendar working hours for this day.

4. In the **Total Overtime** field, enter the value.

This specifies the total added overtime, expressed in the unit of measure of the work center. The complete overtime must fall outside the regular calendar working hours.

On validation of the starting date/time and the ending date/time, the system checks if the time window that is registered starting date/time to (calculated) ending date-time does not overlap with an already existing overtime calendar entry for the specific work center or if it is in regular calendar working hours.

5. Select **OK**.

This creates a calendar entry based on the information registered on **Overtime Lines** FastTab. The overtime is registered and automatically incorporated into the production schedule.

The **Overtime** field on the **Production Order Scheduling** page indicates that the production order contains overtime.

It is possible to see all the Calendar Entries of the selected work center/machine center and the production order on the Production Order Scheduling page. This also includes the calendar entries that are added as overtime.

6. On the action bar, select **Related > Calendar Entries**.

It shows the calendar entries that are created as overtime.

7. Select **OK**.

Move production orders to another work/machine center

When scheduling production orders for a given time window, it is likely that, at any given time, there is too much capacity planned on one work- or machine center. One of the options to better spread the required capacity is to move production orders to another work - or machine center. As the production planner is working from the **Production Order Scheduling** page, it is easy to switch between work- or machine centers directly from this page.

The moving of production orders to another work/machine center is done by using the production scenarios. Initially, when applying a production scenario, the system checks for a default production scenario using the full combination of item, location, and variant code and assigns it. Then, you can change the production scenario as required. For more information, see [Production Scenarios](#).

1. On the action bar, select **More options > Actions > Scheduling > Change Production Scenario**.

2. In the **New Production Scenario Code** field, select a value. If a variant code is specified on the production order line, the list of available production scenarios is further filtered to show only those matching the selected item, location, and variant code.

3. Select **OK**.

After selecting **OK**, a production order has been moved from one work center or machine center to another work center or machine center to balance the load of these work centers and machine centers. When only the routing number differs between the current and new production scenario, the system only refreshes the routing



lines and retains production BOM and components lines, avoiding unnecessary recalculations.
It can be the case that when changing the production scenario, it influences the bin codes as well.

4. Select **Yes**.

Insight into the delta between demand production order component lines versus stocked inventory in the production area

When a production plan is executed, it is vital that sufficient production materials are available to continue production efficiently. Therefore, it has been made easier for production and warehouse managers to check if the available stock in the bins used to post consumption is sufficient for the upcoming timeframe. For this reason, insights are given into shortages that may exist for production components in the short term.

Insight is given in inventory shortage per work center/machine center by comparing the needed inventory (demand) until a given date/time based on Prod. Order Component lines and the available inventory on the production bins.

1. On the action bar, select **More options > Actions > Scheduling > Availability Production Components**.
It is possible to apply an end date/time as a filter on the Routing Lines of the selected work/machine center.

2. Select **OK**.

This opens the **Availability Production Components** page. It gives insight into the total needed inventory (demand) per item number/variant code per bin code for a selected work/machine center until a selected date/time. The availability is defined as physically present inventory in warehouse entries minus the remaining quantities on component lines.

If the filtered Routing Lines don't have a filled Routing Link code, then all the Prod. Order Component lines of the associated production order are used for totaling the Remaining Qty. (Base).

If the filtered Routing Lines have a filled Routing Link code, then only the Prod. Order Component lines of the associated production order with the same Routing Link code filled are used to total the Remaining Qty. (Base).

Split Production Orders

A production order can be split into two separate production orders, based on quantity or time. This might be done (for example) when a part of the initial quantity must be planned on another work center/machine center in case there is an overload on that work center and the production order has a deadline.

1. On the action bar, select **More options > Actions > Scheduling > Split Production Order**.

2. Select the routing line that needs to be split off.

3. In the **Split Off Quantity** field, enter the quantity.

After entering the **Split Off Quantity**, the Split Off Time is automatically calculated. The Split Off Time can also be entered instead of the Split Off Quantity.



4. Select **OK**.

This splits the selected production order into two separate production orders. A production order is created for the remaining (split off) quantity/time. A second, newly created production order has the same characteristics as the production order from which it is derived. Also, the Production Component lines and the Routing lines are copied from the production order to the newly created production order, where the expected quantities are in the Prod. Component lines and the allocated time in the Routing lines are calculated based on the quantity of the newly created production order.

Schedule production orders based on manually assigned sorting number

It is possible to schedule production orders from the **Production Order Scheduling** page in a simple way by assigning a sorting number to these production orders.

Before starting to schedule the orders based on a sorting number, the filter must be set on a work/machine center.

1. On the **General** FastTab, in the **No. Filter** field, click the AssistEdit button to select a desired number.

2. Select **OK**.

3. On the action bar, select **Edit List**.

The numbers can be assigned to indicate the order of execution of the production plan. Production orders that keep the initially assigned sorting number of 0 will not be rescheduled.

4. In the **Sorting No.** field, enter the value.

When all the sorting numbers have been filled in correctly, the *Schedule on Sorting No.* function must be executed.

5. On the action bar, select **More options > Actions > Scheduling > Schedule on Sorting No.**

The **Starting Date After Scheduling** field specifies the starting date of the first routing line after scheduling on sorting number. This date must fall within the regular calendar working hours of the machine/work center.

The **Starting Time After Scheduling** field specifies the starting time of the first routing line after scheduling on sorting number. This time must fall within the regular calendar working hours of the machine/work center.

The **Reset Sorting No.** toggle specifies if after execution of the function Schedule on Sorting No. the assigned sorting numbers should be kept or reset to 0.

6. Select **OK**.

This reschedules the production orders based on the manually assigned sorting number.

