

User Manual

Aptean Food and Beverage ERP

Production Costing

Product Documentation



Contents

- [Release notes](#)
- [2501.0.0.0](#)
- [2401.4.0.0](#)
- [2401.3.0.0](#)
- [2401.2.0.0](#)
- [2401.1.0.0](#)
- [2401.0.0.0](#)
- [Introduction](#)
- [Setup](#)
- [Manage permission sets](#)
- [Set up production costing](#)
- [Work Center and Machine Center Setup](#)
- [Item cost calculation](#)
- [Cost related reports](#)
- [Process manufacturing reports](#)



Release notes

Article • 7/30/2025 • 1 min read

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

Date	Release version	Description
July 2025	2501.0.0.0	Feature release
June 2025	2401.4.0.0	Stability release
May 2025	2401.3.0.0	Stability release
January 2025	2401.2.0.0	Stability release
August 2024	2401.1.0.0	Stability release
May 2024	2401.0.0.0	Initial release



2501.0.0.0

Release Note • 7/30/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
293621	The system fails to post value entries when changing the status of a production order to <i>Finished</i>. Additionally, when there are routing lines from subcontractors on the document trade lines, the system incorrectly allows updating the Unit Cost field value on the Released Production Order page. This issue occurs only when the Aptean Trade Management extension is installed.



2401.4.0.0

Release Note • 6/27/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
304099	The system fails to set the Unit Cost Calculation field properly to the machine center's value of <i>Units</i> in the Prod. Order Routing Line table when the Type is set to <i>Machine Center</i> and the Enable Machine Center Costing toggle in the Production Costing Setup page is turned on.



2401.3.0.0

Release Note • 5/16/2025 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Costing 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.



2401.2.0.0

Release Note • 1/9/2025 • 1 min read

Resolved issues

The following issue has been resolved in this release.

ID	Description
245962	The system fails to calculate the Standard Cost field value on the Item Card page based on the configuration of the Enable Machine Centre toggle on the Production Costing Setup page.



2401.1.0.0

Release Note • 8/21/2024 • 1 min read

Enhancements/Modifications

With this release of the Aptean Production Costing 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.



2401.0.0.0

Release Note • 5/29/2024 • 1 min read

Features

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

- Specify whether the routing line unit cost should be used only for the direct cost portion while indirect costs continue to be sourced from the machine center.
- Configure the **Unit Cost Calculation** field on the **Work Center Card** and **Machine Center Card** pages.



Introduction

Article • 5/29/2024 • 1 min read

The Aptean Production Costing (PRC) extension improves the production costing capability by allowing users to enable machine center costing and define direct unit cost by machine center effortlessly. The extension allows the setup of specific machine center cost by routing and routing version, allowing users to set up more detailed and complex cost allocations. The editable Unit Cost Per feature in routing for machine centers enhances adaptability, ensuring users have granular control over cost parameters. In addition, all roll-up cost calculation functionalities and reporting will be adapted. By streamlining these processes, the extension allows you to optimize production costs, maintain accuracy, and increase overall operational efficiency in the Food & Beverage industry.



Setup

Article • 11/7/2024 • 1 min read

The following setups are required.

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



Manage permission sets

Article • 11/7/2024 • 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 *PRODCOST143FDW*.

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 *PRODCOSTBASIC143FDW*.

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.



Production Costing

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 Costing extension, ensuring secure and role-based access.



Set up production costing

Article • 5/29/2024 • 3 min read

The **Production Costing Setup** page allows you to configure important settings related to production costing. You can enable machine center costing and define specific costs for direct unit costs using the following procedure:

1. Select the Search icon , enter **Production Costing Setup**, and then choose the related link.
The **Production Costing Setup** page opens.
2. Turn on the **Enable Machine Center Costing** toggle if you want to use the machine center fields to control unit cost calculation and specific unit cost for production routing lines. When this feature is enabled, all machine centers will have the respective fields revealed on the card page, and the initial value for unit cost calculation will be set to match with the related work center.
3. Turn on the **Enable Specific Cost Used as Direct Unit Cost** toggle if the machine center or work center must be configured to utilize the *Specific Cost* as the direct unit cost in the production order routing line. This option is available only if the **Enable Machine Center Costing** toggle is turned on. Enabling this option directs the system to use the unit cost specified in the routing line as the direct unit cost, offering a more tailored approach to cost calculation. If disabled, the standard calculation deducts indirect and overhead contributions from the routing line unit cost, using the remainder as the direct unit cost. The **Work Center Card** and **Machine Center Card** pages control this feature.

Note

Ensure that the **Enable Machine Center Costing** and **Enable Specific Cost used as Direct Unit Cost** toggles are appropriately configured before proceeding with machine center and work center validations.



Work Center and Machine Center Setup

Article • 5/29/2024 • 3 min read

You can efficiently manage unit cost calculations by configuring settings on the **Work Center Card** and **Machine Center Card** pages.

1. On the **Work Center Card** page, on the **Posting** FastTab, select the required value in the **Unit Cost Calculation** field. The default value is set as *Time*.
Consequently, on the **Machine Center Card** page, on the **Posting** FastTab, the value in the **Unit Cost Calculation** field is inherited from the related work center.

Note

Changes made to the work center will affect the **Unit Cost Calculation** for all associated machine centers.

2. Turn on the **Specific Unit Cost** toggle.
3. Turn on the **Use Specific Cost as Direct** toggle to specify whether the routing line unit cost should be used for only the direct cost portion of the production order routing line while indirect costs continue to be sourced from the machine center.
This toggle is visible only when the **Specific Unit Cost** toggle is turned on, and both the **Enable Machine Center Costing** and **Enable Specific Cost used as Direct Unit Cost** toggles on the **Production Costing Setup** page must also be turned on.

When the **Enable Specific Cost Used as Direct Unit Cost** toggle on the **Production Costing Setup** page and **Use Specific Cost as Direct** toggle on the **Machine Center** page is turned on, the **Unit Cost per** field can be modified on the **Lines** FastTab of the **Routing** page and **Routing Version** page. This value cannot be modified if the **Status** field on the **Routing** header is set as *Certified*.

When both the **Specific Unit Cost** and **Use Specific Cost as Direct** toggles are turned on, the **Unit Cost Per** field value on the **Routing** page is inherited by the **Direct Unit Cost** field on the **Production Order Routing** page and planning routing line.

If the **Specific Unit Cost** toggle is turned on and the **Use Specific Cost as Direct** toggle is turned off, the **Unit Cost Per** field on the **Routing** page is inherited by the **Unit Cost Per** field on the **Production Order Routing** page and planning routing line.

On the **Released Production Order** page, while performing the **Change Production Scenario** action, the **Routing No.** field value on the **Item Production Scenarios** page is inherited by the **Released Production Order** and **Production Order Routing** pages.

When changing the **No.** field of the work center or machine center on the **Production Order Routing** page, the **No.** field value is inherited along with the associated **Unit Cost Per** and **Direct Unit Cost** values by the **Released Production Order**, **Production Order Routing** and **Planning Routing** pages.



This function also applies when using **Refresh Production Order** action or creating production order from the sales order.

The system sets and validates both the **Unit Cost Per** and **Direct Unit Cost** fields when using the **Calculate Regenerative Plan** or **Calculate Net Change Plan** action on the **Planning Worksheet** page, performing the **Refresh Planning Lines** action with routings included, manually entering the **Planning Routing Line**, and while performing **Change Production Scenario** action.

When the **Specific Unit Cost** toggle is turned on for the machine center or work center, the fields on the item journal line are updated based on the associated production order routing line.



Item cost calculation

Article • 5/29/2024 • 1 min read

The **Specific Unit Cost** and **Use Specific Cost as Direct** toggles on the **Work Center Card** or **Machine Center Card** page influences the calculation method of the capacity cost. When these toggles are turned on, the **Unit Cost Per** field on the routing line for the item will determine the capacity cost.

The capacity cost of the machine center can be calculated using the following actions:

- On the **Item** card page, on the action bar, select **Related** > **Bill of Materials** > **Other** > **Cost Shares**.
- On the **Item** card page, on the action bar, select **Related** > **Bill of Materials** > **Production** > **Calc. Production Std. Cost**.
- On the **Standard Cost Worksheet** page, on the action bar, select **Roll Up Standard Cost**.

The **Indirect Cost %** and **Overhead Rate** field values are obtained from the **Work Center Card** or **Machine Center Card** page. This is also applicable for multi-level calculations.



Cost related reports

Article • 5/29/2024 • 1 min read

On the **Work Center Card** or **Machine Center Card** page, when both the **Specific Unit Cost** and **Use Specific Cost as Direct** toggles are turned on, while calculating the capacity costs related to the machine center, the system prioritizes the value in the **Unit Cost Per** field from the routing line for the item, instead of the values from the **Machine Center Card** page itself. This is applicable when you use the following reports:

Report	Fields updated	Based on values
Detailed Calculation	Unit Cost	Direct Unit Cost, Indirect Cost %, and Overhead Rate
Cost Share Breakdown	Capacity Direct Cost Applied and Capacity Overhead	Direct Unit Cost, Indirect Cost %, and Overhead Rate
Rolled-Up Cost Shares	Material Cost, Capacity Cost, and Overhead Cost	BOM Cost Shares and Standard Cost
BOM Cost Share Distribution	Capacity and Capacity Overhead	Direct Unit Cost, Indirect Cost %, and Overhead Rate



Process manufacturing reports

Article • 5/29/2024 • 1 min read

The production costing affects the calculation of costs in the reports generated by the Aptean [Process Manufacturing](#) extension. On the **Production BOM** page, when you use the **Cost Matrix per Version** or **Independent BOM Cost Share Distribution** action, while calculating the capacity costs related to the machine center, the system prioritizes the value in the **Unit Cost Per** field from the routing line for the item, instead of the values from the **Work Center Card** page itself. This is applicable when you use the following reports for single and multi-level calculations.

Report/Page	Fields updated	Based on values
Prod. BOM Cost Matrix per Version Matrix page	Capacity and Capacity Overhead	Direct Unit Cost, Indirect Cost %, and Overhead Rate
Independent BOM Cost Share Distribution report	Capacity and Capacity Overhead	Direct Unit Cost, Indirect Cost %, and Overhead Rate

