sage

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Switching from Work Order to Production Management

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Introduction

This guide describes the key differences between the Production Management and Work Order modules. Review this guide before setting up the Production Management module if you've migrated from Work Order.

Terminology

The table below lists terms used in the Production Management module and their Work Order equivalents.

> **Tip:** You can customize some labels by entering alternate terms in Production Management Options. The custom terms appear on Sage 100 menus, screens, and reports, and they apply to all companies. The downside is that help and other documentation will no longer match your system.

Production Management Term	Work Order Term
work ticket	work order
open (work ticket status)	firm planned (work order status)
template	routing
activity code	operation code
material budget cost	standard cost
user-defined information code	miscellaneous code
work ticket (printed)	traveler

P/M and W/O terminology comparison

Setting up Production Management

This chapter describes the significant differences between setup tasks in the Production Management and Work Order modules.

Production Management Options

The following are a list of significant differences between Production Management Options and Work Order Options that you should be aware of.

- *Terminology:* On the **Main** tab, you can enter customized labels that appear for work tickets, steps, and activity codes. For example, you can replace "Work Ticket" with "Work Order." The customized labels appear on Sage 100 menus, screens, and reports.

  > **Note:** Customized labels will not match the help and other documentation.

- *Inventory demand:* In Production Management an Open work ticket is the same as a work order with the Firm Planned status. In Work Order the materials for Firm Planned work orders were always included in the inventory demand calculation. However, in Production Management, you have a choice.

  To include materials on Open work tickets in inventory demand, select the **Include Open Work Ticket Materials as Inventory Demand** check box on the **Entry** tab in Production Management Options.

- *Cost completion methods:* In Production Management Options, you can select an option in the **Cost Completion Method** field. You have the same options that were available in Work Order: **Actual**, **Budget**, and **Lower of Budget/Actual**.

  Also a new method, **Standard**, has been added. The standard method uses the standard cost in Item Maintenance, even if Standard Cost is *not* selected as the item's valuation method.

  For more information, see the help for that field in the Production Management Options help.

- *Enter descriptions for labor:* You can select the **Capture Description of Work Performed** check box on the **Main** tab to allow the entry of a description of the work performed when entering time against work tickets in Labor Entry.

- *Dynamic materials:* Selecting this check box determines how inventory items on purchase orders that are linked to work tickets are handled. For more information, see "About the Dynamic Materials feature" (page 9).

- *Dynamic labor:* You can select this check box to automatically apply labor and labor cost transactions to a work ticket when you click **Accept** to save the transaction in Labor Entry.

- *Quick print options:* You can select options for quick printing work tickets and picking sheets on the **Quick Print** tab in Production Management Options.

Work ticket classes

Work ticket classes are used to define different build types and set defaults for those builds. For example, you can select the labor and materials issue methods, specify the default activity code and work center, enter general ledger accounts, and set up overhead calculations.

The STK work ticket class is created by default when you convert your Work Order data. Review the settings in Work Ticket Class Maintenance.

For more information, see the help for Work Ticket Class Maintenance.

User-defined info fields

On the **User Defined** tab in Work Ticket Class Maintenance, you can create user-defined fields that you can add to work ticket templates for use in work tickets. For more information, see Set Up User Defined Info Codes in the help.

Work ticket templates

In Production Management, work ticket templates are used instead of routings. In Work Ticket Template Maintenance, you can maintain step information as you could in Routing Maintenance in the Work Order Module. But you can do more with templates, such as assigning revision numbers and specifying material requirements and scaling options.

For more information see the Work Ticket Template Maintenance help.

Unit of Measure Rounding Maintenance

You can use Unit of Measure Rounding Maintenance to specify whether to round quantities up to the next whole number when creating work tickets or work ticket steps and when material rescaling does not result in whole numbers.

Overhead calculations

Overhead is calculated differently in Production Management, so your calculations may not match what you have in Work Order.

In Work Order, the overhead calculation is based on settings in the following locations:

- Work Center Maintenance

- Operation Code Maintenance

In Production Management, the overhead calculation is based on settings in the following locations:

- The **Overhead** tab in Work Ticket Class Maintenance for Accounts Payable invoices and materials

- The **Overhead** tab in Activity Code Maintenance for labor

When Work Order data is converted to Production Management data, the following occurs:

- A default work ticket class, STK, is created. In Work Ticket Class Maintenance, the **Calculate Overhead** check boxes on the **Overhead** tab are cleared by default.

- For work tickets converted from work orders, the **Overhead** check box on the **Materials** tab in Work Ticket Entry is cleared if there are no fixed or variable overhead costs for the associated step. Otherwise, the check box is selected.

- Fields are converted as shown in the table below:

Work Order	Production Management
Planned Cost Rate/Hour	Standard Cost Per Hour
Fixed Overhead Rate/Hour	Fixed Overhead Amount
Fixed Overhead % of Cost	Fixed Overhead Percent
Variable Overhead Rate/Hour	Variable Overhead Amount
Variable Overhead % of Cost	Variable Overhead Percent

How work order fields are converted in Production Management

> **Important!** After converting your data, be sure to select the correct overhead accounts in Work Ticket Class Maintenance.

Work tickets

In Production Management the term "work ticket" is used instead of "work order." Work tickets serve the same purpose as work orders in the Work Order module, but there are differences, some of which are covered in this chapter.

> **Note:** A custom label can be entered in Production Management Options, so you may see a term other than "work ticket" on screens and reports.

Work ticket and step numbers

In the Production management module, the work ticket number field holds 12 characters. The step number field holds 6 characters.

Work ticket statuses

In the **Status** field in Work Ticket Entry, there are three options:

- Open
- Estimate
- Released

The **Open** status is similar to the **Firm Planned** status in the Work Order module. In Production Management Options, you have the option to include components on open work tickets as inventory demand.

Unlike a work order, after a work ticket is released to production, you can still make changes to it, such as modifying the planned quantity or the materials required. Also, you don't need to enter a transaction to change a work ticket's status to released. Instead, you can select **Released** in the **Status** field in Work Ticket Entry.

For more information, see the help for the Status field in the Work Ticket Entry help.

Work ticket steps

You can do more with individual steps in Production Management, such as:

- Assigning a status to individual steps

- Tracking budgets and labor hours for individual steps

- Renumbering steps after a work ticket is created

Operation codes

Operation codes are *not* used in the Production Management module. Activity codes are used instead of operation codes, but there are some differences.

In the Work Order module, the work center was defined first, and then the operation code. Some key information was identified within the work center.

In Production Management, the work center is simply a grouping mechanism and a way to have the same activity code in multiple work centers. Because more information is tracked within the activity code, you can maintain more granular data.

When you convert Work Order data, operation codes are converted to activity codes.

For information on operation code overhead settings, see the section about "Overhead calculations " (page 4) in the Setting up Production Management chapter.

For more information about activity codes, see Activity Code Maintenance in the help.

Entering labor costs

In Production Management you have two ways to enter labor costs:

- In Work Ticket Transaction Entry, you can enter a transaction using the Labor transaction type. You can record only hours, and the labor cost is calculated using the standard labor rate for the activity code.

- In Labor Entry, located on the Production Management Time menu, you have four ways to enter labor:

  - Hours for an individual employee

  - Hours for a crew

  - A labor cost amount, typically labor performed by an outside source

  - Miscellaneous labor hours for time that must be recorded but is not associated with a work ticket

For more information, see the Labor Entry help.

Piece rate labor costs

The process for calculating piece rate labor costs in the Production Management module is different than the process in Work Order. In Production Management, you must setup up a labor budget in the work ticket template that is multiplied by the standard cost per hour for the activity code. And then set the work ticket to either auto issue or backflush labor.

For more information, see [Set Up Piece Rate Labor Calculation](#) in the help.

Scheduling

In the Production Management module, scheduling is determined by the work ticket's template based on the selections in the following fields in Work Ticket Template Maintenance.

- **Production Start Date**

- **Starting Date**: Available if you select **Actual Date** in the **Production Start Date** field

- **Number of Days** (Start Date): Available if you select **System Date Plus** or **Previous Step Due Date Plus** in the **Production Start Date** field.

- **Production Due Date**

- **Due Date**: Available if you selected **Actual Date** in the **Production Due Date** field

- **Number of Days** (Due Date): Available if you selected either **System Date Plus** or **Prod Start Date Plus** in the **Production Due Date** field

For more information see the help for these field in the [Work Ticket Template Maintenance help](#).

Importing parts

You can import a list of materials into a work ticket by clicking the **Import Materials** button on the **Materials** tab in Work Ticket Entry. You can import materials from another work ticket, a work ticket template, or an ASCII file. For more information, see [Import Materials Into a Work Ticket](#) in the help.

Printing work tickets

Based on your selections in Production Management Options, you can:

- Quick print work tickets and picking sheets

- Automatically print work tickets when the status is changed to released

For more information, see the [Production Management Options help](#).

Recording scrap

In Production Management, scrap is recorded by entering a completion-type entry in Work Ticket Transaction Entry. You can scrap the finished goods for all steps on the work ticket, or you can manually calculate the amount to scrap for specified steps. For more information, see Recording Scrap in the help.

Closing work tickets

Unlike the Work Order module, in which you had to process completion and close transactions separately, in Production Management you can do both in one transaction. In Transaction Entry, you can select **Completion** as the transaction type on the **Header** tab, and then on the **Lines** tab, you can select the **Close W/T** check box to close the work ticket when you update the transaction.

After a work ticket is closed, you cannot view it in Work Ticket Entry, but it is available in Work Ticket History Inquiry. The years to retain work ticket history is set in Production Management Options, and you can purge work tickets using the Purge Work Ticket History utility.

About the Dynamic Materials feature

If the Production Management module is integrated with Purchase Order, you can automate the process of issuing items to work tickets when they are received.

> **Note:** The Dynamic Materials feature is available only if you purchased Sage 100 through a subscription plan.

Inventory Management

If the **Dynamic Materials** check box in Production Management Options is selected, the following occurs in Inventory Management for inventory items on a purchase order linked to work ticket when you process a receipt for the purchase order.

- The quantities are received into inventory and then immediately relieved.
- The quantity on purchase order value for the inventory item is reduced.
- The quantity on hand is increased and then immediately relieved.
- Transactions for both the receipt and the issue of the items are recorded in the transaction detail file for the inventory item.
- For LIFO or FIFO items, the tier created during the receipt is immediately relieved.
- For lot or serial items, the lot or serial numbers() to which the receipt was distributed are relieved.
- Because of the in-and-out nature of the transaction, the inventory item's average cost and warehouse average cost are not recalculated.

Production Management

In addition, the following occurs in Production Management:

- Receipt information is captured.
- The quantity used on work tickets is increased.
- An issue transaction is created in the work ticket detail transaction file.

- If an overhead percent or amount value is assigned to the work ticket class, the calculated overhead is included in the issue transaction overhead amount field.

- A transaction is created in the Daily Materials Usage log. Access the Daily Materials Usage Register/Update option from the Main Menu in Production Management.

> **Important!** When the Dynamic Materials feature is enabled, the General Ledger account associated with a purchase order item linked to a work ticket should not be changed.

- The Daily Receipt Register update process uses the Purchase Order posting date entered in the Daily Receipt Registers/Update window to record the inventory transaction detail record and for the general ledger transaction.

- The Purchase Order posting date is also used to record the Dynamic Materials transaction to the Daily Materials Usage Log and to create the issue transaction in the inventory transaction detail record. The Purchase Order posting date is used for all transactions to avoid possible problems with inventory reconciliation.

Miscellaneous and special items

And the following occurs for miscellaneous and special items in a purchase order that are linked to a work ticket.

- A receipt of goods is recorded for the purchase order.

- The Daily Receipt Register/Update does not create general ledger postings.

- The quantity used for the work ticket part is increased and recorded in the work ticket.

Integration with other modules

The Production Management module works with the Inventory Management module, and it can be integrated with Accounts Payable, Bill of Materials, Purchase Order, and Payroll. This chapter highlights some of the differences between the Production Management and Work Order modules.

> **Note:** The Production Management module *cannot* be integrated with Sales Order.

Inventory Management

When the Production Management module is set up, you'll see the following options in the Procurement field in Item Maintenance:

- Make to Stock

- Buy to Stock

- Buy to Order

- Subcontract

For more information, see Production Management Integration with Inventory Management.

Accounts Payable

When recording an invoice in Accounts Payable, you can apply the invoice to a work ticket as a direct cost. For more information, see Production Management Integration with Accounts Payable in the help.

Purchase Order

When Production Management is integrated with Purchase Order, there are multiple ways to link a purchase order and a work ticket.

- Click the **Purchase Order** button on the **Steps** tab in Work Ticket Entry to create a purchase order for all of the material lines for the steps that have the **Purchase** check box selected.

- Click the **Purchase Order** button on the **Materials** tab in Work Ticket Entry to create a purchase order for one or more lines. The **Purchase** check box is then automatically selected.

- In Purchase Order Entry, on the **Lines** tab, enter a work ticket number and step number. The purchase order information is then updated to the work ticket.

For more information, see [Production Management Integration with Purchase Order](#) in the help.

Payroll

You can integrate the Production Management module with Payroll. Depending on your selection in Production Management Options, you can use Payroll employees, departments, and earnings codes in Production Management, and import Labor Entry records into Payroll Data Entry.

For more information, see [Production Management Integration with Payroll](#) in the help.