Infor XA Order-Based Production Management

Release 11.0

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Chapter 1: Overview

Order-Based Production Management (OBPM) provides you with access to all the information required to view, control, and manage your manufacturing orders.

You can immediately respond to problems on the shop floor without wasting time, steps, materials, and labor. You can view details about the availability of components before releasing orders. Then, you can respond to Material Resource Planning (MRP) recommendations for purchase and manufacturing orders to ensure smooth production work-flow.

You can create, maintain, report activity on, complete and close orders directly from a variety of sources. Besides creating or copying manufacturing orders, you can generate reorder recommendations by warehouse and create manufacturing orders during generation. Using several objects in OBPM, you can view component availability and adjust those components to fill manufacturing orders. You can use order and item shortage reports to help you define the need for manufactured items. In several objects in OBPM,you can create manufacturing orders to meet those shortages. With Customer Order Management (COM) installed, you can review customer demand records and create manufacturing orders for customer order line item releases. With MRP installed, you can create manufacturing orders using recommendations generated through an MRP planning run.

After creating manufacturing orders, you can link them to customer orders or add bills of material and routings. For manufacturing operations, you can add or delete milestones. You can print on demand shop packets, work lists, and manufacturing order close transaction registers.

You can use OBPM to track manufacturing order labor and material processes associated with each order. OBPM ensures each process is performed in sequence. For example, you can close a manufacturing order only when the labor complete, receipt of material, and material complete operations are completed for the order. Use Inventory Management (IM) and Production Control and Costing (PC&C) to perform the order closeout and purge processes. Labor reporting must be performed in PC&C or Production Monitoring and Control (PMC).

In addition to creating and maintaining manufacturing orders, you can use objects in OBPM to view and maintain information related to purchasing and inventory. For example, in Reorder Recommendations, you can create requisitions, purchase orders, and intersite orders.

OBPM does not split manufacturing orders but does support other functions on split orders. OBPM does not create or release manufacturing orders for Knowledge Based Configurator (KBC) items but does support other functions on an order for a KBC item.

Chapter 2: Attendance reasons

You can create additional attendance reasons for the employee in addition to those shipped with the system.

For example, you can create an attendance reason for out sick (OS). Attendance reasons specify whether the employee is in or out.

This table shows the attendance reasons that are shipped with the system.

Reason	Description	Subtype
EB	End Break	In
EL	End Lunch	In
ES	End Shift	In
SB	Start Break	Out
SS	Start Shift	Out
SW	Start Work	Out

Attendance reasons are used by attendance and labor to track and monitor the In and Out times of employees on the shop floor. The employee's first attendance and labor record is counted as an In record and begins a attendance and labor elapsed time pair. The next attendance and labor record is counted as an Out record and provides the ending time for the previous elapsed time record. Subsequent attendance and labor records are paired in the same way until all records have been matched to create elapsed time pairs with In and Out times.

Creating attendance reasons

1 Select **Production > Monitoring > Administration > Attendance Reasons > Maintain > Create**.

2 Complete the fields including this information:

Subtype
Select **`In`** or **`Out`**.

Reason
Specify a two character abbreviation for the attendance reason description.

3 Click **Create**.

Chapter 3: Component availability

Component shortages are calculated by comparing the total quantity of components required for all the selected potential manufacturing orders against available components

If MRP is installed, you can consider future allocations of components as available when calculating shortages. Future allocations are those that are required beyond the item's time phased allocation fence established in MRP.

You can use the Component Availability object to perform these tasks:

- Substitute items for potential orders
- Add, change, or remove potential orders from the list
- Recheck component availability

Use the **Check Component Availability** option to view an analysis of all the potential manufacturing orders and the required components in a selected subset from that object. This option is available from the **Maintain** menu on from these objects:

- Item Warehouses
- Customer Demand
- MRP Recommendations
- Item Warehouses Reorder Recommendations

The **Create Component Availability** page contains these cards:

- **Potential Orders**
- **Components**
- **Errors**

From each card, you can view information for all orders and components or only orders and components for which a shortage exists.

A potential order and its component items can have ties to information in other objects. Within the Component Availability object, you can use Display menu options or toolbar buttons to see information in other objects that is related to a selected potential order and its components.

Checking component availability

Use the **Check component availability** option to analyze component availability for potential orders from sources. Sources may be MRP recommendations, reorder recommendations, or customer demand. You can check component availability for potential orders created from item warehouses.

1. Select orders or items for which to check component availability.
2. Select **Maintain > Check Component Availability**.
3. Complete the fields including this information:

   Subset
   Select a value from the list. This value is used by the source object to restrict the list of potential orders. Note that the more records selected, the longer the process may take.

   Consider future allocations as available
   Select the check box to consider these components when availability is checked. This option is only available if MRP is installed.

4. Click **Create**.
5. To create a list of all potential orders, click **Create** on the **Create Component Availability** page.

Checking component availability from Item Warehouses

Use the **Check Component Availability** task to search for available components related to a selected order. The ability to check for available components enables you to consider alternatives if a specific component is not available. Use this task to analyze interactively the availability of required components for one order or a group of potential manufacturing orders. A group can be a subset of records or a group of selected orders. You can view lists of all orders and components or only those orders and components that are short. You can view what if component substitutions and order quantity changes.

1. Select an item warehouse record.
2. Select **Maintain > Check Component Availability**.
3. Complete the fields including this information:

   Consider future allocations as available
   Select the **Consider future allocations as available** check box for time phased allocations or manufacturing allocations requiring time past the item lead time or the allocation horizon set in MRP.

4. Click **Create**.

Add potential orders

You can add a single potential order or multiple potential orders to your list from other source objects. If EPDM is installed, you have the option to choose the item revision and an associated item process when adding an order.

When adding multiple orders, you can select potential orders from MRP Recommendations, Reorder Recommendation, or Customer Demand. You can restrict the number and type of potential orders to add by applying a subset to list.

Adding a single potential order

1 Select **Maintain > Add Potential Order**.

Optionally, you can click the **+** (**Add Potential Order**) icon on the **Short** or **All** tab on the **Potential** card.

2 Complete the fields including this information on the **Single** tab:

Warehouse
Specify the ID for the warehouse. This attribute is required.

Item
Specify the ID for the item. This attribute is required.

Item revision
Select an item revision, or click **Find Item Revision** to search for an item revision. This attribute is only available if EPDM is installed. The default value is the current effective revision on the order start date.

Process
Click **Find Process** to search for an item process. This attribute is only available if EPDM is installed.

Order quantity
Specify the total number of components required for the order.

Scheduled start date
Select the order start date.

Due date
Select the order due date. If you do not specify a start date or due date, then the order start date and the due date are calculated using the item, warehouse, required quantity, and start date.

3 Click **Add**.

Adding multiple potential orders

1 Select **Maintain > Add Potential Order**.

Optionally, you can click the **+** (**Add Potential Order**) icon on the **Short** or **All** tab on the **Potential** card.

2 Click the **Multiple** tab.
3 Click the **Multiple** button.
4 Select one of these sources for the potential orders:
   - `Customer Demand`
   - `Mrp Recommendation`
   - `Reorder Recommendation`
5 Select a subset from the **Subset** list or click **Customize Subsets** to create a new subset.
6 Click **Add**.

Changing component availability information for a potential order

Use the **Change** option to change order quantity, warehouse, item revision, or process for a potential order.

1 Select an item line from the **Short** or **All** tab on the **Potential Orders** card.
2 Click the **Change** icon on the tab.
3 Change the necessary fields.
4 Click **Update**.

Substitute items for component availability orders

Use the **Substitute item** option when you want to substitute one component for another in your components list for a potential order. For a planning activity, you can substitute available components for those in short supply and recheck component availability before creating a manufacturing order.

You can use this option to substitute a component for a single order when working with components on the Components card.

You can substitute components for all orders when viewing summarized components.

Substituting a single item for a component availability

1 Click the **Components** card tab on the **Create Component Availability** page.
2 Click one of these tabs:
   - **Short**: View the component availability information for the records which show a shortage of components for the potential orders

- **All**: View component availability information for all the records you selected from the order source object. The top level line represents summarized component information. Components for particular orders are indented below the summarized component line.

3 Double-click the line with the component to substitute.
4 Select **Maintain > Substitute item**.
5 Specify this information:

Item
Specify the new item number or click **Find Enterprise Item** to search for the item.

Item revision
The default value is (current). Click **Find Substitute Item Revision** to search for a new item revision.

6 Click **Substitute**.

Substituting a component for all orders

1 Click the **Components** card tab on the **Create Component Availability** page.
2 Click one of these tabs:
- **Short**: View the component availability information for the records which show a shortage of components for the potential orders
- **All**: View component availability information for all the records you selected from the order source object. The top level line represents summarized component information. Components for particular orders are indented below the summarized component line.

3 Select the line with the summarized component in the overview list.
4 Click the **Substitute item** icon on the current tab.
5 Specify this information:

Item
Specify the new item number or click **Find Enterprise Item** to search for the item.

Item revision
The default value is (current). Click **Find Substitute Item Revision** to search for a new item revision.

6 Click **Substitute**.

Rechecking component availability

Use the **Recheck Component Availability** option to recalculate available components for the potential orders in your list after you perform these tasks:

- Add potential orders
- Remove orders
- Change orders

- Substitute items

Select **Maintain > Recheck Component Availability**.

Deleting potential orders

When you remove an order from your list, use the **Recheck Component Availability** option to recalculate component availability for the potential orders in the list.

1. Select the line from the potential orders list on the **Short** or **All** tab.
2. Click the **Delete** icon, then click **Yes**.
3. Select **Maintain > Recheck Component Availability**.

Creating manufacturing orders for a component availability potential order

Use the **Create Manufacturing Order(s)** button to create manufacturing orders from the list of potential orders. After you create a manufacturing order, you can view and make changes to the order in the Manufacturing Orders object.

You can create manufacturing orders (M.O.s) in these ways:

- Create an M.O. from the individual orders selected in the potential orders list
- Create M.O.s for all orders in the list

1. Click one of these tabs:
   - **Short**: View potential manufacturing orders for the selected records from the order source object that have a shortage of components
   - **All**: View all potential manufacturing orders for the selected records from the order source object
2. If creating an M.O. for an individual order, select the line in the Potential Orders card for which to create the M.O..
3. Click the **Create Manufacturing Orders** icon on the current tab.
4. Click **Yes**.

Chapter 4: Customer demand

The Customer Demand object contains information about the item releases associated with customer orders.

This information includes the dates requested and promised for delivery, quantities of the item on-hand, available, on-order, and allocated from the specified warehouse, and release information.

A customer demand record can have ties to information in other objects. For example, the customer demand record has a direct relationship with a customer order line item release and an item warehouse issuing the line item. You can use the **Display** menu options to see more information in other objects that is related to a selected customer demand.

This table shows Customer Demand related objects:

Object	Viewable information
Kit Components	A list of the kit components that must be available to ship the item to the customer.
Shipped Items	A list of the shipped items for the releases.
Customer Order Holds	A list of the holds that have been placed against the releases.
Discrete Allocations	A list of the allocations made for the release. If the item is a kit, the allocations are for the component items.
Sources of Demand	A list of the manufacturing orders that respond to demand created by a customer order line item.
Manufacturing Order History	A list of the closed and purged manufacturing orders used to produce the item.
Item Locations	A list of the item locations associated with the line item.

Checking component availability

Use the **Check component availability** option to analyze component availability for potential orders from sources. Sources may be MRP recommendations, reorder recommendations, or customer demand. You can check component availability for potential orders created from item warehouses.

1. Select orders or items for which to check component availability.
2. Select **Maintain > Check Component Availability**.
3. Complete the fields including this information:

   Subset
   Select a value from the list. This value is used by the source object to restrict the list of potential orders. Note that the more records selected, the longer the process may take.

   Consider future allocations as available
   Select the check box to consider these components when availability is checked. This option is only available if MRP is installed.

4. Click **Create**.
5. To create a list of all potential orders, click **Create** on the **Create Component Availability** page.

Creating a manufacturing order from a customer demand

1. Select a customer demand record that has an item.

   The record cannot already have a manufacturing order.

2. Select **Maintain > Create M.O.**.
3. Complete the fields including this information:

   Item revision
   Specify the revision for the order. This attribute is available if EPDM is installed and active.

   Total order quantity
   Specify the order quantity. The order quantity must be greater than zero.

   Scheduled start date
   Select the scheduled start date. The due date is calculated from this date if a date is not specified.

   Due date
   Select the due date. The scheduled start date is calculated from this date if a date is not specified.

   Create M.O.s for configured components
   Select the check box to create M.O.s for configured components that belong to a configured parent item. This option is valid only if Advanced Planning Configurator (APC) is installed and the customer order line item is associated with an APC item.

4. Click **Create**.

Mass creating manufacturing orders from customer demands

1. Select the customer demand records.
2. Select **Maintain > Mass Create M.O.**.
3. Specify a reason code if reason code tracking is required.
4. Complete the fields including this information:

   Subset
   Select a value from the list to narrow the list.

   Create M.O.s for configured components
   Select the check box to create M.O.s for configured components that belong to a configured parent item. This option is valid only if Advanced Planning Configurator (APC) is installed and the customer order line item is associated with an APC item.

5. Click **Create**, then click **OK**.

Generating a pick list for a customer demand host job

Pick lists are documents that reflect the picking process. You generate pick lists to identify the items that warehouse personnel need to remove from stock and ship-to customers. Warehouse personnel use the pick list as an authorization to pick material. The shipment or packaging personnel use the pick list as a statement of what was picked. The pick list can be used to confirm shipments. Depending on the needs of your company, inventory counters can use the pick list as a turnaround document to report actual picks for inventory control.

You can generate a pick list using customer orders, customer demand records, quotes, standing orders, and credit memos. When you generate a pick list for customer orders, you can use any customer order, customer order line item, or customer order line item release that is not on hold. However, a pick list may not be processed for items on credit memos that are credited to the customers account but not returned to stock.

1. Select the customer demand records.
2. Select **File > Host jobs**.
3. Select the **Execute** check box.
4. Complete the fields under Content.
5. Specify this information on the **Options - General** tab::

   Pick Consolidation
   Select a value from the list. These values are valid:
   - **`Default to company`**: Use this value to default the preferences defined in the Companies object to determine how the pick list is consolidated
   - **`One order, one ship-to`**: Use this value to create a pick list for an order to one ship-to address
   - **`One order, all ship-tos`**: Use this value to create a pick list for an order to all the ship-to addresses specified on the order

- **`All orders, one ship-to`**: Use this value to create a pick list for all orders that are to be sent to one ship-to address
- **`All orders, one customer`**: Use this value to create a pick list for all orders for one customer
- **`All orders, all customers`**: Use this value to create a pick list for all orders that require shipping

Pick short stock quantity
Select a value from the list. If the item quantity on the pick list is more than the quantity of the item you have in stock, you can print the pick list the quantity you have in stock or print both the quantity required and the quantity in-stock. These values are valid:

- **`Ignore short stock`**: Use this value to generate a regular pick list. When you select this value you cannot use the **Automatic pick confirm** attribute.
- **`Short stock, on-hand quantity`**: Use this value to generate a pick list that shows the quantity of the item that is in stock when the quantity in stock is less than the quantity the customer ordered. When you select this value, the **Discrete allocation** attribute defaults to **`Yes`** and is not maintainable.
- **`Short stock, next pick quantity`**: Use this value to generate a pick list that shows the quantity of the item that is in stock when the quantity in stock is less than the quantity the customer ordered. The pick list shows the quantity the customer ordered. When you select this value, the **Discrete allocation** attribute defaults to **`Yes`** and is not maintainable.

Automatic pick confirm
Select this check box to have the transactions to move the items to the staging location generated. Select the check box when you select the **`Short stock, on-hand quantity`** or **`Short stock, next pick quantity`** value.

Discrete allocation
Select this check box to allocate the items to the order to prevent the items from being used elsewhere. Select the check box when you select the **`Ignore short stock`** value.

6 Click the **Options - Print** tab, then specify this information:

Print pick list
Select the check box to automatically print a pick list when you generate the pick list. If you print a pick list, you can specify what prints on the list and in what format.

Item barcodes
Select the check box to print item numbers as bar codes on the pick list.

Location barcodes
Select the check box to print item locations as bar codes on the pick list.

Print kit components
Select the check box to include component items on the documents printed for any order that contains a kit item.

Space for serial numbers
Select the check box to leave space on the pick list to enter serial numbers for the items picked.

Sequence
Select the value that specifies the sequence in which available items for picking should be printed.

Location options
Select the value that specifies how to select locations to print on the pick list. You can only use these options with a controlled warehouse. These values are valid:

- **`Number to fill order`**: Use this value to print locations with stock until enough is located to fill the order
- **`Number plus additional`**: Use this value to print locations with stock until enough is located to fill the order and print the number of additional locations specified
- **`All`**: Use this value to print locations with stock until enough is located to fill the order and print the number of additional locations specified
- **`Number plus low quantity`**: Use this value to print locations with stock until enough is located to fill the order and print all locations with a quantity of ten percent or less of the order amount

Additional locations
If you select Number plus addition, specify the default value for this attribute to specify the number of extra locations with stock. This value is in addition to the locations needed to pick the order. Additional locations are searched in the same sequence, by location or FIFO, as the other locations.

Print pro forma packing list
Select the check box to print a pro forma packing list when the pick list is generated.

7 Click the **E-mail** tab, then specify the information.

8 Click **Submit**.

Chapter 5: Departments

The Departments object contains information about the departments associated with employees.

Any department assigned in the Employee object must exist in the Department object.

Creating departments

1. Select **Production > Monitoring > Departments > Maintain > Create**.
2. Complete the fields.
3. Click **Create**.

   If you select **Preview before create**, you can specify additional information on the **General** card tab. Additionally, you can create employees on the Employees **Activate**and **Terminated** tab.

Chapter 6: Discrete allocations

The Discrete Allocations object contains information for all locations where a specific quantity of an item has been allocated to a specific order.

For each item in a warehouse that has discrete allocations, this information is displayed:

- Location
- Inventory qualifiers such as batch/lot number or FIFO date
- Quantity allocated
- Order that owns the allocations
- Total on-hand quantity of the item

An item can be allocated if the **Discrete allocations** attribute in the Items or Item Revisions object has a value of **Yes**. With discrete allocations, items from a specific location or particular batch/lot or FIFO date can be reserved for a specific customer or manufacturing order. A C.O. line item can have a discrete allocation if the line item is not a blanket item. Discrete allocations for blanket items can only be created at the C.O. line item release level.

These allocations types are supported by XA applications:

- **None**: No allocation
- **Item balance**: Updates the quantity in the **Pick List Requirements** attribute (PKREQ) in the Item Balance file but does not create a detailed allocation
- **Discrete allocation**: Updates the quantity in the **Pick List Requirements** (PKREQ) attribute in the Item Balance file and creates records in the Allocation Quantity file (SLALLO) and the Location Quantity file (SLQNTY)
- **Auto discrete**: Updates the **Pick List Requirements** attribute (PKREQ) in the Item Balance file and creates records in the Allocation Quantity file (SLALLO) and the Location Quantity file (SLQNTY)

You can only allocate inventory manually for items that have an allocation type of discrete allocation.

A discrete allocation record can have ties to information in other objects. For example, an allocation can have an order in the Customer Orders object. You can use the **Display** menu options to see more information in other objects that is related to a selected discrete allocation.

This table shows discrete allocations related objects:

Object	Viewable information
Item	A list of the items associated with the discrete allocation

Object	Viewable information
Item Warehouse	A list of the item warehouses associated with the discrete allocation
Item Location	A list of the item locations associated with the discrete allocation
Customer Order or Quote	A list of the customer orders or quotes associated with the discrete allocation
C.O. Line Item	A list of the customer order line items associated with the discrete allocation
C.O. Line Item Release	A list of the customer order blanket releases associated with the discrete allocation
Manufacturing Order	A list of the manufacturing orders associated with the discrete allocation
M.O. Component	A list of the manufacturing order component items associated with the discrete allocation
Schedule	A list of the schedules associated with the discrete allocation
Schedule Component	A list of the schedule component items associated with the discrete allocation
Warehouse	A list of the warehouses from which the item has been allocated
Warehouse Location	A list of the locations in the warehouse from which the item has been allocated

Running the Publish Discrete Allocations job

The **Publish Discrete Allocations** host job sends current information, for selected discrete allocations, from XA to specified destinations using System-Link. You can choose to publish a single discrete allocation, manually selected discrete allocations, or discrete allocations in a subset. For more information, contact your System-Link administrator.

1. Select **File > Host Jobs**.
2. Select the Execute check box if not selected.
3. Complete the fields including this information:

   Replication
   Specify the System-Link destination to which to send the discrete allocation information. If you leave the replication destination blank, the replication destination specified for the individual discrete allocations is used.

4 Click the **E-mail** tab, then specify the information.
5 Click **Submit**.

Chapter 7: Employee absence

Absence records can be created for all employees by employee ID in the Employee Absence object.

After an employee absence request is created, management can review and reject or approve the request. Absence requests cannot overlap times and dates for any given employee.

A valid employee ID is required to create, approve, or reject an absence request. When an employee absence request is maintained a lock is placed on the employee absence file for that employee. This lock prevents others from maintaining the same employee absence request.

Creating employee absences

1. Select **Production > Monitoring > Administration > Employee Absence > Maintain > Create**.
2. Complete the fields including this information:

   Employee id
   Specify the employee ID or click **Find Employee** to search for an employee.

   Reason
   Select a reason for the absence. These values are valid:
   - `Vacation`
   - `Absent`
   - `Late`

   Type
   Specify the one-character code assigned by your company for the type of absence requested.

3. Click **Create**.

Approving an employee absence

You can only approve an employee absence request with a status of **R** or **X**.

1. Select the employee absence request.
2. Select **Maintain > Approve**.

3 Click **Employee Absence Approve**.
The status of the employee absence request is changed to **A**.

Rejecting an employee absence

You can only approve an employee absence request with a status of **R** or **A**.

1 Select the employee absence request.
2 Select **Maintain > Reject**.
3 Click **Employee Absence Reject**.
The status of the employee absence request is changed to **X**.

Chapter 8: Employee activity

The Employee Activity object shows all the transactions collected for an employee.

The transaction activity that is shown for employees can come from any of these applications:

- Materials Management (MM) - Inventory Management (IM)
- Customer Service Management (CSM) - Customer Order Management (COM)
- Order-Based Production Management (OBPM), includes shop floor activity

Transactions from Production Monitoring and Control (PMC) when shop floor is not activated are not included in OBPM. Therefore, these transactions cannot be viewed in the Employee Activity object. Transactions from Repetitive Production Management (REP) are also not included.

The employee badge ID or user ID from a transaction is used to create employee activity records. The user ID must be linked to an employee.

Employee activity records are linked to the Inventory Transaction History records and the Labor Activity records. Note that no option to turn off employee activity is available.

Chapter 9: Employees

The Employee object contains the business relationship type, business role assignment for shop floor workers, employee ID, badge number, and other employee information. The Employee object does not contain any employee payroll information.

Shop floor supervisors may add employees who report attendance and labor activity. While shop floor and materials management supervisors may add employees who report materials and inventory activity. Though, any user can add an employee.

The Employee Master object in IBM i Production Monitoring and Control (PMC) application has been split into these parts: Payroll Employee maintenance located in PMC and Employee object located in IDF.

All employee information that pertains to payroll continues to be created in Payroll Employee maintenance. Employees that are created in the Payroll Employee object are automatically created in the Employee object. The **Payroll** attribute on the **Employees** page shows as **Enrolled**.

The Employee object is used by these applications:

- Production Monitoring and Control (PMC)
- Contract Accounting (CA)
- Executive Information System (EIS)
- Order Based Production Management (OBPM)
- Inventory Management (IM)
- Materials Management (MM)
- Procurement Management (PM)
- Production Control and Costing (PCC)

The Employee object contains these unique keys:

- Employee ID is the primary key. The employee ID can be manually added or auto-generated when an employee is created.
- Shop Floor ID is a 5-digit badge number. The Shop Floor ID is required if reporting activity in Production Monitoring and Control (PMC). This ID can be used if specifying a badge in MM and PCC. The Shop Floor ID can have an associated shop floor temporary ID, badge containing five numbers, which is also unique.

Therefore, if an employee ID is not deleted when an employee is terminated, then the badge number can be reused.

You can specify an employee as a shop floor employee, which enables you to specify work schedule information for the employee.

Creating employees

If the employee is paid through XA payroll, use the XA Payroll employee maintenance application accessed through the emulator. After the employee information is entered, an IDF employee record is auto generated.

1 Select **Production > Order Based > Employees > Maintain > Create**.

2 Complete the fields including this information:

Template
Select a template to show only the attributes relevant to the purpose of the template. If you are creating a shop floor employee, select **`Shop floor`**.

Employee ID
The employee ID is auto generated but can be changed.

Relationship type
Select the relationship of the employee to the company. These values are valid:

- Employee
- Partner
- Sub-contractor
- Other

Company
Specify the code that identifies the company for which the employee works, or click **Find Company** and select a company from the list.

Department
Specify the department where the employee works, or click **Find Department**and select a department from the list. The department must be defined in the Department object.

Work schedule
Specify a code for the work schedule, or click **Find Work Schedule** and select a work schedule from the list. This attribute is displayed when you select the **`Shop floor`** template.

Multi-job flag
Select this check box to indicate that the employee is authorized to work more than one job at a time. This attribute is displayed when you select the **`Shop floor`** template.

3 Click **Create**.

If you select **Preview before create**, you can specify additional information on the **General** card tab.

Changing employee information

If the employee is enrolled in payroll, then most of the attributes are display only and cannot be changed except through the Payroll Employee maintenance.

1 Select the employee record from the Employee list.

2 Select **Maintain > Change**.
3 Change the necessary fields.
4 Click **Update**.

Viewing employee activity

1 Select the employee record from the Employees list.
2 Select **Display > Employee details**.
3 Click the **Activity** card tab.
4 Optionally, you can view employee activity by selecting **Production > Activity > Employee Activity**.

   Use the filter row to sort the list by Name, Order, and so on. For example, you can sort by **Source** to view activity by transaction source such as by **OBPM shop floor** or by **Status** such as by **I = In process**.

Deleting employees

Before deleting an employee record, ensure that the employee does not have any employee absence requests. If employee absence requests exist for the employee, delete the requests, then delete the employee.

Note: If the employee is enrolled in XA payroll, then you cannot delete the employee from the Employee object. They can only be deleted from the Payroll Employee maintenance.

1 Select the employee record from the Employee list.
2 Select **Maintain > Delete**.
3 Click **Yes**.

Terminating employees

To terminate an employee, the employee must have a relationship type of Employee and not be enrolled in XA payroll. If the employee is enrolled in XA payroll, then the employee must be terminated using the Payroll **Employee Termination/Activation** maintenance.

1 Select the employee in the Employees list.
2 Select **Maintain > Terminate**.
3 Specify the termination date.
4 Click **Continue**.

Rehiring employees

Note that employees enrolled in XA payroll cannot be re-hired through the Employees object. Instead, you must use XA Payroll **Employee Termination/Activation** maintenance to rehire them.

1. Select an employee in the Employees list.
2. Select **Maintain > Re-Hire**.
3. Specify the rehire date.
4. Click **Continue**.

Suspending employees

You can only suspend employees with these relationship types:

- Partner
- Subcontractor
- Other

1. Select the employee in the Employees list.
2. Select **Maintain > Suspend**.
3. Click **Yes**.

Activating employees

You can only activate employees with these relationship types that have a **Status** of **Inactive**:

- Partner
- Subcontractor
- Other

1. Select the suspended, or inactive, employee in the Employees list.
2. Select **Maintain > Activate**.
3. Click **Yes**.

Reporting M.O. operation activity for employees or labor activities

This task is for reporting M.O. operation activity from the Employees or Labor Activity object.

Use the **Report M.O. Operation Activity** transaction for reporting quantities, scrap, machine, and labor times for an M.O. Operation.

This transaction is only available if Shop Floor is active in OBPM application settings.

1 Select one of these options:
   - Select **Order Based > Employees**. Then, select the employee in the list.
   - Select **Activity > Labor Activity**. Then, select the labor activity in list.

2 Select **Maintain > Report M.O. Operation Activity**.

3 Complete the fields including this information:

Template
Select a template to show only the attributes relevant to the purpose of the template. For example, select the **Milestone** template to report the activity as a milestone operation.

Order
Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

Operation
Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

Run type
Select the type of run for the activity. These values are valid:
- Setup
- Run
- Milestone group: This value can only be used with a milestone operation

This attribute is displayed when you select the **`Default`** or **`Scrap quantity`** template.

Completion code
These values are valid:
- **`0=Open`**: Not complete. Quantity can be reported.
- **`1=Complete with entered quantity`**: You must specify quantity with this completion code.
- **`2=Complete with defaulted`**: You do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.
- **`3=Milestone`**: Closes all milestone sub-operations and set the operation status to complete. This completion code can only be used with a **Run code** of **M**.

Complete
Specify the quantity that is complete. This attribute is displayed when you select the **`Default`**, **`Milestone`**, and **`Setup`** template.

Scrap
Specify the scrap quantity. This attribute is displayed when you select the **`Default`**, **`Scrap quantity`**, and **`Setup`** template.

Reason
Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for the scrap. If your company does not require reason codes, blank is a valid entry.

Labor
Specify the amount of labor time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the labor time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the labor time is assumed to be minutes. For an operation in a milestone group type F (flow shop environment), labor time entry is not accepted.

Machine
Specify the amount of machine time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the machine time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the machine time is assumed to be minutes. This attribute is not valid for a milestone group sub-operation. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Reference
Specify information for reference purposes.

Transaction cost
Optionally, specify the cost for the transaction. If using standard rates as actual costs, this cost overrides that cost. If using actual employee costs, this cost overrides that cost as well. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Actual work center
Specify the work center being used for the operation. You can specify an override work center only for the first transaction for an operation. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Rate override
This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Shift override
Specify **`1`**, **`2`**,or **`3`** for the shift override. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

4 Click **Continue**.

Attendance and labor

Use the **Attendance and Labor** menu to select these transactions:

- Start Labor (ON)
- Stop Labor (OF)
- Start Work (SW)

- End Work (EW)

Attendance and labor review and approval is required if **Review attendance and labor before approval** is set to **Manual** in the OBPM - Shop Floor application setting.

You can only approve attendance and labor transactions when **Review attendance and labor before approval** is **Automatic**.

Starting labor for an employee

Use the **Start Labor (ON)** transaction to show that an employee is clocking onto a job and to specify the kind of labor required for the job. Start Labor (ON) cannot be created for Flow-shop milestone.

1. Select **Order Based > Employees**.
2. Select the employee in the list.
3. Select **Maintain > Attendance and Labor > Start Labor (ON)**.
4. Complete the fields including this information:

   Order
   Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

   Operation
   Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

   Run type
   Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:
   - **`Setup`**: Code used to report work spent in preparing an M.O. operation. Time can include changing dies and tools, moving material to the facility, or performing testing.
   - **`Run`**: Code used to report actual work on an operation. Time can include welding, assembly. packaging, etc.
   - **`Indirect`**: Code used to report work that is not against an M.O. operation. Time can include sweeping, cleaning, and attending meetings.
   - **`Milestone`**: Code used to report activity or work against the final operation in a milestone group.

   Crew
   Select the check box to indicate that the employee is part of a work crew.

   Badge
   Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

   Turnaround
   Specify the turnaround number of the operation on which the employee is working.

5. Click **Continue**.

Stopping labor for an employee

Use the Stop Labor (OF) transaction to show that an employee is clocking off a job and to specify the kind of labor required for the job. A corresponding Start Labor (ON) transaction is required unless you are tailored for OF only processing, reporting scrap against a milestone operation, or reporting against a flow-shop milestone.

1. Select **Order Based > Employees**.
2. Select the employee in the list.
3. Select **Maintain > Attendance and Labor > Stop Labor (OF)**.
4. Complete the fields including this information:

   Order
   Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

   Operation
   Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

   Run type
   Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:
   - **`Setup`**: Code used to report work spent in preparing an M.O. operation. Time can include changing dies and tools, moving material to the facility, or performing testing.
   - **`Run`**: Code used to report actual work on an operation. Time can include welding, assembly. packaging, etc.
   - **`Indirect`**: Code used to report work that is not against an M.O. operation. Time can include sweeping, cleaning, and attending meetings.
   - **`Milestone`**: Code used to report activity or work against the final operation in a milestone group.

   Completion code
   Select a completion code. These values are valid:
   - **`0=Open`**: Not complete. Quantity can be reported.
   - **`1=Complete with entered quantity`**: Specify quantity with this completion code.
   - **`2=Complete with defaulted`**: Do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.
   - **`3 = Milestone`**: Closes all milestone sub-operations and sets the operation status to complete. Can only be used with **Run code** of **M**.

   Reason
   Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for scrapping. If your company does not require reason codes, blank is a valid entry.

   Reference
   Specify information for reference purposes.

Crew
Select the check box to indicate that the employee clocked off the job as part of a work crew. Machine time is calculated only if the **Crew** check box is not selected for both a Start Labor (ON) transaction and the matching OF transaction.

Crew clock transactions can be used with multiple employees to clock on or off the same job without reentering the transaction detail information. The first employee clocks on or off using the normal ON or OF transaction. The other employees then specify a Crew Clock (CC) transaction that PM&C converts to an ON or OF transaction with the same time, order, and operation information as the original transaction.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

5 Click **Continue**.

Starting work

Use the Start Work (SW) transaction to specify when an employee starts a shift, starts work, ends a break, or ends lunch.

1 Select one of these options:
- Select **Order Based > Employees**.
- Select **Activity > Shop Floor Activity**.

2 Select the employee in the list.

3 Select **Maintain > Attendance and Labor > Start Work (SW)**.

4 Complete the fields including this information:

Transaction date
The value for this attribute is automatically populated but you can change the value. Click the **Select a Date** icon to change the date.

Transaction time
The value for this attribute is automatically populated but you can change the value.

Reason
Select the reason for starting work. These values are valid:
- EB = End Break
- EL = End Lunch
- SS = Start Shift
- SW = Start Work

5 Click **Continue**.

Ending work

Use the End Work (SW) transaction to specify when an employee ends a shift, ends work, starts a break, or starts lunch.

1 Select one of these options:
   - Select **Order Based > Employees**.
   - Select **Activity > Shop Floor Activity**.

2 Select the employee in list.

3 Select **Maintain > Attendance and Labor > End Work (EW)**.

4 Complete the fields including this information:

   Transaction date
   The value for this attribute is automatically populated but you can change the value. Click the **Select a Date** icon to change the date.

   Transaction time
   The value for this attribute is automatically populated but you can change the value.

   Reason
   Select the reason for starting work. These values are valid:
   - SB = Start Break
   - SL = Start Lunch
   - ES = End Shift
   - EW = End Work

5 Click **Continue**.

Printing employee badges

Use the Badges report to print badges for one or more employees.

- Is active
- Is terminated and the termination date is greater than or equal to current dateEmployee badges are only printed for employees that have shop floor roles assigned and match one of these conditions:

1 Select **Production > Order Based > Employees > File > Host Print**.

2 Select the **Print** check box on the **Badges** tab.

3 Specify this information:

   Subset
   Select a value from the list. These values are valid:
   - **(all records)**: Select to print badges for all records
   - **Active employee**: Select to print badges for all active employees
   - **Badge**: Select to print badges by badge numbers
   - **Name contains**: Select to be able to specify a name.

- **Payroll employee**: Select to print badges for all payroll employees
- **Shop floor**: Select to print badges for all shop floor employees
- **Terminated employee**: Select to print badges for all terminated employees

Sort
Select a value from the list. These values are valid:
- (none)
- (default)
- Display name
- First name
- Last name

4 Select the **E-mail** tab, then specify the information.
5 Optionally, select the **Attachments** tab to add attachments.
6 Click **Submit**, then click **OK** to confirm.
7 If you selected **`Name contains`** for the **Subset**, specify the name or initial, then click **Continue**.

Running the Publish Employees job

The **Publish** host job creates one record for the employee and one for the shop floor role assigned to the employee, if one is assigned. For more information, contact your System-Link administrator.

1 Select **Production > Order Based > Employees > File > Host Jobs**
2 Select the **Publish** tab.
3 Select the **Execute** check box.
4 Complete the fields including this information:

Replication destination
In the Options section, specify the System-Link destination to which to send the employee information. If you leave the replication destination blank, the replication destination specified for the individual employee is used.

5 Select the **E-mail** tab, then specify the information.
6 Click **Submit**.

You can track the progress of the **Publish** host job in the Transaction Status object. Troubleshooting logs may display in the Transaction Status when logging is configured in System-Link by your administrator.

Chapter 10: Facilities

A facility is a group of machines with similar characteristics that are used to perform a manufacturing process.

For example, an assembly area or milling machine center. A facility, often called a production facility, can be a work center, production line, or work station.

How you use these terms depends on the needs of your company though some restrictions exist. For example, routings can contain work stations or work centers but not production lines. Production lines can be made up of a combination of work stations and work centers.

Work stations are usually designated work areas along a production line located relatively close to each other. They may be linked together by material handling devices such as transport belts or robotics material handlers. Work centers can perform stand-alone operations and generally are not a part of a production line.

A facility can have ties to information in other objects. For example, if a facility is used to create a manufactured order, that facility will have an order in the Manufacturing Order Operations Where-Used object. You can use the **Display** menu options to see more information in other objects that is related to a selected facility.

This table shows facility related objects:

Object	Viewable information
Facility Capacity Overrides	A list of facility capacities with start and end times sorted by site
Routing Operations Where-Used	A list of where the facility is used
M.O. Operations Where-Used	A list of the manufacturing order operations which exist for a production facility sorted by manufacturing order
M.O. Operation History Where-Used	A list of the manufacturing order history operations which exist for a production facility sorted by manufacturing order
Production Line Items	A list of the production line items for a production facility sorted by item
Schedules	A list of the scheduled items that exist for a production facility sorted by dates due and item
Schedule Operations Where-Used	A list of schedule operations which exist for a production facility sorted by schedule and operation

Object	Viewable information
Schedule	A list of the schedules associated with the discrete allocation
Schedule Component	A list of the schedule component items associated with the discrete allocation
Warehouse	A list of the warehouses from which the item has been allocated
Warehouse Location	A list of the locations in the warehouse from which the item has been allocated

Facility where used

Facilities where-used shows the routing operations where the facility is used. The manufacturing routing for an item is a sequence of operations that provide a connection between the item and the appropriate facility for each operation in the routing. Thus, options under the **Display** and **Maintain** menus show a **Routings** list page or card file.

Creating facilities

1. Select **Production > Oder Based > Facilities > Maintain > Create**.
2. Complete the fields including this information:

   Site
   Specify the number of the site.

   Facility
   Specify the name of the facility.

3. Click **Create**.

   If you select **Preview before create**, you can specify additional information on the **General** card tab.

Printing a Facility Master Report

You use the **Facility Master Report** host print option to show information about the facility.

1. Select **Production > Order Based > Facilities > File > Host Print**.
2. Select the **Print** check box on the **Facility Master Report** tab.
3. Complete the fields on the **Content** tab.
4. Click the **E-mail** tab, then specify the information.

5 Optionally, click the **Attachments** tab to add attachments.
6 Click **Submit**.

Printing a Facility Where-Used report

Use the **Facility Where-Used** report host print to show information about the routings where the facility is used.

1 Select **Production > Order Based > Facilities > File > Host Prints**.
2 Click the **Facility Where-Used** tab.
3 Select the **Print** check box.
4 Complete the fields on the **Content** tab.
5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Running the Publish Facilities job

Use the **Publish Facilities** host job to send current information, for selected facilities, from XA to specified destinations using System-Link. You can choose to publish a single facility, manually selected facilities, or facilities in a subset. For more information, contact your System-Link administrator.

1 Select **Production > Facilities > File > Host Jobs**.
2 Select the **Execute** check box.
3 Complete the fields including this information:

   Replication destination
   In the Options section, specify the System-Link destination to which to send the facility information. If you leave the replication destination blank, the replication destination specified for the individual facility is used.

4 Click the **E-mail** tab, then specify the information.
5 Click **Submit**.

Facility capacity override

The Facility Capacity Override object contains information related to production capacity for each shift in a production facility.

You see the start and end dates when the variable capacity is available, the source description, the available shift hours, and the available capacity (resources) for each shift.

Facility Capacity Override contains information that relates the facility to other XA objects. For example, you can view the daily capacity overrides available for production lines. Use the option under the **Display** menu to see information in other objects related to a selected production facility. You also can use the option under the **Maintain** menu to work with information in other objects related to a selected production facility.

Facility capacity daily override

The Facility Capacity Daily Override object contains information related to production capacity for each shift on a production line.

The object shows overrides to the base hours specified in the Production Facility object, if PDM is installed, or the Facility object, if EPDM is installed. You see the availability date when the variable capacity is available, the available shift hours, and the available capacity (resources) for each shift.

Facility Capacity Daily Override contains information that relates the override to the Production Facility or Facility object. Within the Facility Capacity Daily Override object, you can use the option under the **Display** menu to see information in the Production Facility or Facility object. You can use the option under the **Maintain** menu to work with information in the Production Facility or Facility object.

Chapter 11: Items

Items are components, materials, purchased parts, finished goods, and any other type of object your company manufactures or sells to customers.

Items are those things that you use, produce, cost, and stock. Items are identified by unique item numbers. To define an item, you must add a record to the Items object and specify this information:

- Unique item number
- Item description
- Item type
- Unit of measure for the item

This information depends on the type of item and the type of information required by your company. You can select from these item types:

- Phantom
- Assembly or subassembly
- Fabricated item
- Raw material
- Purchased item
- User option
- Feature
- Kit

Typically, you start by defining your end items, then define the purchased parts and raw materials that you use to build the end items.

Item records are related to other records. For manufactured items, items are the basis for engineering records such as bills of material and routings. Purchase orders and customer orders reference item records in the details of the orders.

When you use an item on a customer order, manufacturing order, or purchase order, you must have a record in the Items object. Any item on an open customer order, manufacturing order, or purchase order cannot be deleted from the Items object.

You can use the **Pricing** task on the Items object to calculate a selling price for an item without specifying the item on an order or quote.

Pricing an item

Use the **Pricing** task to calculate a selling price for an item without specifying the item on an order or quote. The price is calculated using the values you specify in the **Price Inquiry** page. The price is displayed on Price Inquiry cards with details of how the price was calculated. Information is not saved when the Price Inquiry cards are closed.

1. Select **Materials > Inventory > Items**.
2. Optionally, select an item in the **Items** list page.
3. Select **Maintain > Enterprise Item options > Pricing**
4. Complete the fields including this information:

   Contract
   Specify the ID of the contract that is associated with the customer. The negotiated customer contract price for that item takes precedence over the calculated selling prices.

   Price book
   Specify the code defined by your company to identify the price book for this item. Each price book can have multiple versions based on the effective date.

   Price group
   Specify the code used to group items into categories for pricing.

   Total price class quantity
   Specify the total quantity of items in the item price class that must be ordered for the target group discount percent to be applied.

   Unit price discount %
   Specify the discount or markup percent applied to the unit price when calculating the selling price. A negative value indicates a markup percent.

5. Click **Continue**.

Item base prices

The Item Base Price object shows information about a selected base price defined for an item.

An item can have multiple base prices. However, only one base price is in effect at a time. The effective date for the base price shows the date on which the price becomes effective.

A base price can be created when creating or changing an item in the Items object. Use the Item Base Price object to view information about a base price. You cannot create or change a base price in the Item Base Price object.

You can use the Item Price List report to view all possible base prices, or a subset of base prices, for an item based on the effective date, currency ID, and price book ID.

Viewing an item base price

Item base prices are maintained in the Items object. You cannot change a price directly in the Item Base Price object. You can view information about the price and effective date.

1. Select the item in the **Items** list page.
2. Select **Display > Item details**.
3. Select the **Sales** card tab, then select the base price to use as the base, or starting point, for the comparison.
4. Click the **Item Base Price details** button under Base Prices, or double-click the selected base price.
5. Click **Continue** to return to the **Item** card file.

Printing the Item Price List report

Use this report to view all possible base prices, or a subset of base prices, for items based on the effective date, currency ID, and price book ID. The Item Base Prices object is not included on any shipped application cards but you can add it.

1. Select **File > Host Print** in the **Item Base Prices** list page.
2. Select the **Print** check box if not already selected.
3. Complete the fields including this information:

   Effective date
   Specify the date that the base prices are effective.

   Currency ID
   Specify the currency identifier (ID) for the item base prices.

   Price book ID
   Specify the ID of the price book used to calculate the selling price of the item.

4. Select the **E-mail** tab, then specify the information.
5. Optionally, select the **Attachments** tab to add attachments.
6. Click **Submit**, then click **OK** to confirm.

Copying a bill of material

Note: This task is only available when PDM Plus is installed and running.

Copying a bill of material copies all of the product structure records for the component items from the source items bill of material to a new bill of materials for the target item.

1. Select the item.
2. Select **Maintain > Copy Bill of Material**.
3. Specify the number of the item.

This item is the target item.

4 Click **Continue**.

To see the copied bill of material, go to the target item, open the Default card file, then select the **Single Level Bill of Material** card.

Chapter 12: Item revisions

The Item Revision Master file is created when the PDM Item Master file is migrated to Enterprise Product Data Management (EPDM).

Defining items and revisions

Item records are maintained in the PDM Item Master file. Each record is stored in three files: ITMRVA, ITMRVB, and ITMRVC. File A stores general item information and attributes that are used by Customer Order Management (COM). File B contains product costing information, and File C stores purchasing information.

Each item revision is identified by a combination of three key attributes:

- Site
- Item
- Revision

Each site-item-revision can have a different routing and can be costed separately.

The items in the Item Revision Master file can have different revisions. Each revision has an effective from and effective to date range. Since a revision is part of the site item key, you can create product costs by revision within a site. Master Production Schedule Planning (MPSP) and Material Requirements Planning (MRP) plan orders by revision based on these things:

- The start date of an order
- The planning warehouse
- The site to which the warehouse is assigned

Each item revision must be assigned an implementation status. The implementation status controls the processing of item information through the design, production, manufacturing, and sales cycle. The status code values contained in an implementation status determine how interfacing Infor XA applications process information for item revisions assigned to that implementation status. For example, one implementation status might be created for all item revisions that are manufactured, while another implementation status might be created for all item revisions that are purchased items.

Understanding item revisions and enterprise items

During migration from Product Data Management (PDM), EPDM also creates the Enterprise Item Master file. Each item from the Item Revision Master file is stored in the Enterprise Item Master file. Many sites can copy an item an item definition from the Enterprise Item Master file when in a multi-site environment. Therefore, each site uses the same item definitions.

When you create an item for the first time, the item number in EPDM is added to the Enterprise Item Master file. If someone creates the same item in another site, a message is sent from EPDM that the item already exists. You can then copy the item description from the Enterprise Item Master file to the item you are creating at a different site. You can give the item a unique revision but it is not necessary.

Additional features

Items have a status that identifies them for release to PDM and release of an order. These statuses are used as edits during the functions discussed .

You can attach file objects such as bitmaps, word processing documents, or spreadsheets to the item revision record. You can use a card in the card file for the object to view these files in EPDM. You can define these statuses through file maintenance for individual item revisions or for a group of items related to a project.

Controlling item revisions

These essential properties of an item answer the questions of how and why items acquire revisions:

- Form: Form is the configuration of an item such as shape, size, density, weight, or other physical properties that identify the item.
- Fit: Fit is the characteristic that is used by an item to connect to or become an integral part of another item.
- Function: Function is the use or performance of an item.

Engineering changes drive the creation of revisions for an item. When an engineering change affects the form, fit, or function of an item, you cannot have a revision. A new item must be created. All other changes can result in a revision usually identified as a letter of the alphabet A through Z. Since all revisions of an item are assumed to be interchangeable, form, fit, and function, you cannot track inventory by revision.

When you do not know an item revision number but need to enter the number, you can use EPDM to display a list of all revisions for an item in a site.

Extending the item master record

Revisions, in effect, extend the item master record to let you define appropriate manufacturing processes and run costs by site, item, and revision. Manufacturing orders can be released to build a revision.

These revisions are used by interfacing programs. Consider these rules when selecting a revision:

- A blank revision is valid
- Selection of a revision is done by effective date and revisions

If effective dates overlap for an item, orders in MPSP and MRP are planned by using the item revision with the latest start date. In IM, component revisions are assigned based on the oldest start date; so you should use the oldest revision.

Maintaining items and item revisions

Use the **Maintain** menu in Item Revisions to create, change, delete and copy item revision records. From this menu you can open list windows for Enterprise Item, Site, Buyer, and Vendor.

Creating item revisions

You can create item revisions when EPDM is installed.

1 Select **Production > Item Revisions > Maintain > Create**.

2 Complete the fields including this information:

Site
Specify the identification (ID) for the group of records.

Item
Specify the ID for the group of records.

Revision
Specify a number for the revision or click **Find Item Revision** to select a revision. If you select an existing item revision, the **Site** and **Item** attributes for the item revision are used.

Initial release
Select **Yes** to automatically release the item revision to PDM. The default is **No**. You can only change this attribute when you are creating an item revision, and only if you have Item Release task security authority.

3 Click **Create**.

If you select **Preview before create**, you can specify additional information on the **General** card tab. Click **Create** when finished.

Copying item revisions

Use the **Copy** option to copy a single item and its engineering records to another site, or to create a new item using the same engineering records. You have the option to copy the item revision and an associated item process. The single level bill of material and routing are copied for the item process. All item and facility records must exist at the target site.

1 Select the item revision.

2 Select **Maintain > Copy**.

3 Complete the fields including this information:

Site
Specify the ID for the new group of records.

Item
Specify a new ID if you are creating a new item revision.

Revision
Specify a new ID if you are creating a new item revision.

Copy of Bill of Material
Select the check box to copy. This option is only available if bills of material (BOM) already exist for the item or item revision.

Copy Bill of Material Components
This option is only available if BOM already exist for the item or item revision. The check box is automatically selected when you select the **Copy of Bill of Material** check box. Clear the check box to not copy the BOM components.

Copy Routings
Select the check box to copy. This option is only available if routings already exist for the item or item revision being copied.

Copy Routing Operations
This option is only available if routings already exist for the item or item revision being copied. The check box is automatically selected when you select the **Copy Routings** check. Clear the check box to not copy the routing operations.

Copy Routing Additional Descriptions
This option is only available if routings already exist for the item or item revision being copied. The check box is automatically selected when you select the **Copy Routings** check. Clear the check box to not copy the routing additional descriptions.

Copy Item Process
This option is only available if the **Copy Bill of Material** or **Copy Routings** option is selected, or if the item or item revision being copied has a generic routing. When selected, the **Copy Item Process Comments** check box is automatically selected and cannot be cleared.

Copy Item Process Descriptions
Select the check box to copy. This option is only available if the **Copy Bill of Material** or **Copy Routings** option is selected, or if the item or item revision being copied has a generic routing.

Copy Item Revision Base Prices
Select the check box to copy. This option is only available if base prices already exist for the item or item revision being copied.

Copy Item Foreign Prices
Select the check box to copy. This option is only available if foreign prices already exist for the item or item revision being copied.

Copy Item Revisions Foreign Language Descriptions
Select the check box to copy. This option is only available if foreign language descriptions already exist for the item or item revision being copied.

4 Click **Copy**.

5 Click **OK** to confirm the creation of Enterprise Item records.

Deleting item revisions

Deleting an item revision removes the item revision immediately. If the item revision is used on another object, then you cannot delete the item revision. For example, if the item revision is used on a purchase order or requisition.

1. Select the item revision.
2. Select **Maintain > Delete**.
3. Click **Yes** to confirm. If the item revision is associated with another item, a message is displayed in the **Delete Item Revision** dialog box. Click **No** to return to the **Item Revision** page without deleting the item revision.

Releasing item revisions

Use the **Release** option to update PDM with the item revision record and the associated item process information. Included in the release information is the bill of material, routing, and any facilities associated with the routing operations.

When releasing item revisions for a single engineering change, ensure that each item revision has the engineering change number specified in the **Implementation Status** attribute or in a user attribute. You can use the **Implementation Status** attribute or the user attribute to subset item revisions by the engineering change number. If you need to ensure that engineering change numbers are valid before processing the release to PDM, use the Implementation Status attribute.

1. Select the item revision.
2. Select **Maintain > Release**.
3. Select the **Auto sync** check box to keep the Item Master data automatically synchronized with the current item revision for the released item and site. The **Auto sync** option updates item data when current item revisions change.
4. Click **Continue**.

   You can check the status of this request by looking in the Transaction Status object. The **Description** attribute identifies the release transaction.

Mass indented copying of item revisions

Use the **Mass Indented Copy** option to copy one or more products from one site to another. You can copy all engineering records for the products to a target site, as long as none of the item revisions or objects already exist at the target site. If an item revision does exist, the engineering records for that object will not be copied. This ensures that the data in both the source and target site are the same at the end of the mass indented copy.

Using this option, you can copy engineering records for all the item revision records identified on a subsetted **Item Revision** list page. Based on their primary item processes, the indented bills of material and routings are copied. All items associated with the indented bills of material and all facilities associated with the operation records are copied. If an item revision already exists at the target site, the item process for that item revision is bypassed, and an error message can be created optionally.

1 Select **Maintain > Mass Indented Copy**.

2 Complete the fields including this information:

Target site
Specify the site to which to copy the item revision records, or click **Find Site** to search for a particular site.

Retrieval date
Specify of select a retrieval date to be used for including or excluding engineering records based on their effective dates.

Include Routings
Clear the check box to not copy all routings and associated facilities; otherwise, all routings and associated facilities are copied. The check box is selected by default.

Suppress duplicate record errors
This option is used to not generate error messages for any duplicate item revision and the bill of material, routing header, and facility records for the item revision found in the target site. The mass indented copy continues, by passing the item process for the duplicate item revision. The check box is selected by default.
Clear the check box to generate error messages for the duplicate record errors.

Reason
Optionally, specify a maintenance reason or click **Find Maintenance Reason** to select a reason code.

3 Click **Continue**, then click **OK** to confirm.

Mass releasing item revisions

Use the Mass Release option to update PDM with the item revision and the associated item process information. Included in the release information is the bill of material, routing, and any facilities associated with the routing operations.

1 Select **Maintain > Mass Release**.

2 Complete the fields including this information:

Auto sync
Select the check box to keep the Item Master data automatically synchronized with the current item revision for the released item and site. The **Auto sync** option updates item data when current item revisions change.

3 Click **Continue**, then click **OK** to confirm.

Printing the Cost Variations - Current to Standard report

Use the **Cost Variations - Current to Standard** report option to view lines of current or standard costing information for each item revision. This report shows the costs from the last costing run.

1. Select **Production > Facilities > File > Host Print**.
2. Select **Print** on the **Cost Variations - Current to Standard** tab.
3. Complete the fields on the **Content** tab.
4. Click the **E-mail** tab, then specify the information.
5. Optionally, click the **Attachments** tab to add attachments.
6. Click **Submit**.

Printing the End-Item Where-Used report

Use the **End-Item Where-Used** report option to view the end-items when a selected item revision is used as a component.

1. Select **File > Host Print**.
2. Click the **End-Item Where-Used** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Feature/Option report

Use the **Feature/Options Report** option to view the features and all of the associated options for item revision end items. Item revisions may have features and options when the **Activate Feature/Options** application setting in Enterprise Product Data Management is **Yes**.

1. Select **File > Host Print**.
2. Click the **Feature/Option Report** tab.
3. Select the **Print** check box.
4. Complete the fields on the **Content** tab.
5. Click the **E-mail** tab, then specify the information.

6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Indented Bill report

Use the **Indented Bill** report option to show the entire bill of material (BOM), including structural relationship, in an indented format. The indented bill can be for an item at any level in the structure. Any item that you select for the report is an end-item for this report. An assembly or sub-assembly can have a structure, BOM, and can be used as a component in other BOMs.

1 Select **File > Host Print**.
2 Click the **Indented Bill** tab.
3 Select the **Print** check box.
4 Complete the fields including this information:

Quantity
Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **`900`**.
If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

Retrieval date
Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

S-number
Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Indented Cost Sheet report

Use the **Indented Cost Sheet** report option to view cost information about an item, bill of material, in indented format. This report shows the cost for the components and end-item. Any item you select is an end-item for

this report. An assembly or sub-assembly can have a bill of material, and can also be used as a component in other bills. The Indented Cost Sheet report shows the costs as of the last costing run.

1. Select **File > Host Print**.
2. Click the **Indented Cost Sheet** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Cost Content
   Select `Current` or `Standard`.

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Item Process Report

An item process is a link between the bill of material and the routing. A bill of material is a list of component items. The routing is a list of manufacturing processes.

Use the **Item Process Report**option to show the associated bill of material and the routing for each selected manufactured item that is in effect as of the date that the report is run. The report shows whether the selected item has an alternate bill of material or routing. When you run this report from Item Revisions, only the current primary process is displayed. When you run this report from Item Processes, you can select which records are printed.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Item Process Report** tab.
3. Select the **Print** check box.
4. Complete the fields on the **Content** tab.
5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Item Revision Audit Report

Certain attributes in the item revision record must be identical for all item revisions that have the same item number within a site. Use the **Item Revision Audit Report** option to compare item revision records to corresponding item site records to show which common attributes are not synchronized.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Item Revision Audit Report** tab.
3. Select the **Print** check box.
4. Complete the fields on the **Content** tab.
5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Item Revision Costs report

Use the **Item Revision Costs** report to show current or standard costs for the item revision. This report shows the cost for each selected item and the summary cost of lower-level components. This report does not show the cost for each component. Use the**Single Level Cost Sheet Report** or **Indented Cost Sheet** report to see the cost of the individual components. This report shows the costs as of the last costing run.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Item Revision Costs** tab.
3. Select the **Print** check box.
4. Complete the fields on the **Content** tab.
5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Management Cost Summary report

Use the **Management Cost Summary** report option to view a summary of item revision cost elements such as labor, material, overhead, and other information such as price and gross margin.

The Management Cost Summary report shows the lower-level component costs in summary. The report does not show the cost for each component. Use the **Single Level Cost Sheet Report** or **Indented Cost Sheet** report to see the cost of the individual components.

This report shows the costs as of the last costing run.

1. Select **Production > Facilities > File > Host Print**.

2 Click the **Management Cost Summary** tab.
3 Select the **Print** check box.
4 Complete the fields on the **Content** tab.
5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Operations Cost Sheet report

Use the **Operations Cost Sheet** report option to show the cost of producing a particular batch quantity for the item revisions that are selected for this report. Labor and machine setup cost is calculated for each unit based on the specified batch quantity. In contrast, for standard costing runs, the labor and machine setup costs is apportioned to the expected production run size by dividing by lot size. You can use this to project an expected cost of manufacture.

This report shows costs as of the last costing run.

1 Select **Production > Facilities > File > Host Print**.
2 Click the **Operations Cost Sheet** tab.
3 Select the **Print** check box.
4 Complete the fields including this information:

Quantity
Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **`900`**.
If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

Retrieval date
Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

S-number
Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Routing List report

Use the **Routing List** report option to show the sequence of operations that an item revision is expected to pass through on the shop floor.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Routing List** tab.
3. Select the **Print** check box.
4. Complete the fields on the **Content** tab.
5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Routing and Single Level Bill with blow thru report

Use the **Routing and Single Level Bill with blow thru** report option to show the standard sequence of operations that are required to perform the selected item revisions. This report shows the options of the features. The Routing and Single Level Bill with blow thru job report is similar to single level except that phantom item structures are exploded, blown-thru.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Routing and Single Level Bill with blow thru** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Quantity
   Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **`900`**.
   If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

   S-number
   Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

5. Click the **E-mail** tab, then specify the information.

6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Single Level Bill with blow thru report

For end items, use the **Single Level Bill with blow thru** report option to show the option items for each feature as specified by the S-number and the component items for each phantom. This report provides a single-level picking list for end items that have features or any item with phantoms.

1 Select **File > Host Print**.
2 Click the **Single Level Bill with blow thru** tab.
3 Select the **Print** check box.
4 Complete the fields including this information:

Quantity
Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **900**.
If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

Retrieval date
Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

S-number
Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Single Level Cost Sheet report

Use the **Single Level Cost Sheet** report option to view cost information about an item, bill of material, in indented format. The Single level cost sheet report is a cost summary of the indented cost report, summarizing costs at level 1 of the structure. A blow-thru option is available to explode the structure of phantoms. Use this report when the full detail of a structure is not required.

This report shows the costs as of the last costing run.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Single Level Cost Sheet** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Quantity
   Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **900**.
   If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

   S-number
   Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

   Blow through
   By default, **Yes** is selected. The **Yes** option specifies that the option items for each feature as specified by the S-number and the component items for each phantom are to be displayed. Select **No** to not show this information.

5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing the Single Level Where-Used report

Use the **Single Level Where-Used** report option to show the parent items, one level up, directly using an item revision.

1. Select **File > Host Print**.
2. Click the **Single Level Where-Used** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Summarized Bill report

Use the **Summarized Bill** report option to show the entire bill of material, single list, for an item summarized as a parts list.

1 Select **File > Host Print**.
2 Click the **Summarized Bill** tab.
3 Select the **Print** check box.
4 Complete the fields including this information:

Quantity
Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **`900`**.
If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

Retrieval date
Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

5 Click the **E-mail** tab, then specify the information.
6 Optionally, click the **Attachments** tab to add attachments.
7 Click **Submit**.

Printing the Work-in-process Cost Worksheet report

Use the **Work-in-process Cost Worksheet** report option to print a worksheet for selected item revisions using standard, current, or average costs. This report shows the cost buildup for a quantity of an item in terms of material, outside costs, labor, machine, and overhead costs that are added at each active operation. This report shows components in the ascending sequence of the component within the operation in which they are used.

You can use this report to determine the unit cost of making a quantity of the item. For example, if you specify a standard lot size of the quantity, then the unit cost is matched to the unit cost that is calculated in product costing. The unit cost of the item varies when you specify more or less of the standard lot size.

This report shows the costs as of the last costing run.

1. Select **Production > Facilities > File > Host Print**.
2. Click the **Work-in-process Cost Worksheet** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Cost Content
   Select a cost type. These values are valid:
   - Current
   - Standard
   - Average

   Quantity
   Specify a quantity for the amount of components. The value can be up to 99,999,999. Component quantities are specified as units instead of standard batch quantities. For example, if the standard batch quantity is 100 and there are 900 units, then specify **`900`**.
   If you select multiple item revisions, the quantity that is specified is used for all item revisions on the report.

   Retrieval date
   Specify or select the date to use to select components that are in effect. The Retrieval date is not used to compare to item revision effective dates.

   S-number
   Specify an S-number if the item is an end-item that has features. Use the S-number to select which features and options are reported. Use this attribute to view the cost for a particular configuration, option selection, of an end item. If you do not specify the S-number and the features and options that are present, then all features and options are reported with the component cost. For a specific feature, if you specify an asterisk, then all options for that feature are printed on the report.

5. Click the **E-mail** tab, then specify the information.
6. Optionally, click the **Attachments** tab to add attachments.
7. Click **Submit**.

Running the Product Costing - Both job

To run product costing, you decide whether you want to perform current costing, standard costing, or both.

Use the **Product Costing - Both** host job option to send current and standard costing information for the products from XA to specified destinations using System-Link.

1. Select **Production > Item Revisions > File > Host Jobs**.
2. Select **Execute** on the **Product Costing - Both** tab.
3. Complete the fields including this information:

   Costing effective date
   Specify an effective date for the costing run.

Include affected assemblies
Select this check box to include any affected subassemblies in the costing run.

Suppress warning messages
Select this check box to prevent warning messages from printing on the reports generated by the costing run.

4 Click the **E-mail** tab, then specify the information.
5 Click **Submit**.

Running the Product Costing - Current job

To run product costing, you need to decide whether you want to perform current costing, standard costing, or both.

Use the **Product Costing - Current** host job option to send current costing information for the products from XA to specified destinations using System-Link.

1 Select **Production > Item Revisions > File > Host Jobs**.
2 Click the **Product Costing - Current** tab.
3 Select the **Execute** check box.
4 Complete the fields including this information:

Costing effective date
Specify an effective date for the costing run.

Include affected assemblies
Select this check box to include any affected subassemblies in the costing run.

Suppress warning messages
Select this check box to prevent warning messages from printing on the reports generated by the costing run.

5 Click the **E-mail** tab, then specify the information.
6 Click **Submit**.

Running the Product Costing - Standard job

To run product costing, you need to decide whether you want to perform current costing, standard costing, or both.

Use the **Product Costing - Current** host job option to send standard costing information for the products from XA to specified destinations using System-Link.

1. Select **Production > Item Revisions > File > Host Jobs**.
2. Click the **Product Costing - Standard** tab.
3. Select the **Execute** check box.
4. Complete the fields including this information:

   Costing effective date
   Specify an effective date for the costing run.

   Include affected assemblies
   Select this check box to include any affected subassemblies in the costing run.

   Suppress warning messages
   Select this check box to prevent warning messages from printing on the reports generated by the costing run.

5. Click the **E-mail** tab, then specify the information.
6. Click **Submit**.

Running the Publish Item Revisions job

The **Publish** host job sends current information, for selected item revisions, from XA to specified destinations using System-Link. You can choose to publish a single item revision, manually selected item revisions, or item revisions in a subset. For more information, contact your System-Link administrator.

1. Select **Production > Rate Based > Item Revisions > File > Host Jobs**.
2. Click the **Publish** tab.
3. Select the **Execute** check box.
4. Complete the fields including this information:

   Replication destination
   In the Options section, specify the System-Link destination to which to send the item revision information. If you leave the replication destination blank, the replication destination specified for the individual item revision is used.

5. Click the **E-mail** tab, then specify the information.
6. Click **Submit**.

Item revision base prices

Use the Item Revision Base Prices object to specify and maintain base prices for items by revision.

The definition includes the base price, the pricing unit of measure, the item price class, and an effective date that determines the base price to be used at any given time.

Each base price is identified by its site, item, item revision, and effective date. An item revision can have many base prices. However, only one base price can be effective at a given time.

If you maintain current base price attributes on the item revision, the currently effective base price is updated with the new value. If no currently effective base price exists, one is created using the system date as the effective date.

You can use the Item Revision Price List report to view all possible base prices, or a subset of base prices, for an item revision based on these things:

- Effective date
- Currency ID
- Price book ID

Creating item revision base prices

You need to know the site, item, item revision, and item revision base price before creating the base price record.

1 Select the item revision.

2 Select **Display > Item Revision Base Prices**.

3 Select **Maintain > Create**.

4 Complete these fields including this information:

Price effective date
Select or specify the date that the base price is effective. This date compared to the actual date determines whether the base price is the current one. The current base price is displayed in blue in the Base Prices list. This attribute is used by the Customer Order Management (COM) application.

Pricing unit of measure
Select the unit of measure assigned to the base price class. This user-assigned code identifies the measurement basis for item revisions in the base price class. Examples include EA (each), KG (kilogram), or CM (centimeter).

Item price class
Select a user-defined code to group items into categories for pricing. Items assigned the same item price class must have the same pricing unit of measure.

5 Click **Create**.

If you select **Preview before create**, you can specify additional information on the **General** card tab. If you do not select **Preview before create**, the base price is created and added to the **Item Revision Base Prices** list page. Depending on the price effective date, these values may also qualify as **Current** and shows in the list of **Sales** attributes.

Changing item revision base prices

To perform this change, you need to know the item revision and item revision base price you want to change.

1. Select the item revision in the **Item Revisions** list page that contains the item revision base price.
2. Select **Display > Item Revision Base Prices**.
3. Select the item revision base price.
4. Select **Maintain > Change**.
5. Update maintainable attributes on the **Change Item Revision Base Price** card file.
6. Click **Update**.

Copying item revision base prices

Use the **Copy** option when you want to copy an item revision base price to create another base price for its item revision or another item revision.

1. Select the item revision that contains the item revision base price in the **Item Revisions** list page.
2. Select **Display > Item Revision Base Prices**.
3. Select the item revision base price.
4. Select **Maintain > Copy**.
5. Complete the fields including this information:

   Site
   Specify the ID for the new group of records.

   Item
   Specify the ID for the item for which you are creating the base price.

6. Click **Copy**.

   If you selected **Preview before copy**, the detailed item revision base price information is displayed on the **Copy Item Revision Base Price** card file. You can maintain this information. Click **Copy** after you have finished.

Deleting item revision base prices

Deleting a item revision base price removes the item revision base price immediately.

1. Select the item revision in the **Item Revisions** list page that contains the item revision base price.
2. Select **Display > Item Revision Base Prices**.
3. Select the item revision base price.
4. Select **Maintain > Delete**.
5. Click **Yes** to confirm.

Printing the Item Revision Price List report

Use the **Item Revision Price List** report option to

1. Select the item revision in the Item Revisions list page that contains the item revision base price. report option to
2. Select **Display > Item Revision Base Prices**.
3. Select the item revision base price.
4. Select **File > Host Print**.
5. Select the **Print** check box if not already selected.
6. Complete the fields including this information:

   Effective date
   Specify the date that the base prices are effective.

   Currency ID
   Specify the currency identifier for the item revision base prices.

   Price book ID
   Specify the ID of the price book used to calculate the selling price of the item revision.

7. Click the **E-mail** tab, then specify the information.
8. Optionally, click the **Attachments** tab to add attachments.
9. Click **Submit**.

Running the Generate Item Revision Base Price Changes job

Use this host job to change item revision base prices to a new price based on the percent of the original base price. For example, you could select a subset of item revision base prices and increase the base price for each record by 10%.

1. Select the item revision in the Item Revisions list page that contains the item revision base price. report option to
2. Select **Display > Item Revision Base Prices**.
3. Select the item revision base price.
4. Select **File > Host Jobs**.
5. Select the **Execute** check box if not already selected.
6. Complete the fields including this information:

   Effective date
   Specify the date that the base prices are effective.

   Variance percent
   Specify the percent of the original base price that is added to the item revision base price.

7. Click the **E-mail** tab, then specify the information.

8 Click **Submit**.

Item revision foreign language descriptions

Use Item Revision Foreign Language Descriptions object to specify and maintain text descriptions in multiple languages for items by revision.

The definition includes a translated description and up to two longer descriptions.

Creating item revision foreign language descriptions

You need to know the site, item, item revision, and foreign language of the set of descriptions before creating the foreign language description..

1 Select the item revision.
2 Select **Display > Foreign Language Descriptions**.
3 Select **Maintain > Create.**
4 Complete the fields including this information:

Language
Select the language for the item revision.

Translated description
Specify a 30-character foreign language description of the item revision.

Translated truncated description (20 positions)
Specify a translated description of this item revision for 20 positions.

Translated truncated description (10 positions)
Specify a translated description of this item revision for 10 positions.

Translated extended description 1
Specify a 40-character foreign language description of the item revision.

Translated extended description 2
Specify a second 40-character foreign language description of the item revision.

5 Click **Create**.

Changing item revision foreign language descriptions

To perform this change, you need to know the item revision, language, and translated description of the set to change.

1. Select the item revision in the Item Revisions list page that contains the foreign language description.
2. Select **Display > Foreign Language Descriptions**.
3. Select the foreign language description.
4. Select **Maintain > Change**.
5. Update maintainable attributes on the **Change Foreign Language Descriptions** card file.
6. Click **Update**.

Copying item revision foreign language descriptions

Use the **Copy** option when you want to copy a foreign language description to create another foreign language description for its item revision or another item revision.

1. Select the item revision that contains the foreign language description in the **Item Revisions** list page.
2. Select **Display > Foreign Language Descriptions**.
3. Select the foreign language description.
4. Select **Maintain > Copy**.
5. Complete the fields including this information.

   Site
   Specify the ID for the new group of records.

   Item
   Specify the ID for the item for the new foreign language description.

   Item revision
   Specify the ID for the item revision for the new foreign language description.

6. Click **Copy**.

   If you selected **Preview before copy**, the detailed foreign language description information is displayed on the **Copy Foreign Language Description** card file. You can maintain this information. Click **Copy** after you have finished.

Deleting item revision foreign language descriptions

Deleting a foreign language description removes the foreign language description immediately.

1. Select the item revision in the **Item Revisions** list page that contains the foreign language description.
2. Select **Display > Foreign Language Description**.
3. Select the foreign language description.
4. Select **Maintain > Delete**.
5. Click **Yes** to confirm.

Item revision foreign prices

The Item Revision Foreign Prices object contains prices for item revisions in currencies other than the local currency.

An item revision can have multiple prices in multiple foreign currencies. If you add a foreign currency price for an item revision without specifying a price amount, the nominal price is calculated in the specified currency using the current exchange rate for that currency.

The effective date for the foreign price determines which one of multiple prices in the specified currency applies to the item revision. Only one price per currency applies at a time. Additionally, only foreign currency prices specified for the current item revision can be in effect.

Because of fluctuations in exchange rates, changes to the pricing unit of measure, and other factors can require changes to prices in foreign currency. The Item Revision Foreign Prices object provides several options for updating foreign currency prices for an item revision. Use the **Assign nominal price** button to replace the current price with a recalculated version of the price. Use **Mass Replace Foreign Price with Nominal Price** option to perform these task: recalculate the nominal price for all selected foreign currency prices. The recalculated price replaces the existing foreign currency price with the nominal price.

Creating item revision foreign prices

Before you begin, you need to know the site, item, revision, currency, and pricing unit of measure for the foreign price. You can create more than one foreign price in a specified currency but only one price can be current. The current price is determined by the effective date you assign to the foreign price.

1. Select the item revision.
2. Select **Display > Item Revision Foreign Prices**.
3. Select **Maintain > Create**.
4. Complete the fields including this information:

   Company
   Specify the company to which the site and item revision combination belongs, or click the **Find Company** button to select a company. This information cannot be changed after you create the foreign price.

   Currency
   Select the foreign currency for the price. The currency must be a valid currency defined for the specified company. If you select a currency for a company other than the one you specified, the company changes to the company associated with the selected currency. You cannot change the currency after you create the foreign price.

   Price effective date
   Select the date that the foreign price is effective. This date compared to the actual date determines whether the foreign price is the current one. The current foreign price shows in blue on the Item Revision Foreign Prices list. You cannot change the effective date after you create the foreign price.

   Foreign currency price
   Specify the foreign price amount for this item revision in this currency. If you do not specify an amount, a nominal foreign price can be calculated in EPDM based on these things:

- Base price of the item revision
- Current exchange rate for the specified currency
- Pricing unit of measure
- Any adjustment factor that applies to the currency

5 Click **Create**.

If you select **Preview before create**, you can make changes or additions to the item revision foreign price information. When finished, click **Create**.

If you do not select **Preview before create**, the foreign price is created and added to the**Item Revision Foreign Prices** list page. Depending on the price effective date, this price may qualify as the current price in this currency.

Changing item revision foreign prices

The price and the pricing unit of measure are the only values that can be changed for an item revision foreign price.

1 Select the item revision in the **Item Revisions** list page that contains the item revision foreign price.
2 Select **Display > Item Revision Foreign Prices**.
3 Select the item revision foreign price.
4 Select **Maintain > Change**.
5 Update maintainable attributes.
6 Click **Update**.

Copying item revision foreign prices

Before you begin, you need to know the site, item, revision, currency, and pricing unit of measure for the new foreign price. You can create more than one foreign price in a specified currency but only one price can be current. The current price is determined by the effective date you assign to the foreign price.

1 Select the item revision that contains the item revision foreign price in the **Item Revisions** list page.
2 Select **Display > Item Revision Foreign Prices**.
3 Select the item revision foreign price.
4 Select **Maintain > Copy**.
5 Complete the fields including this information:

Site
Specify the site that contains the item revision for which you are creating the foreign price.

Item
Specify the identifier for the enterprise item to which the item revision belongs.

Company
Specify the company to which the site and item revision combination belongs, or click the **Find Company** button to select a company. This information cannot be changed after you create the foreign price.

Currency
Select the foreign currency for the price. The currency must be a valid currency defined for the specified company. If you select a currency for a company other than the one you specified, the company changes to the company associated with the selected currency. You cannot change the currency after you create the foreign price.

Price effective date
Select the date that the foreign price is effective. This date compared to the actual date determines whether the foreign price is the current one. The current foreign price shows in blue on the Item Revision Foreign Prices list. You cannot change the effective date after you create the foreign price.

6 Click **Copy**.

If you select **Preview before create**, you can make changes or additions to the item revision foreign price information. When finished, click **Create**.

If you do not select **Preview before create**, the foreign price is created and added to the**Item Revision Foreign Prices** list page. Depending on the price effective date, this price may qualify as the current price in this currency.

Deleting item revision foreign prices

The item revision foreign price is deleted automatically if the item revision is deleted.

1 Select the item revision in the **Item Revisions** list page that contains the item revision foreign price.
2 Select **Display > Item Revision Foreign Prices**.
3 Select the item revision foreign price.
4 Select **Maintain > Delete**.
5 Click **Yes** to confirm.

Mass replace foreign price with nominal price

Use the **Mass Replace Foreign Price with Nominal Price** option to do these things:

- Recalculate the nominal price for all selected foreign currency prices
- Replace the existing foreign currency price with the nominal price

For example, since the last time the prices were recalculated, the exchange rate between a local currency and another currency has increased by 10 percent. You can use the **Mass Replace Foreign Price with Nominal Price** option to recalculate and replace the prices in that currency across all item revisions automatically.

This calculation is used for the nominal price:

[base price (local currency) x exchange rate for specified currency] x any currency adjustment factor /foreign pricing UM if different from base price UM

For example, an item revision has a foreign price of 3.35 euros and the foreign pricing UM is each. The base price in dollars is $24 and the pricing UM is dozen. The exchange rate from dollars to francs is 1.5. The price adjustment factor for the euro currency is 0.90. The calculation for the nominal price is [(24 x 1.5)] x 0.90/12 = nominal price of 2.70 euros for each item.

To narrow the foreign currency prices for recalculation and replacement, you can apply one a subset or select specific item revision foreign prices from the **Item Revision Foreign Prices** list page. Note that if the list of item revision foreign prices does not have a subset, then all item revision foreign prices are recalculated and replaced when you use this option. This table shows the subsets you can use and describes when to use them.

Subset	Use to
Currency ID	Recalculate and replace only item revision foreign prices calculated in the specified currency
Current price	Recalculate and replace only the item revision foreign prices that are currently effective
Item	Recalculate and replace only item revision foreign prices for the specified item
Variance percent	Recalculate item revision foreign prices and only replace those prices that differ from the nominal prices by a percentage greater than or equal to the specified variance percent

For any item revision foreign price included in the subset, the **Mass Replace Foreign Price with Nominal Price** option recalculates the nominal price and replaces the existing price with the nominal price based on these things:

- Base price
- Pricing unit of measure
- Current exchange rate for the currency
- Any currency adjustment factor that applies to that currency

Mass replacing foreign price with nominal price

1. Select the item revision foreign prices to replace with the recalculated nominal price. Or, select the subset to use to restrict the list of item revision foreign prices to be replaced.
2. Select **Maintain > Mass Replace Foreign Price with Nominal Price**.
3. Specify this information:

   Description
   Specify a reason for the mass replacement of the selected foreign prices. This description shows with the transaction in the Transaction Status and Transaction History objects.

Subset
Select the subset to use to restrict the list of item revision foreign prices. The default value is any subset that already applies to the list of item revision foreign prices.

4 Click **Continue**.

Chapter 13: Item warehouses

The Item Warehouses object contains one record for each unique item number assigned to a warehouse.

Each record includes data for managing inventory, such as quantity on hand, quantity on order, historical usage, and lead time.

When an item is assigned to more than one warehouse, the item has a different record for each warehouse in the Item Warehouses object. You determine how many item warehouse records need to be created for an item by identifying where the items are stocked. Then, you create an item warehouse record for each warehouse where an item is stocked.

The Item Warehouses object contains the same records as the Item Balance file. For example, maintenance activities you perform in the Item Warehouses object have the same result as performing those activities using the Inventory Management (IM) Item Balance file maintenance options.

The Item Warehouses object has two security levels for maintenance. The highest level of security (09) is required if maintenance is performed for on-hand quantities, or period-to-date and year-to-date figures. These attributes are normally updated by the application. The remaining attributes are maintained through regular security.

Item warehouse records can be suspended or reactivated. When you suspend an item warehouse, you should change the effective dates for that item in the Bills of Material object.

You cannot delete a record from the Item Warehouses object if there are open orders or allocations for the item in that record. If the warehouse in an item warehouse record is controlled, you cannot maintain that record if an MRP Planning run is in process.

A specific item can have ties to information in other objects. For example, if an item is in a controlled warehouse, a location is defined in the Warehouse Locations object. Within the Item Warehouses object, you can use **Display** menu options or toolbar buttons to see information in other objects that is related to a selected item.

By default, the Item Warehouses object shows you all item warehouse records, regardless of item or warehouse. If you want to see only warehouses that stock a particular item, you can select an item in the Items object, then select the **Item Warehouses** option on the **Display** menu. If you want to see only items stocked in a particular warehouse, select the warehouse in the Warehouses object, then select the **Warehouse Items** option on the **Display** menu.

When Materials Planning is installed, you use the Item Warehouse (Planning) object to view your planning information, identify exceptions, and release orders. You can manage the requirements for master level items in the Item Warehouse (Planning) object. The Item Warehouse (Planning) object provides several subsets to assist you in limiting your list window view to specific planning details. For example, if you wanted to limit your view to only those items that had planning exceptions in the last planning run or only those items that were active in the last planning run, you would select the **Has planning exceptions** or **In last planning run**

subset. The **Planning** list page includes an indicator that shows a red exclamation for each item with one or more planning exceptions. You can double-click a line in the **Planning** view on the **Item Warehouses** list page shows the **Item Warehouse** details page with the Planning card file active.

Activating an item warehouse

You can only activate an item warehouse that has been suspended.

1. Select a suspended item warehouse record.
2. Select **Maintain > Activate**.
3. Click **Yes**.

Creating item warehouses

1. Select one of these options:
   - Select **Engineering > PDM Plus > Item Warehouses**
   - Select **Materials > Inventory > Item Warehouses**
   - Select **Material Logistics > Enterprise > Item Warehouses**
   - Select **Production > Order Based > Item Warehouses**
   - Select **Planning > Item Warehouses (Planning)**
2. Select **Maintain > Create**.
3. Specify this information:

   Item
   Specify the code that defines the item.

   Warehouse
   Specify the code that defines the warehouse.

4. Click **Create**.

   If you select **Preview before create**, you can specify additional information on the **General** card tab.

Creating a purchase order from an item warehouse

You can create a purchase order item from a selected item warehouse record. To create a new purchase order, you specify only basic item information. The purchase order header is automatically created from default values. The buyer comes from your user preference in the item master record or from your selection. The

vendor comes from the vendor in the item warehouse record or from the primary vendor in the item master record.

1. Select an item warehouse record.
2. Select **Maintain > Create Purchase Order**.
3. Specify a vendor or buyer depending on the item warehouse record selected.

   The buyer comes from your user preference in the item master record or from your selection. The vendor comes from the vendor in the item warehouse record or from the primary vendor in the item master record.
4. Click **Continue**.
5. Complete the fields including this information:

   Order
   Specify the number to assign to the new purchase order. If you are adding an item to an existing purchase order, specify that number. If you are using system-assigned purchase order numbers, the next available purchase order number is displayed.

   Warehouse
   Optionally, specify the warehouse associated with this item if different from the one provided. The warehouse information is automatically pulled from the selected item warehouse record.

   Requisition
   Click the **Assign requisition** button to specify the number of the requisition that is fulfilled by this item on the purchase order.

   Item
   Specify the item for this purchase order if not the default. This attribute is displayed when you select the **`Default`** or **`Miscellaneous`** template.

   Service
   Specify the enterprise item for the purchase order item. This attribute is displayed when you select the **`Service`** template.

   Extended description
   Specify a description for this miscellaneous item. This attribute is displayed when you select the **`Miscellaneous`** or **`Service`** template.

   Contract
   Specify the number of the contract associated with the item for the purchase order.

   Unit price
   Specify the price at which the item is being ordered. Leave this attribute blank if you are using contract pricing.

   Blanket item
   Select the **Blanket item** check box if the item has more than one delivery date.

   Include Item Receiving operations
   Select the **Include Item Receiving operations** check box to include item receiving operations on the purchase order. This attribute is displayed when you select the **`Default`** or **`Miscellaneous`** template.

6 Click **Create**.

Adding an item warehouse to a purchase order

You can add an item warehouse to a purchase order.

1 Select an item warehouse record.
2 Select **Maintain > Add to Purchase Order**.
3 Specify the order number, then click **Continue**.
4 Specify a vendor, then click **Continue**.
5 Complete the fields.
6 Click **Create**.

Creating a requisition order

1 Select an item warehouse record.
2 Select **Maintain > Create Requisition**.
3 Complete the fields including this information:

Requisition
The next available requisition number is automatically supplied. You can override this number. The number must start with R.

Requisitioner
Specify the requisition vendor.

4 Click **Create**.

Deleting an item warehouse

You cannot delete a record from the Item Warehouses object if there are open orders or allocations for the item in that record.

1 Select an item warehouse record.
2 Select **Maintain > Delete**.
Any related objects that are related to the item warehouse are listed on the **Delete Item Warehouse** prompt.
3 Click **Delete**.

Deleting multiple item warehouses

You cannot delete records from the Item Warehouses object if there are open orders or allocations for the items in that record.

1. Select the item warehouses to delete by creating a subset or by selecting multiple item warehouses from the list.
2. Select **Maintain > Mass Delete**.

   Any related objects that are related to the item warehouse are listed on the **Delete Item Warehouse** prompt.
3. Click **Delete**.

Marking a planning schedule as reviewed

This task is only available when the Materials Planning application is installed.

1. Select **Materials > Inventory > Item Warehouses**.
2. Select **`Planning`** from the **Views** list.
3. Select **`Master level items not reviewed`** from the **Subsets** list.
4. Select an item warehouse record.
5. Select **Maintain > Mark/Unmark Reviewed Planning Schedule**.
6. Click **Yes**.

Marking a planning order as reviewed

This task is only available when the Materials Planning application is installed.

1. Select **`Planning`** from the **Views** list.
2. Select **`Master level items not reviewed`** from the **Subsets** list.
3. Select an item warehouse record.
4. Select **Maintain > Mark/Unmark Reviewed Planning Order**.
5. Click **Yes**.

Suspending an item warehouse

When you suspend an item warehouse, information in that item warehouse record cannot be changed.

1. Select the item warehouse.

2 Select **Maintain > Suspend**.
3 Click **Yes**.

Audit Allocation Quantities host job

Use the Audit Allocation Quantities host job to validate the allocation quantities, or pick requirements, between the Item Balance file and the Manufacturing Order Detail file. The Audit Allocation Quantities host job updates the Item Balance file to correct discrepancies found between these two files and prints any differences found.

If COM is installed and interfacing, this host job accumulates the customer order allocation quantities in the Item Balance file. Any item or warehouse that is out of balance is listed, and the Item Balance record is updated to agree with the Customer Order Detail records for that item or warehouse.

This host job should be scheduled for a time when these files are not being used by another task:

- Item Balance
- Customer Order detail
- Manufacturing Order detail
- Customer Order Master
- Manufacturing Order Master
- Order Release Data Entry

Running an Audit Allocation Quantities host job

1 Select **Materials > Inventory > Item Warehouses > File > Host Jobs**.
2 Click the **Audit Allocation Quantities** tab if not selected.
3 Select the **Execute** check box.
4 Complete the fields.
5 Select the **Confirmation** tab, then specify the information.
6 Click **Submit**.

Running an Audit Allocation Quantities host job

1 Select **Materials > Inventory > Item Warehouses > File > Host Jobs**.
2 Click the **Audit Allocation Quantities** tab if not selected.
3 Select the **Execute** check box.
4 Complete the fields.
5 Select the **Confirmation** tab, then specify the information.

6 Click **Submit**.

Audit On-order Quantities host job

The Audit On-order Quantities host job validates quantities on-order between these files:

- Item Balance
- Purchase Order Item Detail
- Manufacturing Order Master

The host job updates the Item Balance file to correct discrepancies between these three files and prints any differences found.

If a task is selected when the Audit On-order Quantity host job is active, the error message `SYS-1172 FILE (file label) IS CURRENTLY NOT AVAILABLE` is displayed. You can select the available options for this message without endangering data integrity.

Running an Audit On-order Quantities host job

These attributes print out on the **Purchase/Mfg On-Order Audit Exception List**:

- **Item Number**
- **Warehouse**
- **Description**
- **Manufacturing On-order Quantity Before**
- **Manufacturing On-order Quantity After**
- **Purchase On-order Quantity Before**
- **Purchase On-order Quantity After**

1 Select **Materials > Inventory > Item Warehouses > Files > Host Jobs**.
2 Click the **Audit On-order Quantities** tab.
3 Complete the fields.
4 Select the **Confirmation** tab, then specify the information.
5 Click **Submit**.

Running the Copy Indented Item Warehouse job

Use the **Copy Indented Item Warehouse** host job to copy a manufactured item with a bill of materials to another warehouse. This host job to copies the end item and all of its components to the new warehouse and creates Item Warehouse records. The direct, first level, components that are used to produce the end item is

copied but the components of components, lower levels, are not copied. Similar to the **Single Level Bill with blow thru** report, the **Copy Indented Item Warehouse** host job copies both the phantom items and their direct components.

1. Select **Materials > Inventory > Item Warehouses > File > Host Jobs**.
2. Click the **Copy Indented Item Warehouse** tab.
3. Select the **Execute** check box.
4. Complete the fields including this field.

   Structure level
   Specify the item warehouse levels that are copied.

5. Select the **Confirmation** tab, then specify the information.
6. Click **Submit**.

Chapter 14: Labor activity

The Labor Activity object contains information about the labor transactions associated with a manufacturing order.

The Labor Activity Transactions list page includes information such as operation sequence, item and production facility information, employee information, and transaction times.

Reporting M.O. operation activity for employees or labor activities

This task is for reporting M.O. operation activity from the Employees or Labor Activity object.

Use the **Report M.O. Operation Activity** transaction for reporting quantities, scrap, machine, and labor times for an M.O. Operation.

This transaction is only available if Shop Floor is active in OBPM application settings.

1. Select one of these options:
   - Select **Order Based > Employees**. Then, select the employee in the list.
   - Select **Activity > Labor Activity**. Then, select the labor activity in list.
2. Select **Maintain > Report M.O. Operation Activity**.
3. Complete the fields including this information:

   Template
   Select a template to show only the attributes relevant to the purpose of the template. For example, select the **Milestone** template to report the activity as a milestone operation.

   Order
   Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

   Operation
   Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

   Run type
   Select the type of run for the activity. These values are valid:
   - Setup

- Run
- Milestone group: This value can only be used with a milestone operation

This attribute is displayed when you select the **Default** or **Scrap quantity** template.

Completion code
These values are valid:

- **0=Open**: Not complete. Quantity can be reported.
- **1=Complete with entered quantity**: You must specify quantity with this completion code.
- **2=Complete with defaulted**: You do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.
- **3=Milestone**: Closes all milestone sub-operations and set the operation status to complete. This completion code can only be used with a **Run code** of **M**.

Complete
Specify the quantity that is complete. This attribute is displayed when you select the **Default**, **Milestone**, and **Setup** template.

Scrap
Specify the scrap quantity. This attribute is displayed when you select the **Default**, **Scrap quantity**, and **Setup** template.

Reason
Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for the scrap. If your company does not require reason codes, blank is a valid entry.

Labor
Specify the amount of labor time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the labor time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the labor time is assumed to be minutes. For an operation in a milestone group type F (flow shop environment), labor time entry is not accepted.

Machine
Specify the amount of machine time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the machine time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the machine time is assumed to be minutes. This attribute is not valid for a milestone group sub-operation. This attribute is displayed when you select the **Default** or **Setup** template.

Reference
Specify information for reference purposes.

Transaction cost
Optionally, specify the cost for the transaction. If using standard rates as actual costs, this cost overrides that cost. If using actual employee costs, this cost overrides that cost as well. This attribute is displayed when you select the **Default** or **Setup** template.

Actual work center
Specify the work center being used for the operation. You can specify an override work center only for the first transaction for an operation. This attribute is displayed when you select the **Default** or **Setup** template.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Rate override
This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Shift override
Specify **`1`**, **`2`**,or **`3`** for the shift override. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

4 Click **Continue**.

Starting labor in a labor activity

Use the **Start Labor (ON)** transaction to show that an employee is clocking onto a job and to specify the kind of labor required for the job. Start Labor (ON) cannot be created for Flow-shop milestone.

1 Select **Activity > Labor Activity**.
2 Select the activity in list.
3 Select **Maintain > Start Labor (ON)**.
4 Complete the fields including this information:

Order
Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

Operation
Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

Run type
Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:

- **`Setup`**: Code used to report work spent in preparing an M.O. operation. Time can include changing dies and tools, moving material to the facility, or performing testing.
- **`Run`**: Code used to report actual work on an operation. Time can include welding, assembly. packaging, etc.
- **`Indirect`**: Code used to report work that is not against an M.O. operation. Time can include sweeping, cleaning, and attending meetings.
- **`Milestone`**: Code used to report activity or work against the final operation in a milestone group.

Crew
Select the check box to indicate that the employee is part of a work crew.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

5 Click **Continue**.

Stopping labor in labor activity

Use the Stop Labor (OF) transaction to show that an employee is clocking off a job and to specify the kind of labor required for the job. A corresponding Start Labor (ON) transaction is required unless you are tailored for OF only processing, reporting scrap against a milestone operation, or reporting against a flow-shop milestone.

1 Select **Activity > Labor Activity**.
2 Select the activity in list.
3 Select **Maintain > Stop Labor (OF)**.
4 Complete the fields including this information:

Order
Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

Operation
Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

Run type
Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:

- **`Setup`**: Code used to report work spent in preparing an M.O. operation. Time can include changing dies and tools, moving material to the facility, or performing testing.
- **`Run`**: Code used to report actual work on an operation. Time can include welding, assembly. packaging, etc.
- **`Indirect`**: Code used to report work that is not against an M.O. operation. Time can include sweeping, cleaning, and attending meetings.
- **`Milestone`**: Code used to report activity or work against the final operation in a milestone group.

Completion code
Select a completion code. These values are valid:

- **`0=Open`**: Not complete. Quantity can be reported.
- **`1=Complete with entered quantity`**: Specify quantity with this completion code.
- **`2=Complete with defaulted`**: Do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.

- **`3 = Milestone`**: Closes all milestone sub-operations and sets the operation status to complete. Can only be used with **Run code** of **M**.

Reason
Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for scrapping. If your company does not require reason codes, blank is a valid entry.

Reference
Specify information for reference purposes.

Crew
Select the check box to indicate that the employee clocked off the job as part of a work crew. Machine time is calculated only if the **Crew** check box is not selected for both a Start Labor (ON) transaction and the matching OF transaction.

Crew clock transactions can be used with multiple employees to clock on or off the same job without reentering the transaction detail information. The first employee clocks on or off using the normal ON or OF transaction. The other employees then specify a Crew Clock (CC) transaction that PM&C converts to an ON or OF transaction with the same time, order, and operation information as the original transaction.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

5 Click **Continue**.

Chapter 15: Labor activity history

The Labor Activity History object contains information about the labor transactions associated with closed and purged manufacturing orders.

This information includes operation sequence, item and production facility information, employee information, and transaction times.

Chapter 16: Manufacturing orders

The Manufacturing Orders object contains information related to released manufacturing orders.

This list shows some of the related information:

- Item and description
- Warehouse
- Item
- Job number
- Status
- Order quantity
- Stocking unit of measure
- Date due
- Planner responsible for the order

A specific manufacturing order can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected manufacturing order. Depending on what applications are installed, you can use the **Maintain** menu options to work with related information in other objects.

This table shows manufacturing orders related objects:

Object	Viewable information
M. O. Components	A list of the components used to manufacture the item associated with the order
M. O. Operations	A list of the operations used to manufacture the item associated with the order
M. O. Miscellaneous Charges	A list of the miscellaneous charges associated with the order
Discrete Allocations	A list of the discrete allocations associated with the order
Inventory Transaction History	A list of the specific inventory transactions associated with the order
Sources of Demand	A list of the top-level requirement that generated the need for the component associated with the order

Object	Viewable information
Labor Activity Transactions	A list of the specific labor activity transactions associated with the order
Component M.O.s	A list of the manufacturing orders associated with the component in the order
Splits	A list of all splits associated with the order

Creating manufacturing orders

1 Select **Production > Order Based > Manufacturing Orders > Maintain > Create**.

2 Complete the fields including this information:

Order
The next manufacturing order number is automatically supplied but you can override this number. The number must start with M. You can set a user preference for using system-assigned or manually assigned manufacturing order numbers.

Item Revision
This attribute is available only if EPDM is installed and defaults to the current setting.

Standard in quantity
Specify a value. Click the **Set Standard in quantity default** button to calculate the standard in quantity value based on the value of the order quantity.

Total order quantity
Specify a value. If this attribute is inactive, order quantity is calculated based on the **Standard in quantity** value.

Scheduled start date
Specify a start date. If this attribute is inactive, the scheduled start date is calculated based on the **Due date** value.

Due date
Specify a start date. If this attribute is inactive, the due date is calculated based on the **Scheduled start date** value.

Include primary BOM
This attribute is only available if EPDM or PDM is installed. Select the **Include primary BOM** check box to include the primary bill of material. The bill of material (BOM) is based on these attributes:

- If PDM is installed: **Warehouse**, **Item**, and **Start Date**
- If EPDM is installed: **Warehouse**, **Item**, **Start Date**, and **Revision**

Include primary routing
This attribute is only available if EPDM or PDM is installed. Select the **Include primary routing** check box to include primary routing. Primary routing is based on these attributes:

- If PDM is installed: **Warehouse**, **Item**, and **Start Date**

- If EPDM is installed: **Warehouse**, **Item**, **Start Date**, and **Revision**

You can import bills of material and routings from the **Create Manufacturing Order** card file.

3 Click **Create**.

Importing a bill of material for a manufacturing order

When creating a manufacturing order, you can import an existing bill of material or routing.

1 Select the **Components** card tab in the **Manufacturing Orders** card file.
2 Click the **Import Bill of Material** icon.
3 Select one of these sources in the **Import option** attribute:
   - **`Item Process`** (EPDM only)
   - **`Bill of Material`** (EPDM only)
   - **`Item`**(PDM+ only)
   - **`Manufacturing order`**
   - **`Manufacturing order history`**

   For **`Item Process`** and **`Bill of Material`**, you can specify an item and query the EPDM sites, revisions, and processes associated with the item. The **Find** buttons launch a search for these objects. Only the sites, revisions, and processes associated with or belonging to the item and site are displayed. You can import bill of material data from existing manufacturing orders or manufacturing order history by selecting these import options.
4 Specify additional information.
5 Optionally, select **Yes** for the **Import routing also** attribute to import the routing with the bill of material.
6 Click **Import Bill of Material**.

Importing a routing for a manufacturing order

1 Select the **Operations** card tab in the When creating a manufacturing order, you can import an existing routing or bill of material.**Manufacturing Orders** card file.
2 Click the **Import Routing** icon.
3 Select one of these sources in the **When creating a manufacturing order, you can import an existing routing or bill ofImport option** attribute:
   - **`Item Process`** (EPDM only)
   - **`Routing`** (EPDM only)
   - **`Item`**(PDM+ only)
   - **`Manufacturing order`**
   - **`Manufacturing order history`**

For **`Item Process`** and **`Routing`**, you can specify an item and query the EPDM sites, revisions, and processes associated with the item. The **Find** buttons launch a search for these objects. Only the sites, revisions, and processes associated with or belonging to the item and site are displayed. You can import routing data from existing manufacturing orders or manufacturing order history by selecting these import options.

4 Specify additional information.

5 Optionally, select **Yes** for the **Import bill of material also** attribute to import the bill of material with the routing.

6 Click **Import Bill of Material**.

Creating an M.O. operation for a manufacturing order

M.O. operations can be created at any time for a manufacturing order

1 Select the **Operations** tab on the **Create** or **Change Manufacturing Order** page.

2 Click **Create** on the **Operations Dates**, **Operations Quantities**, or **Operations Hours** tab.

3 Complete the fields:

To add an M.O. outside operation to the M.O. operation, ensure that **Preview before Create**is selected.

4 Click **Create**.

Note: If you are adding an M.O. outside operation, click the **Hours** tab and select **`Cost / piece`** for the **Time basis code** attribute.

See Creating an M.O. outside operation for an M.O. operation.

5 If you selected **Preview before Create**, complete additional fields and click **Create**.

6 Click **Continue**, then click **Confirm**.

Creating an M.O. outside operation for an M.O. operation

When creating or changing an M.O. operation you can create an M.O. outside operation if the **Time basis code** (TBC) is set to **Cost / piece**.

1 Click the **Hours** tab on the **Create M.O. Operations** or **Change M.O. Operations** page.

2 Ensure that the **Time basis code** attribute is set to **Cost / piece**.

3 Click the **General** tab.

4 Click the **Create** icon under M.O. Outside Operations.

5 Complete the fields including this information:

Release code
Select a value. These values are valid:

- **`No`**
- **`Requisitions`**
- **`Held P.O.`**
- **`P.O.`**

- **Held blanket**
- **Blanket**
- **Held blanket-fixed**
- **Blanket-fixed**

Vendor
Specify a vendor or click the **Find Vendor** icon to select a vendor. Optionally, click the **Find Outside Operation** icon next to the **Vendor** attribute to select an outside operation detail record that corresponds with the M.O. operation.

Service item
Specify the service item or click **Find Item Revision** to select an item revision.

Qty/cost update
Select a value for the update. These values are valid:

- **Invoice**
- **Receive P.O.**
- **Receive P.O./Invoice**

Update operation status
Select this box to set **Operation status** to **Complete** when cost is reported complete.

6 Click **Create**, then click **Create** on the next page.
7 Click **Continue** until the **Confirm** dialog box is displayed.
8 Click **Confirm**.

Releasing an M.O. outside operation

You can release an M.O. outside operation when the purchase order (P.O.) for the M.O. outside operation is blank and the vendor is an active vendor in the vendor object. You cannot release an M.O. if the purchase order (P.O.) is assigned to the M.O. outside operation.

1 Select the M.O. outside operation.
2 Select **Maintain > Release**.
3 Complete the fields including this information:

Vendor
Optionally, select a different vendor from the one shown. You can select a vendor from outside operations or any active vendor from the Vendor master file.

Release code
Select a code. This attribute is maintainable if **Vendor** is not blank. These values are valid:

- 0 = No
- 1 = Requisitions
- 2 = Held P.O.
- 4 = Held blanket
- 5 = Blanket

- 6 = Held blanket-fixed
- 7 = Blanket-fixed

If you select **6** or **7**, then a fixed blanket must exist.

Service item
Specify the service item number or click **Find Item Revision** to select a service item from the **Find Item Revision** list.

Qty/cost update
Select where the quantity or cost is to be updated. These values are valid:

- Invoice
- Receive P.O.
- Receive P.O./Invoice

Update operation status
Select the check box to indicate that the operation status is to be updated.

4 Click **Continue**.

If you select the **Return here to create another** check box, the next valid M.O. outside operation is displayed.

Activating a manufacturing order

Use the **Activate** menu option to reactivate manufacturing orders that have been canceled, **Order status** is **99**. When activated, the **Order status** changes from **99 = Cancelled** to **10 = Released, no activity**.

You can use **Activate** to reset orders that have these order statuses back to a status of **40 = Started**:

- **45 = Material complete**
- **50 = Labor complete**
- **55 = Complete**

1 Select the manufacturing order or open the card file for the manufacturing order to activate.
2 Select **Maintain > Activate**.
3 Click **Yes**.

Changing manufacturing orders

The **Change** option is available when OBPM is installed.

1 Select the manufacturing order.
2 Select **Maintain > Change**.
3 Update the attributes.

4 Click **Update**.

Canceling a manufacturing order

Use the **Cancel** menu option to prevent any transactions from being processed for an order. You can only use this option for an order with an **Order status** of **10 = Released, no activity**.

The **Cancel** option is available when OBPM is installed.

1 Select the manufacturing order or open the card file for the manufacturing order to cancel.
2 Select **Maintain > Cancel**.
3 Click **Yes**.

   The **Order status** changes from **10 = Released, no activity** to **99 = Cancelled**. To reverse the cancellation, use **Activate**.

Order close transactions in manufacturing orders

You can use these order close transactions to complete the manufacturing order labor and material processes associated with each order:

- Labor Complete
- Receipt of Material
- Material Complete
- Normal Close
- Force Close

The transactions are sequential in nature. For example, you may only designate a manufacturing order with a normal close status when the labor complete, receipt of material and material complete operations have been completed for the order. This table shows you which transactions need to be completed based on the current status of the order.

If the current status is	Complete these transactions
10	• Labor Complete • Receipt of Material, if needed • Material Complete • Normal Close • Force Close

If the current status is	Complete these transactions
40	• Labor Complete • Receipt of Material, if needed • Material Complete • Normal Close • Force Close
45	• Labor Complete • Normal Close • Force Close
50	• Receipt of Material, if needed • Material Complete • Normal Close • Force Close
55	• Normal Close • Force Close

Processing a labor complete transaction

For the line item to be eligible for a labor complete transaction, the original manufacturing order must have one of these order statuses:

- **10 = Released, no activity**
- **40 = Started**
- **45 = Material complete**

1. Select the manufacturing order line items in the **Manufacturing Orders** page to designate as labor complete.
2. Select **Maintain > Labor Complete**
3. Specify this information:

   Reference number
   Specify the reference number related to the manufacturing order.

   Reason code
   Select the reason code related to the manufacturing order. If no codes are displayed in the drop-down list, specify your own code. Codes are created in the Transaction Reasons object.

4. Click **Continue**.

   The **Incomplete Operations** card is displayed with these tabs depending on the transaction being processed:

   - **General**: Shows information provided on the **Labor Complete** card
   - **Incomplete operations**: Shows a listing of all the incomplete operations associated with the order
   - **All operations**: Shows a list of all the components associated with the order

5 Click **Create**.

The **Order status** is updated to **50 = Labor complete** or **55 = Normal close**.

Processing a receipt of material transaction

To use the **Receipt of Material** option on a line item, the manufacturing order must have one of these order statuses:

- **10 = Released, no activity**
- **40 = Started**
- **50 = Labor complete**

1 Select the manufacturing order line item in the **Manufacturing Orders** page to process as having receipt of material to completion.

2 Select **Maintain > Receipt of Material**.

3 Complete the fields including this information:

Item receipt quantity
Specify the amount of material to be received.

Reason
Select the code that represents the reason for the receipt of material. If no codes are provided, you can specify a code. Codes are created in the Transaction Reasons object.

Location
Specify the location code that matches the original location of the material.

User sequence
Specify the number indicating the sequence of this component in the bill of material. This attribute is only displayed if you chose user sequence at application tailoring.

4 Click **Continue**.

The **Backflush/Scrap Candidates** card is displayed with these tabs depending on the transaction being processed:

- **General**: Shows information provided on the **Receipt of Material** card
- **Backflush candidates**: Shows a list of all the backflush components associated with the order
- **All components**: Shows a list of all the components associated with the order

5 Click **Create**.

Processing a material complete transaction

For the manufacturing order to be eligible for the Material complete transaction, the original manufacturing order must have an **Order status** of **40 = Started** or **50 = Labor complete**. Additionally, the finished item on the manufacturing order must be received to completion. If not, the **Receipt of Material** page is displayed.

1. Select the manufacturing order lines in the **Manufacturing Orders** page to designate as material complete.
2. Select **Maintain > Material Complete**.
3. Complete the fields including this information:

   Reference
   Specify the reference number related to the manufacturing order.

   Reason
   Select the reason code related to the manufacturing order. If no codes are displayed in the drop-down list, specify your own code. Codes are created in the Transaction Reasons object.

4. Click **Continue**.

   The **Backflush/Scrap Candidates** card is displayed with these tabs depending on the transaction being processed:

   - **General**: Shows information provided on the **Material Complete** card
   - **Scrap candidates**: Shows a list of all the scrap components associated with the order
   - **All components**: Shows a list of all the components associated with the order

5. Click **Create**.

Processing a normal close transaction

For the manufacturing order to be eligible for the Normal Close transaction, the original manufacturing order must have an **Order status** of **55 = Complete**.

1. Select the manufacturing order line items in the **Manufacturing Orders** page to designate as normal close.
2. Select **Maintain > Normal Close**.
3. Click **Yes**.

Processing a force close transaction

You can process a Force Close transaction for all the order statuses except the **99 = Cancelled**.

1. Select the manufacturing order line items in the **Manufacturing Orders** page to designate as force close.
2. Select **Maintain > Force Close**.
3. Click **Yes**.

Approving a manufacturing order item (MQ)

After all operations have produced a manufactured item, the item often needs to be inspected for quality. The item is inspected to ensure that the item meets the quality parameters set by the organization. The quality manager is responsible for these checks before sending the item to be stocked. If the item does not match with parameters, the item needs to be re-furbished or scrapped. Items clearing the quality inspection are moved to the stocking location and stored or may be shipped to customer.

Use the **Approve Manufacturing Order Item (MQ)** transactions to report that quality control (QC) inspection has been completed for manufactured items.

1 Select **Production > Order Based > Manufacturing Order**, then select a record that has been received and waiting inspection.

If you select one or more records, some attributes default from the selected record and cannot be changed.

2 Select **Maintain > Approve Manufacturing Order Item (MQ)**.

3 Complete the fields including this information:

Template
Select a template to show only the attributes relevant to the purpose of the template. For example, select **`Reject with MO`** to approve, reject, and scrap an item waiting inspection for a specific manufacturing order.

Warehouse
If you selected a manufacturing order, this attribute is automatically populated. Otherwise, specify the warehouse for the manufacturing order.

Item
If you selected a manufacturing order, this attribute is automatically populated. Otherwise, specify the item for the manufacturing order.

Location
Specify the location of the item. This attribute is required if the warehouse is controlled.

Batch/Lot
Specify the batch or lot number if one is assigned to this item. This attribute is maintainable if batch/lot control was selected during application tailoring and item revision setup. This attribute is required if the warehouse is controlled.

To warehouse
Specify the ID of the warehouse to which the quantity is approved . This attribute is displayed when you select the **`Default`**, **`Complete`** or **`Reject with MO`** template.

To location
Specify the location to which the quantity is approved. This attribute is required if the warehouse is controlled. This attribute is displayed when you select the **`Default`**, **`Complete`** or **`Reject with MO`** template.

Reject to warehouse
Specify the ID of the warehouse to which the quantity is being rejected. This attribute is displayed when you select the **`Complete`**,**`Reject with MO`**, and **`Reject without MO`** template.

Reject to location
Specify the location to which the quantity is being rejected. This attribute is displayed when you select the **Complete**,**Reject with MO**, and **Reject without MO** template.

Production order
Specify the number of the production order. This attribute is displayed when you select the **Default**, **Complete**, and **Reject with MO** template.

Reference
Specify information for reference purposes.

Approval reason
Select the reason for the approval. If reason codes are specified in the Transaction Reasons object, you must select a reason in each of the reason fields shown.

Transfer reason
Select the reason for the transfer. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Transfer reason** attribute is displayed when you select the **Complete**, **Reject with MO**, or **Reject without MO** template.

Issue transfer reason
Select the reason for issuing the transfer. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Issue transfer reason** attribute is displayed when you select the **Complete** template.

Receive transfer reason
Select the reason for the transfer of the quantity to the receiving location. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Receive transfer reason** attribute is displayed when you select the **Complete** template.

Rejection reason
Select the reason for the rejection. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Rejection reason** attribute is displayed when you select the **Complete** template.

Transfer rejected reason
Select the reason for the rejected transfer. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Transfer rejected reason** attribute is displayed when you select the **Complete** template.

Issue rejected transfer reason
Select the reason for issuing the rejected transfer. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Issue rejected transfer reason** attribute is displayed when you select the **Complete** template.

Receive rejected transfer reason
Select the reason for the rejected transfer of the quantity to the receiving location. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Receive rejected transfer reason** attribute is displayed when you select the **Complete** template.

Scrap production order reason
Select the reason for scrapping the production order. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. This attribute is displayed when you select the **`Complete`** or **`Reject with MO`** template.

Stock scrap reason
Select the reason for the scrapping the stock. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. The **Stock scrap reason** attribute is displayed when you select the **`Complete`**, **`Reject with MO`**, or **`Reject without MO`** template.

Cost adjustment reason
Select the reason for the cost adjustment. If reason codes are specified by your company in the Transaction Reasons object, you must select a reason. This attribute is displayed when you select the **`Complete`** or **`Reject with MO`** template.

Badge
Specify the number that identifies the person entering the transaction. The badge number can be an employee number or number encoded on an employee badge. This attribute is displayed when you select the **`Complete`** template.

Turnaround
Specify the turnaround number of the item. Turnaround numbers are used with barcode readers and can be printed on inventory documentation. Specifying the turnaround number, pre-fills other attributes on this page. This attribute is displayed when you select the **`Complete`** template.

4 Click **Continue**.

Issuing an M.O. unplanned production component (IU)

Use the **Issue M.O. Unplanned Production Component (IU)** transaction to add a new component to a manufacturing order (M.O.) and create an issue transaction. You can issue an unplanned quantity to the new or existing component. For example, you have an M.O. to build a bicycle and the list of components includes a frame, two wheels, handlebars, and a seat. You need to add training wheels to the M.O.. The training wheels are an unplanned component, therefore, you use the IU transaction to report this addition.

This task can be used to add new or different components to a rework order for special tooling, or to add consumable supplies to an order. An unplanned issue has no effect on allocation quantities unless the required quantity is greater than the issue quantity. The IU transaction is similar to the Issue Item (IS) transaction except that it applies the issue to a manufacturing order.

1 Optionally, select the records from the **Manufacturing Orders** list page.

If you select one or more records, some attributes default from the selected record and cannot be changed.

2 Select **Maintain > Issue M.O. Unplanned Production Component (IU)**.
3 Complete the fields including this information:

Template
Select a template to show only the attributes relevant to the purpose of the template. For example, use the **Uncontrolled** template when issuing an unplanned production component from an uncontrolled warehouse.

Sequence
Specify the user-assigned sequence number of the desired material detail record if the issue is applied to a specific record in the **Manufacturing Order** detail page.

Location
Specify the location of the item. This attribute is required if the warehouse is a controlled warehouse. This attribute is displayed when you select the **Default** or **Complete** template.

Standard quantity per
Specify the standard quantity for each component used in each parent item. If left blank, the attribute is set to equal the adjusted quantity per. This attribute is required for controlled floor stock items with a Backflush code of 2, backflush at standard. If the Backflush code is 1, adjusted quantity per, the standard quantity per attribute is not used.

If the Backflush code for the item on this order is 2, standard quantity per, then you can specify a standard quantity per that is different from the adjusted quantity per. When the component is backflushed, the standard quantity is used. If you backflush at standard, you must account for material used in excess of the standard quantity using scrap transactions.

Operation where used
Specify the sequence number of the first operation where this component is used.

Reason
Select the reason for issuing an unplanned production component. If reason codes are specified in the Transaction Reasons object, you must select a reason.

Badge
Specify the number that identifies the person entering the transaction. The badge number can be an employee number or number encoded on an employee badge. This attribute is displayed when you select the **Complete** template.

Turnaround
Specify the turnaround number of the item. Turnaround numbers are used with barcode readers and can be printed on inventory documentation. Specifying the turnaround number, pre-fills other attributes on this page. This attribute is displayed when you select the **Complete** template.

4 Click **Continue**.

Rejecting a manufacturing order item (RQ)

Use the **Reject Manufacturing Order Item (RQ)** transaction to reject waiting inspection inventory with a status of **19 = QC shelf life item in stock, expired** or **90 = Purchased item waiting inspection** to perform these actions:

- Scrap the inventory through the SS transaction and removes the quantity from the item location records
- Return the inventory through the VR transaction and removes the quantity from the item location records
- Leave the inventory in the item location records and change status to Rejected (80)

The RQ transaction may generate any of these child transactions:

- Scrap Item (SS): scraps the item and reduces the quantity in the item location records
- Scrap Purchase Item (SP): Scrap purchased item from P.O., if a purchased item and if a P.O. is entered
- Scrap Production Item (SM): Scrap manufactured item from M.O., if a manufactured item and if an M.O. is entered
- Return Purchased Item to Vendor (VR): returns item to vendor and reduces the quantity in the item location records

1 Optionally, select the records from the **Manufacturing Order** list page.

If you select one or more records, some attributes default from the selected record and cannot be changed.

2 Select **Maintain > Reject Manufacturing Order Item (RQ)**.

3 Complete the fields including this information:

Template
Select a template to show only the attributes relevant to the purpose of the template. For example, use the **`Default with transfer`** template when you are rejecting and transferring M.O, item quantities.

Warehouse
If you selected a record, this attribute is automatically populated. Otherwise, specify the warehouse for the manufacturing order.

Item
If you selected a record, this attribute is automatically populated. Otherwise, specify the item for the manufacturing order.

Rejected quantity
Specify the rejected quantity.

Scrapped quantity
Specify the quantity that is being scrapped. This attribute is displayed when you select the **`Default with scrap`**, **`Complete`**, and **`Production order`** templates.

Returned quantity
Specify the quantity that is being returned. This attribute is displayed when you select the **`Complete`** template.

Resupply
Select this check box to indicate that the vendor must send replacement inventory for the returned inventory. Clear this check box to indicate that the vendor does not have to send replacement inventory. The check box is cleared by default. This attribute is displayed when you select the **`Complete`** template.

Location
Specify the location of the item. This attribute is required if the warehouse is controlled.

Batch/Lot
Specify the batch or lot number if one is assigned to this item. This attribute is maintainable if batch/lot control was selected during application tailoring and item revision setup. This attribute is required if the warehouse is controlled.

To warehouse
Specify the ID of the warehouse to which the quantity is being rejected. This attribute is displayed when you select the **`Complete`**, **`Default with transfer`**, and **`Production order`** templates.

To location
Specify the location to which the quantity is being rejected. This attribute is required if the warehouse is controlled. This attribute is displayed when you select the **`Complete`**, **`Default with transfer`**, and **`Production order`** templates.

Production order
Specify the number of the production order. This attribute is displayed when you select the **`Complete`** and **`Production order`**.

Purchase order
Specify the number of the purchase order. This attribute is displayed when you select the **`Complete`** template.

Line
Specify the line item for the purchase order associated with this transaction. This attribute is displayed when you select the **`Complete`** template.

Release
Specify the blanket release number if this is a blanket purchase order. If left blank and this is a blanket purchase order, the receipt is applied to the oldest open release. Any remaining quantity is applied to the next oldest release until the quantity is fully applied. This attribute is displayed when you select the **`Complete`** template.

Rejection reason
Select the reason for the rejection. If reason codes are specified in the Transaction Reasons object, you must select a reason in each of the reason fields shown.

PO scrap reason
Optionally, select the reason for scraping the purchase order (P.O.). If no reason is selected, the reason from the **Rejection reason** attribute is used. This attribute is displayed when you select the **`Complete`**template.

Stock scrap reason
Optionally, select the reason for scrapping the stock. If no reason is selected, the reason from the **Rejection reason** attribute is used. This attribute is displayed when you select the **`Complete`**, **`Default with scrap`**, **`Production order`**, template.

Scrap production order reason
Optionally, select the reason for scrapping the production order. If no reason is selected, the reason from the **Rejection reason** attribute is used. This attribute is displayed when you select the **`Complete`**, **`Default with scrap`**, and **`Production order`** template.

Return reason
Optionally, select the reason for the return. If no reason is selected, the reason from the **Rejection reason** attribute is used. The **Return reason** attribute is displayed when you select the **`Complete`** template.

Transfer reason
Optionally, select the reason for the transfer. If no reason is selected, the reason from the **Rejection reason** attribute is used. The **Transfer reason** attribute is displayed when you select the **`Complete`**, **`Default with transfer`**, and **`Production order`** templates.

Issue transfer reason
Optionally, select the reason for issuing the transfer. If no reason is selected, the reason from the **Rejection reason** attribute is used. The **Issue transfer reason** attribute is displayed when you select the **`Complete`** template.

Receive transfer reason
Optionally, select the reason for the transfer of the quantity to the receiving location. If no reason is selected, the reason from the **Rejection reason** attribute is used. The **Receive transfer reason** attribute is displayed when you select the **`Complete`** template.

Badge
Specify the number that identifies the person entering the transaction. The badge number can be an employee number or number encoded on an employee badge. This attribute is displayed when you select the **`Complete`** template.

Turnaround
Specify the turnaround number of the item. Turnaround numbers are used with barcode readers and can be printed on inventory documentation. Specifying the turnaround number, pre-fills other attributes on this page. This attribute is displayed when you select the **`Complete`** template.

4 Click **Continue**.

Assigning a reopen status

Only manufacturing orders with an **Order status** of **55 = Complete** can be reopened.

1 Select the manufacturing order line items in the **Manufacturing Orders** page to designate as reopened.
2 Select **Maintain > Reopen**.
3 Click **Yes**.

Printing an Item Shortage report

Use the Item Shortage report to view the material for an item not available to meet current release demands at order release.

1. Select **Production > Order Based > Manufacturing Orders > File > Host Print**.
2. Select the **Print** check box on the **Item Shortage** tab.
3. Complete the fields.
4. Select the **E-mail** tab, then specify the information.
5. Optionally, select the **Attachments** tab to add attachments.
6. Click **Submit**.

Printing an Order Shortage report

Use the **Order Shortage** report option to view the material not available to meet current release demands at order release.

1. Select **Production > Order Based > Manufacturing Orders > File > Host Print**.
2. Select the **Order Shortage** tab.
3. Select the **Print** check box.
4. Complete the fields.
5. Select the **E-mail** tab, then specify the information.
6. Optionally, select the **Attachments** tab to add attachments.
7. Click **Submit**.

Printing a Shop Packet report

Use the **Shop Packet** report option to print worksheets, pick lists, labor tickets and receiving tickets.

1. Select **Production > Order Based > Manufacturing Orders > File > Host Print**.
2. Select the **Shop Packet** tab.
3. Select the **Print** check box.
4. Complete the fields including this information:

   Options group box
   The Options group box contains a multi-tabbed options pane. You can use these option tabs to select which shop packets to print and what information to display:
   - **Worksheet**: Select **Print** to print worksheets to be included as part of the shop packet. If not selected, all options on both sub-tabs are disabled. When **Print** is checked, select the options on the **General** and **Barcode** tabs that meet your reporting needs.
   - **Pick list**: Select **Print** to print pick lists to be included as part of the shop packet. If not selected, all options on both sub-tabs are disabled. When **Print** is checked, select the options on the **General** and **Barcode** tabs that meet your reporting needs.
   - **Labor tickets**: Select **Print** to print labor tickets to be included as part of the shop packet. When **Print** is checked, select the options that meet your reporting needs.

- **Receiving tickets**: Select **Print** to print receiving tickets to be included as part of the shop packet. When **Print** is checked, select the options that meet your reporting needs.

5 Select the **E-mail** tab, then specify the information.
6 Optionally, select the **Attachments** tab to add attachments.
7 Click **Submit**.

Generating a Work List host job

The Generate Work List host job function provides a work list for the manufacturing orders and is run by site, not by manufacturing order. This host job updates the priorities of all the manufacturing orders in one or more sites. Optionally, the host job prints one or more of these reports:

- Work list
- Critical orders
- Work center analysis

Depending on whether EPDM is installed, these default values apply:

- Not installed: Your work list is generated from one site only.
- Installed: All attributes have a choice for a site default. Every site can be created with these default options, and each site uses their individual site defaults.

1 Select **Production > Order Based > Manufacturing Orders > File > Host Jobs**
2 Select the **Execute** check box on the **Generate Work List** tab.
3 Complete the fields under Content.
4 Under Options, select **Use sited default** check boxes for the options or specify information for the attributes to override the site default.
5 Select the **E-mail** tab, then specify the information.
6 Click **Submit**.

Running the Publish Manufacturing Orders job

Use the **Publish** host job to send current information, for selected manufacturing orders, from XA to specified destinations using System-Link. You can choose to publish a single manufacturing order, manually selected manufacturing orders, or manufacturing orders in a subset. For more information, contact your System-Link administrator.

1 Select **Production > Order Based > Manufacturing Orders > File > Host Jobs**.
2 Click the **Publish** tab.
3 Select the **Execute** check box.
4 Complete the fields including this information:

Replication destination
In the Options section, specify the System-Link destination to which to send the manufacturing order information. If you leave the replication destination blank, the replication destination specified for the individual manufacturing orders is used.

5 Click the **E-mail** tab, then specify the information.

6 Click **Submit**.

C.O. Link/Unlink option for manufacturing orders

The **Link/Unlink** option for manufacturing orders is available if APC is installed and only for top-level manufacturing orders in its hierarchy for a configured item.

By clicking the **Link/Unlink C.O. Release** button on the **Status** card, you can connect or disconnect a manufacturing order to or from a customer order. The correct function is performed based on the current condition of the manufacturing order. If the manufacturing order is linked to a customer order, selecting the tool performs the unlink function. If the manufacturing order is unlinked, selecting the tool performs the link function. The button only shows when the manufacturing order is in create or maintenance mode.

This function is not available for M.O. Components. Only top-level manufacturing orders in a configured item M.O. hierarchy can be linked to a customer order. This function is not applicable to manufacturing orders for non-configured items.

Linking a manufacturing order to a customer order

1 Select the manufacturing order on the **Manufacturing Orders** page to link to a customer order.

2 Select **Maintain > Change**.

3 Click the **Status** card tab.

4 Click the **Link/Unlink C.O. Release** button next to the **Customer demand** attribute.

The link function searches all potential customer order line item releases that can be linked to this manufacturing order using the this criteria:

- C.O. Line Item Release item must match the manufacturing order item
- C.O. Line Item Release **Configuration ID** attribute must match the manufacturing order configuration ID
- C.O. Line Item Release **M.O. status** attribute must not be **R = Manufacturing order released**
- C.O. Line Item Release **Release status** attribute must be less than **50 = Complete**
- C.O. Line Item Release **Open to pick/MBO** attribute must be less than or equal to the manufacturing order **Remaining quantity**

All customer order line item releases that pass the criteria are displayed in the Find C.O. Line Item Release list.

5 Select an item release, then click **Select**.

The selected release is returned to the manufacturing order. The customer order attributes are updated with the proper values. The Customer demand is updated to reflect the change.

Unlinking a manufacturing order to a customer order

1. Select the manufacturing order on the **Manufacturing Orders** page to link to a customer order.
2. Select **Maintain > Change**.
3. Click the **Status** card tab.
4. Click the **Link/Unlink C.O. Release** button next to the **Customer demand** attribute.
5. Click **Yes**.

   If the unlink option is confirmed, the data in the customer order attributes in the Manufacturing Orders object are removed and passed to the server as part of the update transaction.

Chapter 17: Manufacturing order history

The Manufacturing Order History object contains information related to closed manufacturing orders and schedules.

The Manufacturing Order History list page includes information such as the item and description, warehouse containing the item, job number, status, order quantity, stocking unit of measure, date due, and the planner responsible for the order.

Manufacturing order history records contain information that relates the orders to other objects. For example, a manufacturing order history has ties to the Warehouses object. You can use the **Display** menu options to see more information in other objects that is related to a selected order or schedule. Depending on what applications are installed, you can use options under the **Maintain** menu to work with information in other objects that is related to a selected order or schedule.

This table shows Manufacturing Order History related objects:

Object	Viewable information
M.O. History Components	A list of the components used to manufacture the item associated with the closed order
M. O. History Operations	A list of the operations used to manufacture the item associated with the closed order
M. O. History Miscellaneous Charges	A list of the miscellaneous charges associated with the closed order
Inventory Transaction History	A list of the inventory transaction history associated with the closed order
Labor Activity Transaction History	A list of the labor activity transactions associated with the order

Copying a manufacturing order history record to a manufacturing order

1 Select **Production > Order Based > Manufacturing Order History**.

2 Select the manufacturing order history record.

3 Select **Maintain > Copy to Manufacturing Order**.

4 Complete the fields including this information:

Standard in quantity
Specify the recommended starting quantity of the manufacturing order.

Total order quantity
Specify the order quantity of a manufacturing item determined after any changes from deviation quantity and split order quantity.

5 Click **Copy**.

M.O. History Components

The M.O. History Components object contains a list of all the components of the parent item on the selected manufacturing order history record. The information shown contains the component description, the components warehouse, the standard quantity of the component expected to be issued to this order, and the actual quantity issued of the component to date, unit of measure, and the date required.

You can use the **Display** menu options to see more information in other objects that is related to a selected component. For example, the **Inventory Transaction History** option shows a list of the inventory transaction history records associated with the component on the order.

M.O. History Miscellaneous Charges

The M.O. History Miscellaneous Charges object contains a list of all miscellaneous charges related to the item on the selected manufacturing order.

The information shown contains the charge number and its description, the standard and actual quantities and costs, and the date of the last transaction associated with the miscellaneous charge.

You can use the **Display** menu options to see more information in other objects that is related to a selected miscellaneous charge. For example, the **Manufacturing Order History** option shows a list of information related to closed manufacturing orders and schedules.

M.O. History Operations

The M.O. History Operations object contains a list of all operations related to the item on the selected manufacturing order.

The information displayed contains the operation description, the facility where the operation is performed, the operation status, the department responsible for the facility, the process sheet ID, and the tool number

associated with that operation. You can see whether or not additional routing descriptions are defined for this operation.

Chapter 18: M.O. components

The M.O. Components object contains a list of all the components of the parent item on the selected manufacturing order.

The information contains this information:

- Component description
- Component warehouse
- Standard quantity of the component expected to be issued to this order
- Actual quantity issued of the component to date, unit of measure, and the date required

A specific M.O. component record can have ties to information in other objects. You can use the **Display** menu options to see more information in other objects that is related to a selected component. Depending on what applications are installed, you can use the **Maintain** menu options to work with information in other objects that is related to a selected component.

This table shows M.O. components related objects:

Object	Viewable information
Discrete Allocations	A list of the discrete allocations associated with the component on the order
Inventory Transaction History	A list of the inventory transactions associated with this M.O. component.
Sources of Demand	A list of the top-level requirement that generated the need for the component associated with the order
M.O. Component P.O.s	A list of the purchase order associated with the component on the order
M.O. Component Requisitions	A list of the requisition associated with the component on the order

Creating an M.O. component

1 Select **Production > Order Based > Manufacturing Orders**.

2 Select the manufacturing order for which to create an M.O. component.
3 Select **Display > M.O. Components**.
4 Select **Maintain > Create**.
5 Select a manufacturing order.
6 Complete the fields including this information:

Component warehouse
Specify the warehouse in which this component resides.

Component item revision
This attribute is only available if EPDM is installed. Specify the component item revision number.

7 Click **Create**.

Changing an M.O. component

1 Select the manufacturing order that contains the M.O. component in the Manufacturing Orders list page.
2 Select **Display > M.O. Components**.
3 Select the M.O. component.
4 Select **Maintain > Change**.
5 Change the attributes.
6 Click **Update**.

Copying M.O. components

1 Select the manufacturing order that contains the M.O. component in the Manufacturing Orders list page.
2 Select **Display > M.O. Components**.
3 Select the M.O. component.
4 Select **Maintain > Copy**.
5 Complete the fields including this information:

Order
Specify the order number to use for the new component item. If you are using system-generated component item numbers, the next available component item is shown in the attribute.

User sequence
Specify the user sequence number.

Operation where-used
Specify the operations number.

6 Click **Copy**.

Deleting M.O. components

1. Select the manufacturing order that contains the M.O. component in the Manufacturing Orders list page.
2. Select **Display > M.O. Components**.
3. Select the M.O. component.
4. Select **Maintain > Delete**.
5. Click **Yes** to delete.

Chapter 19: M.O. operations

The M.O. Operations object contains a list of all operations related to the item on the selected manufacturing order.

The information displayed contains the operation description, the facility where the operation is performed, the operation status, the department responsible for the facility, the process sheet ID, and the tool number associated with that operation. You also can see whether or not additional routing descriptions are defined for this operation.

A specific M.O. operations record can have ties to information in other objects. You can use options under the **Display** menu to see more information in other objects that is related to a selected operation. Depending on what applications are installed, you also can use options under the **Maintain** menu to work with information in other objects that is related to a selected operation. Availability of the **Maintain** menu depends on what applications you have installed.

This table shows M.O. components related objects:

Object	Viewable information
Operation Components	A list of the components associated with the operation
M.O. Outside Operations	A list of the M.O. outside operations associated with the operation

Creating M.O. operations

1. Select **Production > Order Based > Manufacturing Orders > Maintain > Create**.
2. Select the manufacturing order, then select **Display > M.O. Operations**.
3. Select **Maintain > Create**.
4. Complete the fields including this information:

   Facility (standard)
   Specify the facility code of the M.O. operation.

5. Click **Create**.

Changing M.O. operations

1. Select the manufacturing order that contains the M.O. operation on the **Manufacturing Orders** list page.
2. Select **Display > M.O. Operations**.
3. Select the M.O. operation.
4. Select **Maintain > Change**.
5. Change the attributes.
6. Click **Update**.

Creating an M.O. outside operation for an M.O. operation

When creating or changing an M.O. operation you can create an M.O. outside operation if the **Time basis code** (TBC) is set to **Cost / piece**.

1. Click the **Hours** tab on the **Create M.O. Operations** or **Change M.O. Operations** page.
2. Ensure that the **Time basis code** attribute is set to **Cost / piece**.
3. Click the **General** tab.
4. Click the **Create** icon under M.O. Outside Operations.
5. Complete the fields including this information:

   Release code
   Select a value. These values are valid:
   - **No**
   - **Requisitions**
   - **Held P.O.**
   - **P.O.**
   - **Held blanket**
   - **Blanket**
   - **Held blanket-fixed**
   - **Blanket-fixed**

   Vendor
   Specify a vendor or click the **Find Vendor** icon to select a vendor. Optionally, click the **Find Outside Operation** icon next to the **Vendor** attribute to select an outside operation detail record that corresponds with the M.O. operation.

   Service item
   Specify the service item or click **Find Item Revision** to select an item revision.

   Qty/cost update
   Select a value for the update. These values are valid:
   - **Invoice**
   - **Receive P.O.**
   - **Receive P.O./Invoice**

Update operation status
Select this box to set **Operation status** to **Complete** when cost is reported complete.

6 Click **Create**, then click **Create** on the next page.
7 Click **Continue** until the **Confirm** dialog box is displayed.
8 Click **Confirm**.

Creating a milestone for an M.O. operation

Use the **Create Milestone** option to group a collection of operations as a unit for tracking purposes. The range of the milestone must include all of the sequence numbers that exist between the start sequence number and the ending operation sequence number.

1 Select the manufacturing order (M.O.) that contains the M.O. operation in the **Manufacturing Orders** list page.
2 Select **Display > M.O. Operations**.
3 Select the M.O. operation that is to be the first M.O. operation in the milestone group.
4 Select **Maintain > Create Milestone**
5 Complete the fields including this information:

To operation
Specify the To operation.

Milestone type
Select **`Flow shop`** or **`Job shop`** for the type of milestone group.

6 Click **Continue**.

Copying M.O. operations

1 Select the manufacturing order that contains the M.O. operation on the **Manufacturing Orders** list page.
2 Select **Display > M.O. Operations**.
3 Select the M.O. operation.
4 Select **Maintain > Copy**.
5 Complete the fields including this information.

Copy M.O. Operation Description
Select this check box to copy the additional description from the source M.O. operation.

6 Click **Copy**.

Deleting M.O. operations

1. Select the manufacturing order that contains the M.O. operation on the **Manufacturing Orders** list page.
2. Select **Display > M.O. Operations**.
3. Select the M.O. operation.
4. Select **Maintain > Delete**.
5. Click **Yes**.

Deleting a milestone for a manufacturing order

1. Select the manufacturing order that contains the M.O. operation on the **Manufacturing Orders** list page.
2. Select **Display > M.O. Operations**.
3. Select the M.O. operation.
4. Select **Maintain > Delete Milestone**.
5. Click **Yes**.

Reporting M.O. operation activities

Use the **Report M.O. Operation Activity** transaction for reporting quantities, scrap, machine, and labor times for an M.O. Operation.

This transaction is only available if Shop Floor is active in OBPM application settings.

1. Select **Order Based > Manufacturing Orders**.
2. Select the manufacturing order from the list.
3. Select **Display > M.O. Operations**.
4. Select the outside operation.
5. Select **Maintain > Report M.O. Operation Activity**.
6. Complete the fields including this information:

   Template
   Select a template to show only the attributes relevant to the purpose of the template. For example, select the **Milestone** template to report the activity as a milestone operation.

   Order
   Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

   Operation
   Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

Run type
Select the type of run for the activity. These values are valid:

- **`Setup`**
- **`Run`**
- **`Milestone group`**: This value can only be used with a milestone

This attribute is displayed when you select the **`Default`** or **`Scrap quantity`** template.

Completion code
These values are valid:

- **`0=Open`**: Not complete. Quantity can be reported.
- **`1=Complete with entered quantity`**: You must specify quantity with this completion code.
- **`2=Complete with defaulted`**: You do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.
- **`3=Milestone`**: Closes all milestone sub-operations and set the operation status to complete. This completion code can only be used with a **Run code** of **M**.

Complete
Specify the quantity that is complete. This attribute is displayed when you select the **`Default`**, **`Milestone`**, and **`Setup`** template.

Scrap
Specify the scrap quantity. This attribute is displayed when you select the **`Default`**, **`Scrap quantity`**, and **`Setup`** template.

Reason
Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for the scrap. If your company does not require reason codes, blank is a valid entry.

Labor
Specify the amount of labor time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the labor time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the labor time is assumed to be minutes. For an operation in a milestone group type F (flow shop environment), labor time entry is not accepted.

Machine
Specify the amount of machine time in hours or minutes. If the **Time basis code** for M.O. Operation is not **M** (minutes), then the machine time is assumed to be hours. If the **Time basis code** is **M** (minutes), then the machine time is assumed to be minutes. This attribute is not valid for a milestone group sub-operation. This attribute is displayed when you select the **`Default`** or **`Setup`** template.

Reference
Specify information for reference purposes.

Transaction cost
Optionally, specify the cost for the transaction. This cost is overridden if this cost is true:

- Standard rates are being used as actual costs
- Actual employee costs are being used

For outside operations, specify the transaction cost if actual costs are not coming from associated purchase order or invoice. This attribute is not valid for a milestone group sub-operation. This attribute is displayed when you select the **Default** or **Setup** template.

Actual work center
Specify the work center being used for the operation. You can specify an override work center only for the first transaction for an operation. This attribute is displayed when you select the **Default** or **Setup** template.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Rate override
This attribute is displayed when you select the **Default** or **Setup** template.

Shift override
Specify **1**, **2**,or **3** for the shift override. This attribute is displayed when you select the **Default** or **Setup** template.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

7 Click **Continue**.

Chapter 20: M.O. outside operations

An M.O. outside operation in XA is an operation performed by a vendor that provides outside service.

When an M.O. operation is created with **Time Basis Code** of **C = Cost/piece**, an outside service can be performed on that operation. An M.O. outside operation is then created and linked to this M.O. operation to perform this outside service.

M.O. outside operations and outside operations are created in IDF when OBPM is installed and EPDM is activated.

You can use the **Display** menu to view the related outside operations for a selected M.O. outside operation.

Outside operations

An outside operation in XA is a setup record used when creating an M.O. outside operation.

An outside operation in XA is a setup record that can be used when creating an M.O. outside operation. When an M.O. operation is created with a **Time basis code** of **C=Cost/piece** an M.O. outside operation is created. The M.O. outside operation details are provided by an outside operation setup record. If multiple outside operation setup records exists, then you have the option to select an outside operation before the M.O. outside operation is created.

An outside operation setup record is linked to a routing operation. One or more outside operations can be linked to a routing operation.

Outside operation setup records can be created in IDF when OBPM is installed and EPDM is activated.

Note: If OBPM is not installed and EPDM is not activated, then outside operations are created and maintained in PCC.

To create an outside operation you must have these records:

- Item revisions in EPDM defined as a service item
- A vendor as a service provider
- Production facility
- Routing for operation activity

A specific outside operation can have ties to information in other objects. You can use the **Display** menu options to see information in other objects that is related to a selected outside operation. Depending on what applications are installed, you can use the **Maintain** menu options to work with related information in other objects.

This table shows outside operations related objects:

Object	Viewable information
Manufacturing Order	A list of the manufacturing orders (M.O.) associated with the outside operation
Manufacturing Order Outside Operations	A list of the manufacturing order (M.O.) outside operations associated with the outside operation

Creating outside operations

Outside operations can be created for routing operations with a **Time Basis Code (TBC)** of **C = cost/piece**.

1. Double-click the routing operation with a **TBC** of **Cost / piece** in the **Routing Operations** list page.
2. Click the **Create** icon under Outside Operations.
3. Complete the fields including this information:

   Preferred
   Select this check box to indicate that the vendor is the preferred vendor. Note that at least one record with a primary vendor associated with the site, item, revision, or warehouse must exist. If a record does not exist, then the **Preferred** check box is automatically selected.

   Service item
   Specify the item revision or click **Find Item Revision** to select one.

4. Click **Create**.

Creating M.O. outside operations

1. Select **Production > M.O. Outside Operations > Maintain > Create**.
2. Complete the fields including this information:

   Create PO / req at MO release
   Select this check box to create a purchase order (PO) or requisition when a manufacturing order (M.O.) is created. This attribute is only applicable when you are creating an M.O.

   Release code
   Select a value. These values are valid:

   - **No**
   - **Requisitions**
   - **Held P.O.**
   - **P.O.**
   - **Held blanket**
   - **Blanket**

- **Held blanket-fixed**
- **Blanket-fixed**

Operation sequence

Service item
Specify the service item or click **Find Item Revision** to select an item revision.

Qty/cost update
Select a value for the update. These values are valid:

- **Invoice**
- **Receive P.O.**
- **Receive P.O./Invoice**

Update operation status
Select this check box to update the **Operation status** attribute on the **General** tab of the M.O. Operation.

3 Click **Create**, then click **Create** again.

Releasing an M.O. outside operation

You can release an M.O. outside operation when the purchase order (P.O.) for the M.O. outside operation is blank and the vendor is an active vendor in the vendor object. You cannot release an M.O. if the purchase order (P.O.) is assigned to the M.O. outside operation.

1 Select the M.O. outside operation.
2 Select **Maintain > Release**.
3 Complete the fields including this information:

Vendor
Optionally, select a different vendor from the one shown. You can select a vendor from outside operations or any active vendor from the Vendor master file.

Release code
Select a code. This attribute is maintainable if **Vendor** is not blank. These values are valid:

- 0 = No
- 1 = Requisitions
- 2 = Held P.O.
- 4 = Held blanket
- 5 = Blanket
- 6 = Held blanket-fixed
- 7 = Blanket-fixed

If you select **6** or **7**, then a fixed blanket must exist.

Service item
Specify the service item number or click **Find Item Revision** to select a service item from the **Find Item Revision** list.

Qty/cost update
Select where the quantity or cost is to be updated. These values are valid:

- Invoice
- Receive P.O.
- Receive P.O./Invoice

Update operation status
Select the check box to indicate that the operation status is to be updated.

4 Click **Continue**.

If you select the **Return here to create another** check box, the next valid M.O. outside operation is displayed.

Chapter 21: MRP Recommendations

The MRP Recommendations object provides you with all of the orders planned by MRP that were created for a warehouse during an MRP planning run.

The recommended orders include all the released and firmed manufacturing, purchase orders, inter-site orders, and purchase requisitions; and any planned orders with a start date on or before your MRP Review Horizon. During planning, MRP defines its recommended actions (recommendations, for example, release, expedite, defer, cancel) by assigning an exception to an order.

You can view all records or any provided subset of records in the file and take action on the recommendations as appropriate. You can access the MRP Recommendations object from related objects like Planners and Buyers, where you can view only the recommendations that pertain to that planner or buyer. You can also maintain MRP Recommendations for manufacturing schedules and KBC items. In addition, there are several maintainable options in the MRP Recommendations object. You can perform these options on a single record or run in Mass mode by predefined set of records or by user-selected records. Included in the seven maintainable options are these five basic transactions:

- Create order: Creates or releases an order or requisition from a planned or firm planned order. As you create the order, you can make changes to attributes to fit the current situation. You use the set of cards based upon the Make/buy new code that exists on the recommended order. You can change the Make/buy new attribute to create a different order if desired, and the cards that you view will change to reflect the new Make/buy new code that has been selected. For example, if you select a manufacturing order to create, the Manufacturing Order card opens. If you decide to change the order into a purchasing order (by changing the Make/buy new attribute), the Purchase Order card opens. Different attributes may only apply to certain Make/buy new types. Therefore, applicable attributes will be enabled or disabled based upon the Make/buy new attribute chosen.
- Change: Changes any kind of order or requisition. Changing a planned order will firm the order.
- Cancel: Cancels any type of order or requisition
- Accept: Accepts or implements the MRP recommendation, for example: creating/releasing an order
- Firm: Firms, without change, a planned order, which prevents MRP from re-planning or changing the order in the next MRP planning run

Using a user preference you can create transactions either in Immediate or Deferred update mode. The Immediate mode enables you to complete all of the transactions inline, while the Deferred mode allows you to record the transaction in the MRP Recommendations order review file without processing the transaction. With deferred processing, you can use the reset transaction to back out any pending deferred transaction, or use the process transaction to process the pending transaction. Another user preference allows you to print shop packets while creating a manufacturing order.

The MRP Recommendations object also contains the option Check Component Availability that allows you to view the availability of the components required, evaluate alternatives to the recommendations, and take the most appropriate action.

A specific MRP recommendation can have ties to information in other objects. Within the MRP Recommendations object, you can use options under the Display menu to see information in other objects that is related to a selected MRP recommendation. Depending on what applications are installed, you also can use options under the Maintain menu to work with information in other objects that is related to a selected recommendation.

Accepting an MRP recommendation

Using the Accept function you can select an order or recommendation and accept the recommendations that have been provided by the planning run.

1. In the MRP Recommendations list window, select the order or items to accept the recommendation.
2. Select **Maintain > Accept**.
3. Specify this information:

   Immediate processing of this transaction
   Select this option to process this transaction when you click **Accept**.

   Print shop packet at M.O. release
   Select this option to print the shop packet when the manufacturing order is released.

4. Click **Accept** to confirm your request. If you selected **Preview before create** the Change MRP Recommendations card file opens. Click **Update** to accept the recommendation and any changes you made. Click **Cancel** to cancel your request to accept the recommendation.

Creating an order for an MRP recommendation

1. Select **MRP Recommendations**.
2. From the **MRP Recommendations** list window, select **Maintain > Create**.
3. Specify any final attribute overrides to create the order.
4. Click **Create Order**.

Changing an MRP Recommendation

You can change a released, planned, or firm planned order or requisition. Changing a planned order results in a firmed planned order and preserves the changes made for the next MRP planning run. The change option

returns you to the original set of cards used in the creation of the order. You can change the maintainable attributes in those cards.

1 Select **MRP Recommendations > Maintain > Change**.
2 From the Change MRP Recommendations card file, make final attribute overrides to the recommended order.
3 Click **Update**.

Firming orders for MRP recommendations

You can reserve the selected planned order for a future transaction, which prevents MRP from re-planning or changing the order in the next MRP planning run. To change and firm a planned order, you can use the Change option on the **Maintain** menu, which automatically firms the order.

1 In the MRP Recommendations list window, select the order or items to firm.
2 Select **Maintain > Firm**.
3 Specify this information from the Firm MRP Recommendation prompt:

Immediate processing of this transaction
Select this option to process this transaction when you click **Firm**.

Preview before firm
Select this option to preview the order before it is firmed.

4 Click **Firm** to confirm your request. Click **Cancel** to cancel the order.

Canceling an MRP recommendation

1 In the **MRP Recommendations** list window, select the recommendation order or items to cancel an order.
2 Select **Maintain > Cancel**.
3 Specify this information

Immediate processing of this transaction
Select this option to process this transaction when you click **Cancel Order**.

4 Click **Cancel Order** to confirm your request. Click **Cancel** to cancel your request to cancel the order.

Resetting an MRP recommended order

You can only reset a recommendation with a deferred transaction status that has not been processed. Resetting the transaction clears or backs out the pending deferred action, setting the recommendation back to its status before the deferred action was entered.

1. In the MRP Recommendations list window, select the order or items to resert a recommended order.
2. Select **Maintain > Reset**.
3. Click **Reset** to reset the original recommended order.

Processing an MRP recommendation

You can only process a recommendation with a deferred transaction status that has not been processed. Processing the transaction performs all of the required transaction processing and updates. In addition, to print any reports from MRP Order Release (other than shop packets for manufacturing orders), you can use the MRP Order release menu.

1. In the MRP Recommendations list window, select the order or items to process a recommended order.
2. Select **Maintain > Process**.
3. Click **Process** to process the original recommended order.

Checking component availability for an MRP recommendation

Using this option you can search for available components related to a selected order. You can consider alternatives if a specific component is not available. You can use this option to analyze interactively the availability of required components for one order or a group (subset of records, or a group of orders you pick) of potential manufacturing orders. The option provides viewing capabilities by order and by component, and you can view all or short lists of the orders and components. The object also provides what-if component substitutions and order quantity changes.

1. Select **MRP Recommendations >** .
2. In the MRP Recommendations list window, select the recommendation order or items to check component availability.
3. Select **Maintain > Check Component Availability**.
4. Specify this information:

   Subset
   Select an available subset from the drop-down list to search for the related components of your item.

Consider future allocations as available
Select this option if you want time either phased allocations or manufacturing allocations required beyond either the item lead time or the allocation horizon set in MRP.

5 Click **Create**.

The **Create Component Availability** card file opens. This card file contains these three tabs and related sub tabs:

- **Potential Orders**: Provides a listing of potential orders. Select the **Short** tab to see the subsetted list of items that are short orders. Select the **All** tab to view the complete list.
- **Components**: Provides the list of components and related orders. Select the **Short** tab to see the component short list. Select the **All** tab to view the complete list.
- **Errors**: Provides any errors that may have occurred based upon the requested component availability and subset selected.

6 Click **Create**.

Performing mass accept for an MRP recommendation

Using the mass accept function, you can mass accept the orders that were recommended by the planning run. Using the **Mass Accept** option impacts a large range of orders.

1 In the MRP Recommendations list window, select the recommendation order or items to perform mass accept.
2 Select **Maintain > Accept**.
3 Specify this information:

Description
Specify a description of the mass accept being performed.

Subset
Select an available subset from the list.

Immediate processing of this transaction
Select this option to process this transaction when you click **Continue**.

Print shop packet at M.O. release
Select this option to print the shop packet when the manufacturing order is released.

4 Click **Continue** to mass accept the MRP recommendations.
5 Click **Yes** to update the MRP recommendation.

Performing mass create orders for an MRP recommendation

Using the **Mass Create Orders** option you can mass create orders. Note that using the mass create orders option impacts a large range of orders.

1. In the MRP Recommendations list window, select the recommendation order or items to perform mass create.
2. Select **Maintain > Mass Create**.
3. Specify this information:

   Description
   Specify a description of the mass create being performed.

   Subset
   Select an available subset from the list.

   Immediate processing of this transaction
   Select this option to process this transaction when you click **Continue**.

   Print shop packet at M.O. release
   Select this option to print the shop packet when the manufacturing order is released.

4. Click **Continue**.
5. Click **Yes**.

Performing mass change for MRP recommendations

Using the **Mass Change** option you can perform mass changes on recommended orders. Note that using the **Mass Change** option impacts a large range of orders.

1. In the MRP Recommendations list window, select the recommendation order or items to perform mass change.
2. Select **Maintain > Mass Change**.
3. Specify this information:

   Transaction description
   Specify a description of the mass change being performed.

   Transaction criteria
   Select the subset to be used in selecting the MRP recommendations and the sort to determine the processing order of the objects included in the subset.

   Available attributes
   Select an available attribute or attributes from the list. Click the **Add** button.

4. From the **Mass change definition** dialog, specify this information:

Update type
Select either replace value or adjust value. If you select replace value, include the value to be replaced.

5 Click **Click Continue**.
6 Click **Update**.
7 Click **Yes**.

Performing mass firm for an MRP recommendation

Using the **Mass Firm** option you can mass firm planned orders. Note that using the **Mass Firm** option will impact a large range of orders.

1 In the MRP Recommendations list window, select the recommendation order or items to perform mass firm.
2 Select **Maintain > Mass Firm**.
3 Specify this information:

Description
Specify a description of the mass firm being performed.

Subset
Select an available subset from the list.

Immediate processing of this transaction
Select this option to process this transaction when you click **Continue**.

4 Click **Continue**.
5 Click **Yes**.

Performing mass cancel for an MRP recommendation

The **Mass Cancel** option enables the user to mass cancel orders. Note that using this option impacts a large range of orders.

1 In the MRP Recommendations list window, select the recommendation order or items to perform mass cancel.
2 Select **Maintain > Mass Cancel**.
3 Specify this information:

Description
Specify a description of the mass cancel being performed.

Subset
Select an available subset from the list.

Immediate processing of this transaction
Select this option to process this transaction when you click **Continue**.

4 Click **Continue**.
5 Click **OK**.

Performing Mass Reset for an MRP recommendation

Using the Mass Reset option you can mass reset orders that currently have a deferred status. Note that using the Mass Reset option impacts a large range of orders.

1 In the MRP Recommendations list window, select the recommendation order or items to perform mass reset.
2 Select **Maintain > Mass Reset**.
3 Specify this information:

Description
Specify a description of the mass reset being performed.

Subset
Select an available subset from the list.

Immediate processing of this transaction
Select this option to process this transaction when you click **Continue**.

4 Click **Continue** to accept and trigger the mass reset the transaction.
5 Click **Yes** to update the MRP recommendations.

Performing mass process for an MRP recommendation

Using the **Mass Process** option you can mass process all of the actions that have a status of deferred update, thereby changing the status of each of the orders to immediate update status. Note that using the **Mass Process** option impacts a large range of orders.

1 In the **MRP Recommendations** list page, select the recommendation order or items to perform mass process.
2 Select **Maintain > Mass Process**.
3 Specify this information:

Description
Specify a description of the mass process being performed.

Subset
Select an available subset from the list.

Immediate processing of this transaction
Select this option to process this transaction when you click **Continue**.

Print shop packet at M.O. release
Select this option to print the shop packet when the manufacturing order is released.

4 Click **Continue**.

5 Click **Yes**.

Chapter 22: Planners

A planner is responsible for planning and managing the availability of a set of items.

The Planners object creates a record for each planner number present in item warehouse, manufacturing order, and purchase order item records. Use the planner to navigate across a variety of records by planner number.

For instance, view only the MRP recommendations or the open manufacturing orders, assigned to a specific planner. A planner number is validated against this file in client item warehouse, manufacturing order, and purchase order entry and maintenance. The planner file is keyed by planner number, and includes planner name, user ID, department, phone number, user fields, and create and change user, date and time.

A planner can have ties to information in other objects. For example, you can navigate, subset, and edit items in a warehouse, open manufacturing orders, or purchase orders that are assigned to a specific planner. Within the Planners object, you can use **Display** menu options or toolbar buttons to see information in other objects that is related to a planner.

Creating a planner

When you create a planner, you create a new card file and a new entry in the Planners list window.

1. Select **Planner > Maintain > Create**.
2. From the **Create Planner** dialog, specify this information:

   Template
   Select an existing template from the list or click the **Template** button to modify a template.

   Planner
   Specify the planner number for the new planner.

   Name
   Specify the planner name.

3. Click **Create**.

   If you select **Preview before create**, the card file for the planner opens. Make any changes or additions that are necessary to the planner information, then click the **Create** button. If you do not select **Preview before create**, the new planner is created and added to the list of planners.

Changing a planner

1. Select **Planner**.
2. Select the planner to change by highlighting the planner in the **Planners** list page or by opening the **Planner** card file.
3. Select **Maintain > Change**.
4. Make the changes to information.
5. Click **Update**.

Deleting a planner

You cannot delete a planner if the planner is assigned to an item warehouse, manufacturing order, or purchase order.

1. Select **Planner**.
2. Select the planner to delete by highlighting the planner in the **Planners** window.
3. Select **Maintain > Delete**.
4. Click **Yes**.

Chapter 23: Production GL transactions

The Production GL Transactions object contains Production Control & Costing (PC&C) and Repetitive Production Management (REP) transaction information created in XA that you want to be available in EGLi.

The Order Based and Rate Based Production GL Transactions objects are installed when you install OBPM or RBPM.

The General Ledger interface in PC&C creates ledger entries to record costs charged to manufacturing orders and cost variances when manufacturing orders are closed out. From an accounting viewpoint, work in manufacturing orders increases when PC&C accumulates material, labor, and overhead costs against an order. Work in manufacturing orders decreases when users process Receive Production Item (RM) transactions. When you close out and purge an order, order variances are calculated in PC&C and an order closeout variance transaction is created to force the work in progress balance to zero.

The General Ledger interface in REP creates ledger entries to record labor, machine, and overhead costs to manufacturing schedules. Accounting for other REP activities, such as material costs and production receipts, is handled through the General Ledger interface in Inventory Management (IM).

The production transaction information in the Order Based and Rate Based Production GL Transactions objects is used by EGLi to create GL journal entries for production in EGLi when all of these conditions exist:

- OBPM or RBPM is installed
- OBPM and RBPM are interfacing with Enterprise General Ledger
- Production ledger entries are created in XA
- General Ledger interface in XA is active
- Generate Production GL Journal Entries host job is run
- Processing in EGLi is successful and no errors are received

EGLi accounts are assigned by EGLi from user-defined rules based on the warehouse, transaction type, item, and order information. You define the transaction type for general ledger transmission when you set up the General Ledger interface for order based and rate based production transactions.

To find the production GL transactions that have EGLi errors, use the **Error transactions** subset in the Production GL Transactions list page. To display the error messages for a transaction, use the **Error Messages** option from the**Display** menu or view from the details card.

Correct the EGLi errors in the EGLi configuration of account segments, charts of accounts, financial calendars, ledgers, macros, models, event classes, and subsystems. Then, resend the GL transactions that have EGLi error messages using the Generate Production GL Journal Entries host job.

Running the Generate Production GL Journal Entries job

Use the **Generate Production GL Journal Entries** host job to initially send or resend production GL journal entries to EGLi.

Correct the EGLi errors in the EGLi configuration of account segments, charts of accounts, financial calendars, ledgers, macros, models, event classes, and subsystems. Then, resend the GL transactions that have EGLi error messages using this host job.

1 Select one of these options:
   - Select **Production > Order Based > Order Based Production GL Transactions > File > Host Jobs**
   - Select **Production > Order Based > Rate Based Production GL Transactions > File > Host Jobs**

2 Select the **Execute** check box if not already selected..

3 Complete the fields including this information:

   Override journal entry date
   Specify or select the override posting date used for the EGL journal entries. This date is used in place of the date on the transaction.

   Summarize IFM journal entries - Charge
   Select the option to use for the charge. These values are valid:
   - No Summarization
   - Unit, naturet, transaction type
   - Unit, nature

   Summarize IFM journal entries - Offset
   Select the option to use for the offset. These values are valid:
   - No Summarization
   - Unit, naturet, transaction type
   - Unit, nature

   IFM transaction - Type
   Select the code that classifies the transaction type. For example, payable invoices, receivable credit notes, cash receipts, payable credit for goods returned, receivable invoice for services, or cash receipts for goods sold. The transaction type determines the type of ledger in which the transaction is entered, for example, AR, AP, cash book, or general ledger.

   IFM transaction - Number
   Specify the number to identify the transaction. Based on values in the associated ledger, this number can be generated automatically and can contain a user-assigned prefix and suffix for identification purposes.

   IFM transaction - Narrative
   Specify a brief description of the transaction.

   IFM transaction - Financial division
   Specify the identifier for the financial division in which the transaction occurred.

IFM transaction - Originating unit
Specify the organizational unit, cost center, that initiated the transaction. The organizational unit must be in the same financial division as the transaction. If no unit is specified on transaction lines, the originating unit is the default unit for posting to the general ledger.

IFM transaction - Period
Specify the accounting period to which the transaction is posted. This period must be open in the transaction ledger. To use the period that is associated with the journal entry date, leave this attribute blank.

4 Select the **E-mail** tab, then specify the information.

5 Click **Submit**.

You can track the progress of the this host job in the Transaction Status object.

Workspaces

Workspaces are a collection of choices for how you want to display and work with information in the Order Based/Rate Based Production GL Transactions objects. When you apply a workspace, the choices in the workspace override your default choices specified in Preferences for this log-on session.

Order Based Production GL Transaction workspace

The Order Based Production GL Transactions workspace shows order based production GL transactions. In this workspace, you can use the OBPM subset to work with order based production transactions.

Rate Based Production GL Transaction workspace

The Rate Based Production GL Transactions workspace shows rate based production GL transactions. In this workspace, you can use the RBPM subset to work with rate based production transactions.

Chapter 24: Reorder recommendations

The Reorder Recommendations object shows a preview of order recommendations for replenishment items. that are generated at the warehouse level that are eligible for action.

The replenishment items are generated at the warehouse level and are eligible for action. Use this object to see all the items that need replenishment in a warehouse and the quantity of the replenishment.

Reorder recommendations are created for item warehouses with the quantity available less than the reorder point. You can create or refresh these recommendations with the Generate Reorder Recommendations host job option. This host job can also be run by using the Submit Work List Generation (SBMPCCWLG) AS/400 command in OBPM in a user program, which you can set up to run on a scheduled basis using OS/400 scheduled jobs. Reorder recommendations are always generated for all order point items in a warehouse or a subset of warehouses.

A specific reorder recommendation can have ties to information in other objects. You can use **Display** menu options or toolbar buttons to see information in other objects that is related to a selected recommendation.

Checking component availability

Use the **Check component availability** option to analyze component availability for potential orders from sources. Sources may be MRP recommendations, reorder recommendations, or customer demand. You can check component availability for potential orders created from item warehouses.

1. Select orders or items for which to check component availability.
2. Select **Maintain > Check Component Availability**.
3. Complete the fields including this information:

   Subset
   Select a value from the list. This value is used by the source object to restrict the list of potential orders. Note that the more records selected, the longer the process may take.

   Consider future allocations as available
   Select the check box to consider these components when availability is checked. This option is only available if MRP is installed.

4. Click **Create**.
5. To create a list of all potential orders, click **Create** on the **Create Component Availability** page.

Creating orders for reorder recommendations in mass

1. Select the recommendation orders or items for which to perform a mass create.
2. Select **Maintain > Mass Create Orders**.
3. Complete the fields.
4. Click **Continue**, then click **Yes**.

Creating an order for a reoder recommendation

When you create an order from a reorder recommendation, the item type defaults to the type of item planned by the order recommendation. You can change the type of item recommended for an order and specify the required information for the type of item contained in an order.

You can create manufacturing orders, purchase orders, intersite orders, and requisitions from Reorder Recommendations.

1. Select the recommendation for which to create an order.
2. Select **Maintain > Create Order**.
3. Change the necessary fields.

   If the planned item type contained in the order is a manufactured item, specify information that is required to create a manufacturing order. If the item type is an intersite item, specify information required for creating an intersite order.
4. Click **Create Order**.

Running a Generate Reorder Recommendations host job

Use the **Generate Reorder Recommendations** host job to create or refresh reorder recommendations. Reorder recommendations are always generated for all order point items in a warehouse or a subset of warehouses.

Use this host job to select whether to automatically create or not automatically create replenishment orders during generation. After you generate a list of reorder recommendations, you can view them and create orders from the Reorder Recommendations object. You can change order type, quantity, and other information as you create orders.

1. Select **File > Host Jobs**.
2. Select the **Execute** check box.
3. Complete the fields including this information:

   Create manufacturing orders
   Select the value from the list. These values are valid:
   - Create

- Create, if all components are available
- Create based on auto release code
- Do not create

Shop packet
Select **Yes** to generate a shop packet.

Consider future allocations
If MRP is installed, select **Yes** to consider future allocations as available when OBPM checks component availability for an order. Future allocations are those components required outside the lead time for an item or after an allocation time fence as designated in MRP.

Create purchase orders
Select a value from the list. These values are valid:
- (Find or create)
- Create based on auto release code
- Do not create

Create requisitions
Select a value from the list. These values are valid:
- Create based on auto release code
- Do not create

Create intersite orders
Select a value from the list. These values are valid:
- Create
- Create based on auto release code
- Do not create

4 Click **Submit**.

Chapter 25: Shop floor activity

When Shop Floor Activity is turned on in OBPM application settings, PMC transactions are processed in OBPM except for physical inventory, repetitive, and user-defined transactions.

The Shop Floor Activity object provides these benefits to IDF users:

- Real-time attendance and labor summary information is presented
- Error identification and correction can be performed in one place
- Review and approval process for attendance and labor is improved
- Persisted data

You can create attendance and labor transactions in the Shop Floor Activity object. The transactions are then processed and if no errors are found, the status is updated to **Processed**.

Process flow

This list describes the process flow for transactions created by shop floor employees:

- Attendance and Labor transactions that are processed in shop floor activity can come from PMC, Shop Floor System-Link, and Shop Floor Activity. Non-labor transactions that are processed in shop floor activity can come from PMC and Shop Floor System-Link.
- Shop floor activity transactions are processed.
- Shop floor **Processing** status is set to **Error** or **Processed (no errors)**.
- If the **Processing** status is **Error**, then update these shop floor summary files: Labor status, Other status, and Error counts.
- If non-labor transactions and no error, then update the XA database and shop floor summary files.
- If an SW or EW attendance transaction or ON or OF labor transaction, then match transactions.
- If the attendance and labor transactions are matched, then calculate the unapproved hours and costs
- Labor unapproved hours and costs update Manufacturing order, M.O. operation, and shop floor summary files. Attendance unapproved hours and costs update shop floor summary files.

Errors

You can view and correct these error types:

- Transaction errors, for example, an item not found. If badge is in error, you cannot change the badge number.
- Related object errors, for example, order status is not correct.
- Unmatched errors for attendance and labor, for example, a Stop Labor (OF) record is missing. To correct a labor that is unmatched, you can create a matching attendance and labor transaction.

- Employee shift errors, for example, attendance records are missing.

Reprocessing shop floor activity

When a transaction is processed, errors within the transaction prevent the transaction from being processed successfully. You can view the errors by viewing the transaction details. Use the **Reprocess** action to correct a shop floor activity transaction that has processed in error. Only transactions with an **Error** or **Canceled** status can be reprocessed.

1. Select **Production > Activity > Shop Floor Activity**.
2. Select the transaction with an **Error** or **Cancel** status. Or, double-click the transaction to view the details and reprocess the error.
3. Select **Maintain > Reprocess**.

   You are presented with the IDF transaction page that matches the transaction type such as Receive Item (RC).
4. Change or correct any maintainable attributes such as **Item**, **Warehouse**, or **Order**.
5. Click **Continue**.

Reassigning attendance reasons

The Start Work (SW) and End Work (EW) attendance transactions are created or generated. The reasons for those attendance reasons can vary. For example, these XA supplied reasons are for a Start Work (SW):

- EB=End break
- EL=End lunch
- SS=Start shift
- SW=Start work

Additional user defined reasons can be created and assigned to SW or EW.

You can change the reason for these attendance transactions. Use the **Reassign Attendance Reason** action to change the attendance reason. For example, changing the attendance reason from Start break to Start lunch.

1. Select **Production > Activity > Shop Floor Activity**.
2. Select the attendance transaction.
3. Select **Maintain > Reassign Attendance Reason**.
4. Select a reason from the **New Reason** attribute list.
5. Clear the **Auto Advance** check box.
6. Click **Continue**.

Canceling shop floor activities

The **Cancel** action is used by a shop floor employee or supervisor to change **Processing status** of a transaction in shop floor activity from **Error** to **Canceled**. This action can be performed when the initial processing of the transaction results in an error. If the transaction does not need to be processed successfully, then use **Cancel** to set the transaction status to Canceled.

Use this action to signify that the transaction has errors but is not to be corrected. All attendance and labor transactions for an employee shift must have a **Processing status** of **Processed** or **Canceled** before the employee shift **Labor status** can be set to **Approved**.

1. Select **Production > Activity > Shop Floor Activity**.
2. Select the Error transaction.
3. Select **Maintain > Cancel**.
4. Click **Yes** to confirm.

Reversing a specific shop floor activity

Transactions that are processed in shop floor and have a **Processing status** of **Processed** can be reversed. The transaction being reversed is usually performed by the shop floor employee who created the transaction or their supervisor. When reversed the status is set to **Reversed** and updates to database files such as M.O. operation and summary files are backed out. Reversed non-labor transactions written to inventory transaction history have a reversing transaction, same transaction but with negative quantity, written to inventory transaction history. Reversed transactions written to labor activity do not have a reversing transaction. They are flagged as reversed.

Not all processed transactions can be reversed. Employee shift attendance and labor transactions that have a **Labor status** of **Approved** cannot be reversed. Reversing a shop floor activity transaction backs out what is updated when the transaction was processed, such as quantity or costs.

These types of transactions cannot be reversed:

- CQ
- LA
- LQ
- RQ
- SM
- SQ

1. Select **Production > Activity > Shop Floor Activity**.
2. Select a transaction with a status of **Processed**.
3. Select **Maintain > Reverse**.
4. Click **Yes** to confirm.

Attendance and labor

Use the **Attendance and Labor** menu to select these transactions:

- Start Labor (ON)
- Stop Labor (OF)
- Start Work (SW)
- End Work (EW)

Attendance and labor review and approval is required if **Review attendance and labor before approval** is set to **Manual** in the OBPM - Shop Floor application setting.

You can only approve attendance and labor transactions when **Review attendance and labor before approval** is **Automatic**.

Starting labor transactions for a shop floor activity

Use the **Start Labor (ON)** transaction to show that an employee is clocking onto a job and to specify the kind of labor required for the job.

1. Select **Activity > Shop Floor Activity**.
2. Select the activity in list.
3. Select **Maintain > Attendance and Labor > Start Labor (ON)**.
4. Complete the fields including this information:

   Order
   Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

   Operation
   Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

   Run type
   Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:
   - Setup
   - Run
   - Indirect

   Crew
   Select the check box to indicate that the employee is part of a work crew.

   Badge
   Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

   Turnaround
   Specify the turnaround number of the operation on which the employee is working.

5 Click **Continue**.

Stopping labor in shop floor activity

Use the Stop Labor (OF) transaction to show that an employee is clocking off a job and to specify the kind of labor required for the job. A corresponding Start Labor (ON) transaction is required unless you are tailored for OF only processing, reporting scrap against a milestone operation, or reporting against a flow-shop milestone.

1 Select **Activity > Labor Activity**.

2 Select the activity in list.

3 Select **Maintain > Attendance and Labor > Stop Labor (OF)**.

4 Complete the fields including this information:

Order
Specify the order number of the operation on which the employee is working. If you selected a labor activity, this attribute is automatically populated.

Operation
Specify the operation of the operation on which the employee is working. If a labor activity transaction is selected, this attribute is may be automatically populated.

Run type
Select the run type for this transaction. The value indicates the kind of labor required for the job associated with this transaction. These values are valid:

- **`Setup`**: Code used to report work spent in preparing an M.O. operation. Time can include changing dies and tools, moving material to the facility, or performing testing.
- **`Run`**: Code used to report actual work on an operation. Time can include welding, assembly. packaging, etc.
- **`Indirect`**: Code used to report work that is not against an M.O. operation. Time can include sweeping, cleaning, and attending meetings.
- **`Milestone`**: Code used to report activity or work against the final operation in a milestone group.

Completion code
Select a completion code. These values are valid:

- **`0=Open`**: Not complete. Quantity can be reported.
- **`1=Complete with entered quantity`**: Specify quantity with this completion code.
- **`2=Complete with defaulted`**: Do not specify quantity with this completion code. The quantity is assumed to be the quantity still open for the operation.
- **`3 = Milestone`**: Closes all milestone sub-operations and sets the operation status to complete. Can only be used with **Run code** of **M**.

Reason
Select a reason for the scrap. If reason codes are specified in the Transaction Reasons object, you must select a reason for scrapping. If your company does not require reason codes, blank is a valid entry.

Reference
Specify information for reference purposes.

Crew
Select the check box to indicate that the employee clocked off the job as part of a work crew. Machine time is calculated only if the **Crew** check box is not selected for both a Start Labor (ON) transaction and the matching OF transaction.

Crew clock transactions can be used with multiple employees to clock on or off the same job without reentering the transaction detail information. The first employee clocks on or off using the normal ON or OF transaction. The other employees then specify a Crew Clock (CC) transaction that PM&C converts to an ON or OF transaction with the same time, order, and operation information as the original transaction.

Badge
Specify the employe badge number. This attribute is mandatory. If an employee record is selected, this attribute is automatically populated.

Turnaround
Specify the turnaround number of the operation on which the employee is working.

5 Click **Continue**.

Starting work

Use the Start Work (SW) transaction to specify when an employee starts a shift, starts work, ends a break, or ends lunch.

1 Select one of these options:
- Select **Order Based > Employees**.
- Select **Activity > Shop Floor Activity**.

2 Select the employee in the list.

3 Select **Maintain > Attendance and Labor > Start Work (SW)**.

4 Complete the fields including this information:

Transaction date
The value for this attribute is automatically populated but you can change the value. Click the **Select a Date** icon to change the date.

Transaction time
The value for this attribute is automatically populated but you can change the value.

Reason
Select the reason for starting work. These values are valid:
- EB = End Break
- EL = End Lunch
- SS = Start Shift
- SW = Start Work

5 Click **Continue**.

Ending work

Use the End Work (SW) transaction to specify when an employee ends a shift, ends work, starts a break, or starts lunch.

1. Select one of these options:
   - Select **Order Based > Employees**.
   - Select **Activity > Shop Floor Activity**.
2. Select the employee in list.
3. Select **Maintain > Attendance and Labor > End Work (EW)**.
4. Complete the fields including this information:

   Transaction date
   The value for this attribute is automatically populated but you can change the value. Click the **Select a Date** icon to change the date.

   Transaction time
   The value for this attribute is automatically populated but you can change the value.

   Reason
   Select the reason for starting work. These values are valid:
   - SB = Start Break
   - SL = Start Lunch
   - ES = End Shift
   - EW = End Work

5. Click **Continue**.

Running a Cancel job

Use the shop floor activity **Cancel** host job to cancel a large number of transactions that have a status of **Error**.

1. Select **Production > Activity > Shop Floor Activity > File > Host Jobs**.
2. Select the **Execute** check box on the **Cancel** tab.
3. Complete the fields.
4. Select the **E-mail** tab, then specify the information.
5. Click **Submit**.
6. Click **Yes** to confirm.
7. If you selected **`Badge`**, **`Data collector`**, **`Employee name`**, or **`Transaction type`**, specify the information in the **Display** attribute and click **Continue**.

Running a Reprocess job

Use the **Reprocess** host job to correct a subset of shop floor activity transactions that have a status of **Error** or **Canceled**.

1. Select **Production > Activity > Shop Floor Activity > File > Host Jobs**.
2. Select the **Reprocess** tab.
3. Select the **Execute** check box .
4. Complete the fields.
5. Select the **E-mail** tab, then specify the information.
6. Click **Submit**.
7. Click **Yes** to confirm.
8. If you selected **`Badge`**, **`Data collector`**, **`Employee name`**, or **`Transaction type`**, specify the information in the **Display** attribute and click **Continue**.

Chapter 26: Shop floor summary objects

As the shop floor activity transactions are processed, shift dates are assigned to the transactions using the employee and work schedules assigned to the employee.

These shop floor summary objects are located under the **Shop Floor Summary** card on the Monitoring card file:

- Employee shop floor summary

  The icon is **Employee Summary**.
- Department shop floor summary

  The icon is **Department Summary**.
- Company shop floor summary

  The icon is **Company Summary**.

Each of these summaries has a shift shop floor summary:

- Employee shift shop floor summary
- Department shift shop floor summary
- Company shift shop floor summary

If the shift summary record does not exist for the summary employee, department, and summary object, then one is created for the summary object. These shift shop floor summaries are not available on the **Shop Floor Summary** card but can be added.

If review and approval is performed by a department supervisor, then select the Department Summary to view a list of department summary records.

The shop floor summary objects are created as non-labor, attendance, and labor transactions are processed in the Shop Floor Activity object. These transactions are shown in real-time as they are processed. Attendance and labor real-time matching and calculations provide visibility to authorized personnel to correct any errors, review, and approve attendance labor time and costs.

Errors can be identified and corrected from any of the Shop Floor Summary objects. The Labor status and Other status headings in the summary list identify issues that should be reviewed and corrected.

Real-time updates

This section describes how real-time updates are processed when shop floor summary objects are created or updated. An Employee shift shop floor summary record is used in this description.

The **Employee Shift Shop Floor Summary** page is accessed from the **Display** menu on the **Employee Shop Floor Summary** page.

Understanding the shop floor summary pages

After clicking a summary icon on the **Shop Floor Summary** card, the shop floor summary list page for that icon is displayed. From the list page, you can view details for an individual shop floor summary record by double-clicking the record.

Shop Floor Summary list page

This table shows each column heading on the list page, a description of each, and values if they exist.

Column heading	Description	Values
Labor status	Summary status for attendance and labor transactions. Attendance and labor transactions require approval. Review is required if the OBPM application setting **Review attendance and labor before approval** is set to **Manual**.	• **Error** • **Unmatched** • **Ready to review** • **Ready to approve** • **Approved** • blank Labor status is hierarchical. If any attendance and labor errors exist, then the value is **Error**. If no errors exist, then the values is **Unmatched** if unmatched attendance and labor transactions are not matched.
Other status	Summary status for non-labor transactions. You should review and correct transactions with an **Error** status.	• **Error** • blank The value is **Error** when these conditions are true: • Any non-labor transactions with status of Error exist • Other errors count is greater than 0 Review and approve are not required for non-labor transactions.
Ready to review	Shows the number of employee shift shop floor summary records that are ready to review.	

Column heading	Description	Values
Ready to approve	Shows the number of employee shift shop floor summary records that are ready to review.	
Attendance and labor errors	Shows the number of individual attendance and labor transactions for that shop floor summary record that are in error. If non-zero, then the**Labor status** for the record is **Error**.	
Unmatched errors	Shows the number of individual attendance and labor transactions for that shop floor summary record that are unmatched. If non-zero and no transactions or employee shift records with status of **Errors** exist, then the **Labor status** for the record is **Unmatched**.	
Employee shift errors	Shows the number of employee shift shop floor summary records that are in error due to employee shift errors. For example, no attendance records when work schedule requires them.	
Other errors	Shows the number of non-labor transactions that are in error. If non-zero, then **Other status** for the shop floor summary record should be **Error**.	

Shop floor summary details page

The details General view contains these sections:

- Hours and Costs

  The **Hours** and **Costs** tabs show the hours and costs that are ready and not ready for approval.
- Status

  This section shows both counts and activity statuses.
- Shop Floor Activity

  This compound card contains these additional tabs of information related to the shop floor activity for the selected record:

- **Needs review**: This card tab contains summary records where the **Labor status** is not approved or **Other status** is not blank for employees.
- **Overview**: This card tab contains all employee summary records in that summary record. If you select a department shop floor summary record or company shop floor summary record, expand the levels to view the employee information.
- **All**: This card tab contains a list of every shop floor transaction for that record.
- **Errors**: This card tab contains a list of all the shop floor transactions that are in error.

Understanding elapsed time

Elapsed time is calculated by matching Start Labor (ON) and Stop Labor (OF) transactions for each order. Elapsed time calculations work the same way for generated ON transactions that may occur with the off-only method of job activity reporting.

In and out matching

Attendance and labor records are matched from an employee's in and out records. The employee's first attendance and labor record is counted as an In record and begins a attendance and labor elapsed time pair. The next attendance and labor record is counted as an Out record and provides the ending time for the previous elapsed time record. Subsequent attendance and labor records are paired in the same way until all records have been matched to create elapsed time pairs with In and Out times. Matched records are linked by updating each record with the transaction number of the other record.

Job record matching

Job ON and OF record matching is based on these things:

- record type such as production, setup, or indirect
- Job number such as manufacturing order number
- Operation sequence number

Elapsed time pairs are formed by matching ON and OF records. ON and OF records are matched in the same way even the off-only method of job activity reporting and the system generated the ON transaction.

Time and attendance (SW, EW, TA) transactions

Time and attendance (TA) transactions can only come in from PMC. When processed in shop floor they are transformed into a Start Work (SW) or End Work (EW) transaction based on whether preceding attendance transactions exist. The only time TA transactions show up in shop floor is if the TA transaction cannot be transformed to an SW or EW transaction. This can happen if Badge, Transaction date, or transaction time are invalid for the TA transaction.

Attendance time is calculated for matching attendance transactions using the work schedule assigned to the employee. Work schedule clocking windows, lunch, paid and unpaid breaks, and Pay basis code are used in the calculation. After the attendance time is approved the calculated attendance and job time can be passed to XA payroll or a third party payroll application for processing.

Time adjustment

You can adjust employee clock-ins when they fall within a specified range. The time ranges that can be specified for each work shift:

- Shift start
- Lunch start
- Lunch end
- Shift end

Separate time ranges are specified for time and attendance records. To specify a time range, these times are required:

- Range start: The earliest time for the time range
- Range end: The latest time for the time range
- Standard time: The time that replaces the actual clocking when the time falls within the time range

Each transaction contains an actual start or stop time. The start time is compared to the shift start early or shift start late and lunch early and late time ranges. If the actual start time falls within the time range or is equal to the start or end of the time range, the standard time for shift start or lunch end is used as an adjusted start time. If the actual start time does not fall within the time range, the actual clocking is used for any time calculation.

Stop times are compared to the lunch start and shift end time ranges. If the stop time falls within the time range, then the standard time is used as an adjusted stop time.

Time calculation

Elapsed time for each record is calculated by subtracting the adjusted time from the adjusted end time. The break and lunch times are then extracted from the job records. Lunch times are extracted from the time and attendance records. The breaks can be paid or unpaid.

If the job begins or ends during a break, then only the portion of the break spanned by the record is extracted. If the complete break time is spanned, the complete break is extracted. If more then one break or portion of a break is spanned, the total of all complete and partial breaks spanned is extracted.

A lunch period can be specified and extracted from both types of records when required. The time is extracted in the same manner.

Overlap apportionment

An employee can work on several job simultaneously. For example, the employee may perform the setup on one machine while several other machines are performing operations for different jobs. The overlap apportionment function checks the employee's records for overlapped jobs and operations. If jobs overlap, then the amount of overlapped time is apportioned equally between the hobs. Any time for paid or unpaid breaks is extracted before the apportionment is made.

On the Labor Report, overlapped jobs are shown by an **A** to the right of the job time to show apportionment has taken place.

Overlap apportionment is used for labor hours only. Machine hours are not apportioned. Overlap apportionment works with the off-only method of job activity reporting when you use clocking windows.

Machine time calculation

Machine time is only calculated if the standard machine time is defined for an operation and the ON transaction nor the OFF transaction is a Crew Clock (CC) transaction. Machine time is calculated from the adjusted job start time and adjusted job end time. unlike labor time, machine time is not apportioned. Breaks are extracted as specified in the production facility record. Lunch is extracted if lunch extract is specified for the work schedule.

Machine hours are used to update the Manufacturing Order Operation detail file and are included in the transactions passed to PR.

Employee shop floor summary

The Employee Shop Floor Summary object contains a summary of shop floor activity for all employees for which shop floor activity has been reported.

The Employee Shop Floor Summary object is accessed from the **Shop Floor Summary** application card on the **Monitoring** tab.

The **General** view shows several statuses that are relevant to the employee such as labor activity status and other activity status. These statuses are updated based on the labor and activity status from the employee shift activity.

The **Last reported** view shows labor status and last reported order information. **Actual work status** shows whether an employee is in or out based on the work schedule assigned to the shop floor employee. The **Ready to approve** view shows the number of employee shift summary records that are ready to approve. this view also shows the total unapproved attendance hours and labor hours for each employee.

A specific employee shop floor summary can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected employee shop floor summary.

This table shows employee shop floor summary related objects:

Object	Viewable information
Employee Activity	A list of the employee activities associated with the selected employee shop floor summary
Employee Shift Shop Floor Summary	A list of the employee shift information associated with the selected employee shop floor summary
Shop Floor Activity	A list of the shop floor activities associated with the selected employee shop floor summary

Employee shop floor summary related object tasks

You can maintain information in other objects that are related to the Employee Shop Floor Summary object. For example, from the **Employee Shop Floor Summary** list page or card file, you work with or maintain information for a related employee from the **Maintain** menu. You can select tasks for these related objects from the **Maintain** menu on the **Employee Shop Floor Summary** card file:

- Company shop floor summary on page 165
- Department shop floor summary on page 163
- Employees on page 33

Employee shift shop floor summary

The Employee Shift Shop Floor Summary object shows the labor status and other status along with paid, attendance, labor, and machine hours for the shift dates of a specific employee.

These statuses are updated based on the labor and activity status from the employee shift summary. The Employee Shift Shop Floor Summary object is the lowest shop floor summary object. You can access this object from the **Display** menu on the **Employee Shop Floor Summary** list page.

Employee Shift Shop Floor Summary can provide the shop floor employee and their supervisor with a summary by shift date for a given employee. This information can be helpful by a supervisor who upon reviewing their department finds that an employee shop floor summary with a Labor status of Unmatched. The supervisor can use the **Employee Shift Shop Floor Summary** page to find out which employee shift records have unmatched attendance or labor records. The supervisor can add an attendance and labor transaction to match up the record or reverse the attendance and labor transaction if the record is a duplicate.

The **Employee Shift Shop Floor detail** page shows hour and cost information, employee work status, and shop floor activity information for the shift date.

You can use the **Display** menu to view the related shop floor activities for a selected employee shift shop floor summary.

Viewing employee shift shop floor summaries

The Employee Shift Shop Floor Summary object is not displayed on the **Shop Floor Summary** tab on the **Monitoring** card.

1. Select **Production > Monitoring > Employee Summary**.
2. Select an employee.
3. Select **Display > Employee Shift Shop Floor Summary**.

Employee shift shop floor related object tasks

You can maintain information in other objects that are related to the Employee Shift Shop Floor Summary object. For example, from the **Employee Shift Shop Floor Summary** list page or card file, you work with or maintain information for a related employee from the **Maintain** menu. You can select tasks for these related objects from the **Maintain** menu on the **Employee Shift Shop Floor Summary** card file:

- Company shop floor summary on page 165
- Company Shift Shop Floor Summary on page 166
- Department shop floor summary on page 163
- Department shift shop floor summary on page 164
- Employees on page 33
- Employee shop floor summary on page 161

Department shop floor summary

The Department Shop Floor Summary provides you with a real-time summary by department.

The Department Shop Floor Summary object is accessed from the **Shop Floor Summary** application card on the **Monitoring** tab.

The Department Shop Floor Summary object provides a summary of shop floor activity that can be used by a department supervisor. The **General** view contains labor status and other status. A supervisor can look at these statuses to see if any shop floor employees in their department have errors, are unmatched, need reviewed, or need approval.

The **General** view can provide a supervisor with a count of how many employee shift records in that department are ready to review and ready to approve. Additionally, total counts in that department are displayed for attendance and labor errors, unmatched, employee shift errors, and other errors. Counts are important in case a supervisor wants to know how much time they should take for reviewing and fixing the issues. This time could be minutes or hours depending on the status and counts shown.

A specific department shop floor summary can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected department shop floor summary.

This table shows the department shop floor summary related objects:

Object	Viewable information
Employee Shop Floor Summary	A list of the employee shop floor summaries associated with the department shop floor summary
Department Shift Shop Floor Summary	A list of the department shift shop floor summaries associated with the department shop floor summary
Employee Activity	A list of the employee activities associated with the department shop floor summary

Object	Viewable information
Employee Shift Shop Floor Summary	A list of the employee shift shop floor summaries associated with the department shop floor summary
Shop Floor Activity	A list of the shop floor activities associated with the department shop floor summary

Department shop floor summary related object tasks

You can maintain information in other objects that are related to the Department Shop Floor Summary object. For example, from the **Department Shop Floor Summary** list page or card file, you work with or maintain information for a related department from the **Maintain** menu. You can select tasks for these related objects from the **Maintain** menu on the **Department Shop Floor Summary** card file:

- Company shop floor summary on page 165
- Departments on page 26

Department shift shop floor summary

The Department Shift Shop Floor Summary object shows a list of shift dates within that department.

You can access this object from the **Display** menu on the **Department Shop Floor Summary** list page.

The Department Shift Shop Floor Summary object provides a summary of shop floor activity that can be used by a department supervisor. The **General** view contains labor status and other status. A supervisor can look at these statuses to see if any shop floor employees in their department have errors, are unmatched, need reviewed, or need approval.

The **General** view can provide a supervisor with a count of how many employee shift records in that department are ready to review and ready to approve. Additionally, total counts in that department are displayed for attendance and labor errors, unmatched, employee shift errors, and other errors. Counts are important in case a supervisor wants to know how much time they should take for reviewing and fixing the issues. This time could be minutes or hours depending on the status and counts shown.

A specific department shift shop floor summary can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected department shift shop floor summary.

This table shows the department shift shop floor summary related objects:

Object	Viewable information
Employee Shift Shop Floor	A list of the employee shop floor summaries associated with the department shift shop floor summary

Object	Viewable information
Shop Floor Activity	A list of the shop floor transactions associated with the department shift shop floor summary

Viewing department shift shop floor summaries

The Department Shift Shop Floor Summary object is not displayed on the **Shop Floor Summary** tab on the **Monitoring** card.

1. Select **Production > Monitoring > Department Summary**.
2. Select a department.
3. Select **Display > Department Shift Shop Floor Summary**.

Department shift shop floor summary related object tasks

You can maintain information in other objects that are related to the Department Shift Shop Floor Summary object. For example, from the **Department Shift Shop Floor Summary** list page or card file, you work with or maintain information for a related employee from the **Maintain** menu. You can select tasks for these related objects from the **Maintain** menu on the **Department Shift Shop Floor Summary** card file:

- Company shop floor summary on page 165
- Company Shift Shop Floor Summary on page 166
- Departments on page 26
- Department shop floor summary on page 163

Company shop floor summary

The Company Shop Floor Summary provides you with a real-time summary by company.

The Company Shop Floor Summary object is accessed from the **Shop Floor Summary** application card on the **Monitoring** tab.

The Company Shop Floor Summary object provides a summary of shop floor activity that can be used by someone reviewing and approving shop floor summary at the company level. The **General** view contains labor status and other status. The person who is reviewing, correcting, and approving shop floor activity at the company level can look at these statuses to see if any shop floor employees in that company that have errors, unmatched, need review, or need approval.

The **General** view can provide a count for how many employee shift records in that company that are ready to review and ready to approve. Additionally, total counts in that company are displayed for attendance and labor errors, unmatched, employee shift errors, and other errors. Counts are important in case a supervisor

wants to know how much time they should take for reviewing and fixing the issues. This time could be minutes or hours depending on the status and counts shown.

A specific company shop floor summary can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected company shop floor summary.

This table shows the company shop floor summary related objects:

Object	Viewable information
Company Shift Shop Floor Summary	A list of the company shift shop floor summaries associated with the company shop floor summary
Department Shop Floor Summary	A list of the department shop floor summaries associated with the company shop floor summary
Employee Shift Shop Floor Summary	A list of the employee shift shop floor summaries associated with the company shop floor summary
Shop Floor Activity	A list of the shop floor transactions associated with the company shop floor summary

Company shop floor summary related object tasks

You can maintain information in other objects that are related to the Company Shop Floor Summary object. For example, from the **Company Shop Floor Summary** list page or card file, you work with or maintain information for a related company from the **Maintain** menu.

Company Shift Shop Floor Summary

The Company Shift Shop Floor Summary object shows a list of shift dates for that company.

You can access this object from the **Display** menu on the **Company Shop Floor Summary** list page.

The Company Shift Shop Floor Summary object provides a summary of shop floor activity that can be used by someone reviewing and approving shop floor summary at the company level. The **General** view contains labor status and other status. The person who is reviewing, correcting, and approving shop floor activity at the company level an look at these statuses to see if any shop floor employees in that company that have errors, unmatched, need review, or need approval.

The **General** view can provide a count for how many employee shift records in that company that are ready to review and ready to approve. Additionally, total counts in that company are displayed for attendance and labor errors, unmatched, employee shift errors, and other errors. Counts are important in case a supervisor wants to know how much time they should take for reviewing and fixing the issues. This time could be minutes or hours depending on the status and counts shown.

A specific company shift shop floor summary can have ties to information in other objects. You can use the **Display** menu options or toolbar buttons to see information in other objects that is related to a selected company shift shop floor summary.

This table shows the company shift shop floor summary related objects:

Object	Viewable information
Department Shift Shop Floor Summary	A list of the department shift shop floor summaries associated with the company shift shop floor summary
Employee Shift Shop Floor Summary	A list of the employee shift shop floor summaries associated with the company shift shop floor summary
Shop Floor Activity	A list of the shop floor transactions associated with the company shift shop floor summary

Company shift shop floor summary related object tasks

You can maintain information in other objects that are related to the Company Shift Shop Floor Summary object. For example, from the **Company Shift Shop Floor Summary** list page or card file, you work with or maintain information for a related company from the **Maintain** menu. You can select tasks for these related objects from the **Maintain** menu on the **Company Shift Shop Floor Summary** card file:

- Company
- Company shop floor summary

Viewing company shift shop floor summaries

The Company Shift Shop Floor Summary object is not displayed on the **Shop Floor Summary** tab on the **Monitoring** card.

1. Select **Production > Monitoring > Company Summary**.
2. Select a company.
3. Select **Display > Company Shift Shop Floor Summary**.

Reprocessing a shop floor activity from a summary

When a transaction is processed, errors within the transaction prevent the transaction from being processed successfully. You can view the errors by viewing the transaction details. Use the **Reprocess** action to correct

a shop floor activity transaction that has processed in error. Only transactions with an **Error** or **Canceled** status can be reprocessed.

1. Click **Employee Summary**, **Department Summary**, or **Company Summary**.
2. Double-click the summary with a **Labor status** or an **Other status** of **Error**.
3. Under Shop Floor Activity, click the **Errors** tab.

   To view the details of the errors, double-click the transaction. From the details page, you can view the details and click **Continue** to return to the **Errors** tab; or, select **Maintain > Reprocess** to reprocess the transaction.
4. Click the **Reprocess** icon on the tab.

   You are presented with the IDF transaction page that matches the transaction type such as Receive Item (RC).
5. Change or correct any maintainable attributes such as **Badge**, **Transaction date**, or **Transaction time**.
6. Click **Continue**.

Canceling a shop floor activity from a summary

You can cancel a shop floor activity transaction with a **Processing status** of **Error** can be canceled. Use this action to signify that the transaction has errors but is not to be corrected. All attendance and labor transactions for an employee shift must have a **Processing status** of **Processed** or **Canceled** before the employee shift **Labor status** can be set to **Approved**.

The **Cancel** action is available in all the shop floor summary detail pages under Shop Floor Activity.

1. Double-click the summary with an status of **Error** on the shop floor summary page.
2. Under Shop Floor Activity, select the**Overview** or **Needs Review** tab, then expand the record to view the transaction in error.

   You can expand the transaction to view the errors.
3. Select the transaction to cancel.
4. Click the **Cancel** icon on the tab.
5. Click **Yes** to confirm.

Review, approve, and recalculate attendance and labor transactions

As attendance and labor shop floor transactions are processed they are matched and attendance time, labor time and labor costs are calculated real time. Matching attendance and labor calculations results in updates to these files:

- Manufacturing Order (M.O.)

- M.O. Operation
- Employee Shop Floor Summary
- Employee Shift Shop Floor Summary
- Department Shop Floor Summary
- Department Shift Shop Floor Summary
- Company Shop Floor Summary
- Company Shift Shop Floor Summary

Attendance and labor review and approval is required if **Review attendance and labor before approval** is set to **Manual** in the OBPM - Shop Floor application setting.

Shop Floor Summary files are updated in real time. The attendance time, labor time, and labor costs can be reviewed and approved by authorized supervisors and managers without having to run separate attendance and labor batch jobs. Authorized people have the ability to calculate attendance and labor time and costs due to changes to employee, production facility, and work schedules. You can back out labor time and costs from the M.O. operation and M.O. files using the **Unapprove Labor** action.

Review

You can review shop floor summaries from all the Shop Floor Summary levels. Though, you can only perform a review on an employee shift shop floor summary with a **Labor activity** status of **C=Ready to review** or **R = Ready to review**. When performing a review at another shop floor summary level, the Labor activity status can be any status. Any Employee Shift Shop Floor Summary with a status of **C=Ready to review** within that summary group is set to **R=Ready to approve** when a review is performed.

The Review action updates these areas:

- Reviewed fields in the Shop Floor Transaction file, such as **User**, **Date**, **Time**, and **Status**.
- Change the **Attendance hour**, **Labor hour**, and **Cost** attributes on the employee shift shop floor summary record to **Ready to approve** and set the **Labor activity** status to **R = Ready to approve**.
- Update the **Attendance hour**, **Labor hour**, and **Cost** attributes on higher shop floor summary objects, such as Employee Shop Floor Summary, Department Shop Floor Summary, or Department Shift Shop Floor Summary. Set the**Labor Activity** status to **Ready to approve** based on hierarchy.

  Note that the higher shop floor summary files are updated using the **Recalculate** action.

Approve

You can approve an Employee Shift Shop Floor Summary in any of the shop floor summary levels as long as the labor activity for the employee record has a status of **R=Ready to approve**. The **Approve** action is available at all shop floor summary levels on the**Maintain** menu and as host job.

When approving the labor activity from the employee shift shop floor summary record, these actions are taken:

- Update the hours and costs in these locations:
  - Manufacturing order (M.O.)
  - M.O. operation
  - Item warehouse
  - Labor activity

    - Inventory GL Transactions (INVTXN)
    - Order Based Production GL Transactions (PCCTXN)
- Update the approved date, time, user and status fields in the shop floor transaction file for attendance and labor transactions for the employee shift.
- Move employee shift M.O. operation and employee shift M.O. records from a status of **Unapproved** to **Approved**.
- Update the M.O. operation extension and M.O. extension unapproved hours and costs.
- Updates the Employee Shift Shop Floor Summary **Labor status** from **Ready to approve** to **Approved**.
- Attendance and labor transactions in approved employee shift shop floor summary are set to approved when you click **Approve**. If no further maintenance is required, you can use these transactions: **Cancel** and **Reverse**.
- All employee shift shop floor summary records in higher level shop floor summary object, such as department shop floor summary, with **Labor status** of **Ready to approve** are set to **Approved** when you select **Approve** for the higher level shop floor summary records.
- For all employee shift shop floor summary records in a higher level shop floor summary record, such as Employee Shop Floor Summary, then the **Labor status** is set to **Approved** for the shop floor summary record at the higher level.
- Create an Employee Shift Attendance and Labor Summary file to be used by third party payroll systems.

Recalculate

You may find that in situations such as these that you want to recalculate attendance time, labor time, and labor costs:

- After attendance and labor transactions are matched and time is calculated, changes occur for an employee, to a work schedule, or at the production facility. If these changes are made before attendance and labor are approved, a reviewing and approving manager wants to recalculate attendance and labor based on those changes.
- A power outage or some other failure occurs during the activity matching and elapsed time calculations causing the attendance and labor calculations to be wrong.

The Recalculate option is available on all shop floor summary and shift shop floor summary pages. Only Employee Shift Shop Floor Summary records with a **Labor activity** status of **E=Error**, **U=Unmatched**,**C=Ready to review**, and **R=Ready to approve** can be recalculated.

Reviewing shop floor summaries

Use the **Review** action to change the **Labor status** from **Ready to review** to **Ready to approve**.

The **Review** action is available in all the shop floor summary objects from the **Maintain** and **Host Job** options. Note that the **Review** action is available and required if OBPM application setting **Review attendance and labor before approval** is **Manual**.

1 Select one of these options:

- Select a ready to review Employee Shift Shop Floor Summary record, then select **Maintain > Review**.

- Select any upper level Shop Floor Summary record (Employee, Department, Department Shift, Company, Company Shift) and select **Maintain > Review**. Any Employee Shift Shop Floor Summary record in that summary group with status **Ready to review** is set to **Ready to Approve**.

2 Click **Yes**.

Approving shop floor summaries

Use the **Approve** action to change the **Labor status** from **Ready to approve** to **Approved**.

The **Approve** action is available in all shop floor summary objects from the **Maintain** menu and **Host Job** options.

1 Select any shop floor summary record, then select **Maintain > Approve**.

Any Employee Shift Shop Floor Summary record with status **Ready to approve** is approved.

2 Click **Yes** to confirm.

Recalculating shop floor summaries

Use the **Recalculate** action when changes occur in the work schedule or related object and the changes affect the calculation of hours and costs. These examples describe when you may want to recalculate a shop floor summary:

- A change occurs in the pay basis or breaks of a work schedule that affect the hour and cost calculations
- A production facility reporting method changes in a related object that affects the hour and cost calculations

Only Employee Shift Shop Floor Summary records with a **Labor activity** status of **E=Error**, **U=Unmatched**,**C=Ready to review**, and **R=Ready to approve** can be recalculated.

1 Click **Employee Summary**, **Department Summary**, or **Company Summary**.
2 Do one of the following:
   - To recalculate the list of shop floor summaries, select **Maintain > Recalculate**
   - To recalculate a specific shop floor summary record, double-click the shop floor record in the summary list, then select **Maintain > Recalculate** on the shop floor summary detail page.
   - To recalculate the shop floor activity record for a specific shop summary record, use these steps:
     a Double-click the shop floor record in the summary list.
     b Select the shop floor activity record under Shop Floor Activity on the floor summary detail page.
     c Click the **Recalculate** icon.
3 Click **Yes** to confirm.

Recalculating shift shop floor summaries

Use the **Recalculate** action when changes occur in the work schedule or related object and the changes affect the calculation of hours and costs. These examples describe when you may want to recalculate a shop floor summary:

- A change occurs in the pay basis or breaks of a work schedule that affect the hour and cost calculations
- A production facility reporting method changes in a related object that affects the hour and cost calculations

.

1. Click **Employee Summary**, **Department Summary**, or **Company Summary**.
2. Select the transaction, then select **Display > (Employee, Department, or Company) Shift Shop Floor Summary**.
3. Select one of these options:
   - To recalculate the list of shift shop floor summaries, select **Maintain > Recalculate**.
   - To recalculate a specific shift shop floor summary record, double-click the shift shop floor record in the summary list, then select **Maintain > Recalculate** on the shift shop floor summary detail page.
   - To recalculate the shop floor activity record for a specific shift shop summary record, use these steps:
     a. Double-click the shift shop floor record in the summary list.
     b. Select the shop floor activity record under Shop Floor Activity on the shift floor summary detail page.
     c. Click the **Recalculate** icon.
4. Click **Yes** to confirm.

Running a Review job

Use the **Review** host job to select a subset of shop floor summary transactions to review.

Review is available and required for attendance and labor when OBPM application setting **Review attendance and labor before approval** is **Manual**.

The **Review** host job is available on all the shop floor summary pages.

1. Optionally, select a ready to approve summary record.
2. Select **File > Host Jobs**
3. Select the **Review** tab.
4. Select the **Execute** check box.
5. Complete the fields including this information:

   Subset
   Select a subset. These values are valid:
   - **`(all records)`**: Select to subset on all records.
   - **`Badge`**: Select to subset records by badge ID
   - **`Employee name`**: Select to subset records by employee name

- **`Errors`**: Select to subset by records with errors
- **`Labor activity status`**: Select to subset records by a specific labor activity status
- **`Needs review`**: Select to subset by records that need reviewed

Sort
Select **`Name`** to sort by employee name. Otherwise, leave as **`(default)`** or select **`(none)`** for no sort.

6 Select the **E-mail** tab, then specify the information.
7 Click **Submit**.
8 Click **Yes** to confirm.
9 If you selected **`Badge`**, **`Employee name`**, or **`Labor activity status`**, specify the information in the **Display** attribute and click **Continue**.

Any Employee Shift Shop Floor Summary with **Labor status** of **Ready to review** is set to **Ready to approve**.

Running an Approve job

Use the **Approve** host job to change the **Labor status** from **Ready to approve** to **Approved** by subset.

The **Approve** host job is available on all the shop floor summary pages.

1 Optionally, select a ready to approve summary record.
2 Select **File > Host Jobs**
3 Select the **Execute** check box on the **Approve** tab.
4 Complete the fields including this information:

Subset
Select a subset. These values are valid:

- **`(all records)`**: Select to subset on all records.
- **`Badge`**: Select to subset records by badge ID
- **`Employee name`**: Select to subset records by employee name
- **`Errors`**: Select to subset by records with errors
- **`Labor activity status`**: Select to subset records by a specific labor activity status
- **`Needs review`**: Select to subset by records that need reviewed

Sort
Select **`Name`** to sort by employee name. Otherwise, leave as **`(default)`** or select **`(none)`** for no sort.

5 Select the **E-mail** tab, then specify the information.
6 Click **Submit**.
7 Click **Yes** to confirm.
8 If you selected **`Badge`**, **`Employee name`**, or **`Labor activity status`**, specify the information in the **Display** attribute and click **Continue**.

Running a Recalculate job

Use the **Recalculate** host job to recalculate shop floor summary transactions by subset. These examples describe when you may want to recalculate a shop floor summary:

- A change occurs in the pay basis or breaks of a work schedule that affect the hour and cost calculations
- A production facility reporting method changes in a related object that affects the hour and cost calculations

Only Employee Shift Shop Floor Summary records with a **Labor activity** status of **E=Error**, **U=Unmatched**,**C=Ready to review**, and **R=Ready to approve** can be recalculated.

The **Recalculate** host job is available on all the shop floor summary pages.

1. Optionally, select a record.
2. Select **File > Host Jobs**
3. Click the **Recalculate** tab.
4. Select the **Execute** check box.
5. Complete the fields including this information:

   Subset
   Select a subset. These values are valid:
   - **`(all records)`**: Select to subset on all records.
   - **`Badge`**: Select to subset records by badge ID
   - **`Employee name`**: Select to subset records by employee name
   - **`Errors`**: Select to subset by records with errors
   - **`Labor activity status`**: Select to subset records by a specific labor activity status
   - **`Needs review`**: Select to subset by records that need reviewed

   Sort
   Select **`Name`** to sort by employee name. Otherwise, leave as **`(default)`** or select **`(none)`** for no sort.

6. Select the **E-mail** tab, then specify the information.
7. Click **Submit**.
8. Click **Yes** to confirm.
9. If you selected **`Badge`**, **`Employee name`**, or **`Labor activity status`**, specify the information in the **Display** attribute and click **Continue**.

Chapter 27: Sources of demand

The Sources of Demand object is an inquiry that shows you all the sources of demand for the selected item on a requisition, material order, customer order, or purchase order.

The **Sources of Demand** page shows the top level requirement that generated the request for the purchase of the item. You can use this information to determine the person or group that is waiting for the ordered item. The information is used to notify the person or group of changes to the shipment or delivery of the ordered item.

The Sources of Demand object provides demand information for items specified on requisitions and for items and item releases on purchase orders.

MRP planning runs generate the sources of demand information. You do not maintain information in this object.

Chapter 28: Warehouses

The Warehouses object contains information about the entities where inventory is stored and managed. The information for each warehouse identifies whether it is controlled or uncontrolled, selling or non-selling, and planning or demand.

Warehouses are used to group information in other objects. The Item Warehouses object shows the items stored or managed in each warehouse. The Warehouse Addresses object contains the addresses associated with each warehouse. You can assign multiple items to a warehouse, and you can define multiple addresses for a warehouse.

A specific warehouse can have ties to information in other objects. For example, a warehouse has ties to the Warehouse Locations object. Within the Warehouses object, you can use options under the **Display** menu to see information in other objects that are related to a selected warehouse.

Creating warehouses

To create a warehouse you need to know this information:

- Warehouse code
- Warehouse type
- Shipping calendar code

If EPDM is installed, you need to know the site for the new warehouse.

1. Select one of these options:
   - Select **Engineering > PDM Plus > Warehouses > Maintain > Create**
   - Select **Materials > Inventory > Warehouses > Maintain > Create**
   - Select **Production > Order Based > Warehouses > Maintain > Create**
   - Select **Planning > Warehouses > Maintain > Create**
2. Complete the fields.
3. Click **Create**.

Changing warehouses

Use these instructions to change information for warehouses.

1. Select the warehouse.
2. Select **Maintain > Change**.
3. Update the attributes.
4. To change the warehouse to or from a planning warehouse, use these steps:
   a. Select the **General** tab if not already selected.
   b. Click `Yes` or `No` for the **Planning warehouse** attribute.
   c. Click the **Assign planning defaults** button. If **Yes** is selected, planning warehouse values are set back to their default value when **Update** is clicked. If **No** is selected, planning warehouse values are cleared when **Update** is clicked.
5. Click **Update**.

Copying a warehouse

You can create a new warehouse by copying an existing warehouse.

1. Select the warehouse.
2. Select **Maintain > Copy**.
3. Complete the field including this information:

   Warehouse
   Specify the target warehouse number.

   Shipping calendar
   Specify the shipping calendar of the target warehouse.

   Site
   Specify the site of the target warehouse.

   Copy Warehouse Addresses
   Select the check box to copy the warehouse address information. If you select a different template from the one used to create the source warehouse, values copied from the warehouse are overridden with the values from the selected template.

   To make source attributes blank in the target warehouse, make those attributes blank in the template.

4. Click **Copy**.

   If you selected Preview before copy, the

Deleting warehouses

Deleting a warehouse removes the warehouse immediately.

1. Select the warehouse.
2. Select **Maintain > Delete**.
3. Click **Yes**.

Warehouse Planning card

You can use the **Planning** card to establish planning horizon dates, set date intervals for consolidating requirements, and establish planning run execution and report options. You initiate the planning run using the **Planning Run** host job option. The **Planning** card is maintainable when Materials Planning (MP) is installed and the warehouse is a planning warehouse. This card is blank when MP is not installed.

Execution Options

This section includes execution information for the planning run of the selected warehouse. Before setting up the planning run, consider these execution questions:

- Should customer backlog orders be combined
- Should you allow time phased allocation
- What level will you plan master level items
- How will rescheduling be handled
- Should contracts be required for auto-release

Reporting Options

This section includes these report settings for printing automatically when a planning run is executed:

- Requirements planning
- MLI requirements vs forecast customer orders
- Purchase planning
- Order recommendation by item
- Order recommendation by exception

If the Requirements planning report check box is selected, then you can specify this information:

- Types of items
- Level of details for the items
- Dates intervals for the items on the report

Horizon Values

This section is used to specify planning horizon values and dates used in the planning run. The planning dates are the parameters, or horizons, that you establish for the application to perform materials planning. You should only change these dates immediately before a planning run. Between runs they are used on reports and displays and should correspond with the data they accompany. Because the data represents the last planning run, the dates should also represent the last planning run.

You can specify a new current date and displacements, or days. Displacements occur between start, current, release and review dates. These formulas describe how the start, release, allocation, and review dates are derived from the current date:

- Current date minus Overdue days equals Start date
- Current date plus Release days equals Release date
- Current date plus Allocation days equals Allocation date
- Current date plus Review days equals Review date

Combine Interval Days

This section is used to specify the number of days for the combine codes. The Combine requirements code, 1-9, identifies which of these codes is used during planning. These codes determine time intervals for combining requirements for the item for planning orders.

Price Break Literals

This section is used to specify the unit of measure to use as a literal value for price breaks from the vendor for combine codes 5 through 9. Literals are only used for printing the MRP Purchase Planning Report, which groups items by combine code associated with the unit of measure in which purchased.

Report Code Period Intervals

This section is used to specify the length of periods on the Requirements Planning Report. You can print the Requirements Planning Report showing the total quantities of requirements and planned orders within buckets, or periods, of specified numbers of days. You can choose the length of periods on the report by selecting the appropriate report code. In the Report Code Period Intervals, you can define the number of days within each of the twenty periods for each of the 3 report codes. If you specify zero for a period interval, all remaining interval periods for that report code must be zero. The first period of each report code begins at the planning start date. Any generated requirement falling before the start date shows individually. Any generated requirement falling after the 20th period is not printed. Planner requirements are listed individually; only generated requirements are summarized.

Setting up a warehouse planning run

1. Select the warehouse.
2. Select **Maintain > Change**.
3. Select the **Planning** tab.

4 Complete the fields.
5 Click **Update**.

Printing a M.O. Transaction Register report

The M.O. Transaction Register report shows all material and labor transactions. Additionally, the report shows any closeout transactions that are performed during completing and closing orders. Transactions processed through Inventory Management (IM) are logged to the OBPM Order close transaction file. Production Control and Costing (PC&C) transactions, such as labor complete and operations, are also written to the OBPM Order Close transaction file.

1 Select **File > Host Jobs**.
2 Select the **Print** check box on the **M.O. Transaction Register** tab.
3 Complete the fields.
4 Optionally, click the **E-mail** tab, then specify the information that confirms the printing of this report.
5 Click **Submit**.

Printing an Order Shortages report

The Order Shortages report shows the material not available to meet current release demands at order release.

1 Select **File > Host Print**.
2 Click the **Order Shortages** tab.
3 Select the **Print** check box.
4 Complete the fields.
5 Optionally, click the **E-mail** tab, then specify the information that confirms the printing of this report.
6 Click **Submit**.

Audit Allocation Quantities host job

Use the Audit Allocation Quantities host job to validate the allocation quantities, or pick requirements, between the Item Balance file and the Manufacturing Order Detail file. The Audit Allocation Quantities host job updates the Item Balance file to correct discrepancies found between these two files and prints any differences found.

If COM is installed and interfacing, this host job accumulates the customer order allocation quantities in the Item Balance file. Any item or warehouse that is out of balance is listed, and the Item Balance record is updated to agree with the Customer Order Detail records for that item or warehouse.

This host job should be scheduled for a time when these files are not being used by another task:

- Item Balance
- Customer Order detail
- Manufacturing Order detail
- Customer Order Master
- Manufacturing Order Master
- Order Release Data Entry

Running an Audit Allocation Quantities host job

1. Select **File > Host Jobs**.
2. Click the **Execute** check box on the **Audit Allocation Quantities** tab.
3. Complete the fields.
4. Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.
5. Click **Submit**.

   This table shows the lists and their attributes that are printed when this host job is executed.

Mfg Allocation Audit Exception List attributes	Pick Requirements Audit Exception List attributes
Item number	Item number
Warehouse	Warehouse
Description	Description
Manufacturing allocated quantity before	Pick requirements quantity before
Manufacturing allocated quantity after	Pick requirements quantity after
Allocation records	Requirements records

Running an Audit Location Quantities host job

The Audit Location Quantities host job creates the Location Quantity/Item Balance report. This report compares the item quantities in the Item Balance file with the on hand quantities in the Location Quantity file to identify any discrepancies. Reject items and items waiting for inspection are not included in the totals.

1. Select **File > Host Jobs**.

2 Click the **Audit Location Quantities** tab.
3 Click **Execute** check box.
4 Complete the fields.
5 Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.
6 Click **Submit**.

These attributes are displayed on the Location Quantity/Item Balance report:

- Item number
- Warehouse
- On-hand quantity location detail
- On-hand quantity item balance
- Allocated quantity
- Exception

Audit On-order Quantities host job

The Audit On-order Quantities host job validates quantities on-order between these files:

- Item Balance
- Purchase Order Item Detail
- Manufacturing Order Master

The host job updates the Item Balance file to correct discrepancies between these three files and prints any differences found.

If a task is selected when the Audit On-order Quantity host job is active, the error message `SYS-1172 FILE (file label) IS CURRENTLY NOT AVAILABLE` is displayed. You can select the available options for this message without endangering data integrity.

Running an Audit On-order Quantities host job

This option should be scheduled for a time when these files are not being used by another task:

- Item Balance
- Purchase Order Item Detail
- Manufacturing Order Master

1 Select **File > Host Jobs**.
2 Click the **Audit On-order Quantities** tab.
3 Click the **Execute** check box.
4 Complete the fields.

5 Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.

6 Click **Submit**.

These attributes are displayed on the Purchase/Mfg On-Order Audit Exception List:

- Item number
- Warehouse
- Manufacturing on-order quantity before
- Manufacturing on-order quantity after
- Purchase on-order quantity before
- Purchase on-order quantity after

Creating an inventory count group for cycle count

You can create a cycle count job from the Item Locations object and from the Warehouse Locations object.

1 Select **File > Host Jobs**.

2 Click the **Cycle Count** tab.

3 Select the **Execute** check box.

4 Complete the fields on the **Content** tab.

5 Specify this information on the **General** tab in the Options section:

Compare quantity
Select one of these options for the on-hand quantity to use during the reconciliation process to which to compare entered counts:

- **`Entry on-hand quantity`** to capture the quantity at the time the count is specified
- **`Cutoff on-hand quantity`** to capture the quantity at the time the count is activated

Exclude line locations
Select one of these options for excluding line locations from the group:

- **`Yes`**: The line locations are not included even if they meet some other cycle count criteria
- **`No`**: The line locations are included if they are selected by another criteria

Exclude unapproved items
Select one of these options for excluding unapproved items or locations:

- **`Yes`**: The unapproved item or locations are not counted
- **`No`**: The unapproved item or locations are counted if they are selected by another criteria

Starting tag number
Specify the first number to use when generating tag numbers or use the default number that is automatically generated. You can generate tag numbers when you create the count group or maintain the count group.

Activate next count
Select **`Yes`** to set a flag to indicate which count is active. When you activate a new group for cycle count, the active count is always 1.

Generate tag numbers
Select one of these options for how to generate tag numbers:

- **Yes**: The tag numbers are automatically generated using the starting tag number indicated when the group is created.
- **No**: To generate tag numbers later or manually specify the tag number later. The tag numbers can be generated through inventory count group maintenance.

6 Select the **Selection Criteria** tab and specify this information:

Select all in subset
Select **Yes** to include every item in the subset in the inventory count group. If you select **No** to include only those items that meet one or more of the criteria activated under **Select all in subset**.

Select by transaction activity
If **No** is selected for **Select all in subset**, then select **Yes** if only items that have exceeded the limit of transaction activity are selected for this cycle count. The transaction activity is defined at the item warehouse level.

Transaction tolerance percent
Specify a percent to use when comparing the number of transactions for the item to the transaction compare number. Items within the tolerance are included even if they do not exceed the limit.

Select by time period
Select **Yes** to specify that only items due for another count based on their cycle count code are to be selected. The cycle count code is defined at the item warehouse level.

Select if forced cycle count
Select **Yes** to specify that if the item or warehouse has the forced cycle count flag on, then the item and warehouse or item and locations are included.

Select if negative on hand
Select **Yes** to specify that if the item and warehouse or item and location has a negative on-hand balance the item is included.

7 Optionally, click the **Reports** tab to print these reports after the inventory count group is created:

- Inventory Count Entry List: This report is used as a turnaround document for entering the counts as they are being taken. Select the **Print** check box and specify the information.
- Inventory Tags: Use the inventory tag forms instead of the Inventory Count Entry List. Each item or location prints on a separate tag.
  a Click the **Inventory Tags** tab.
  b Select the **Print** check box and specify the information.

8 Optionally, click the **E-mail** tab and specify the information.

9 Click **Submit**.

Running a Generate Reorder Recommendations host job

Use the **Generate Reorder Recommendations** host job to create or refresh reorder recommendations. Reorder recommendations are always generated for all order point items in a warehouse or a subset of warehouses.

Use this host job to select whether to automatically create or not automatically create replenishment orders during generation. After you generate a list of reorder recommendations, you can view them and create orders from the Reorder Recommendations object. You can change order type, quantity, and other information as you create orders.

1. Select **File > Host Jobs**.
2. Select the **Execute** check box.
3. Complete the fields including this information:

   Create manufacturing orders
   Select the value from the list. These values are valid:
   - Create
   - Create, if all components are available
   - Create based on auto release code
   - Do not create

   Shop packet
   Select **Yes** to generate a shop packet.

   Consider future allocations
   If MRP is installed, select **Yes** to consider future allocations as available when OBPM checks component availability for an order. Future allocations are those components required outside the lead time for an item or after an allocation time fence as designated in MRP.

   Create purchase orders
   Select a value from the list. These values are valid:
   - (Find or create)
   - Create based on auto release code
   - Do not create

   Create requisitions
   Select a value from the list. These values are valid:
   - Create based on auto release code
   - Do not create

   Create intersite orders
   Select a value from the list. These values are valid:
   - Create
   - Create based on auto release code
   - Do not create

4. Click **Submit**.

Creating an inventory count group for physical inventory

Use the Physical Inventory host job to create an inventory count group and print the Inventory Count Entry List and Inventory Tag forms. The Inventory Count Entry List report can be used as a turnaround document for specifying the counts as they are being taken. You can use the inventory tags instead of using the Inventory Count Entry List. The turnaround number can be converted and printed as a bar code on the tags.

Use this host job to count all items and update the on-hand quantity in the Item Balance and Location Quantity files.

1. Select **File > Host Jobs**.
2. Click the **Physical Inventory** tab.
3. Click **Execute** check box.
4. Complete the fields on the **Content** tab.
5. Specify this information on the **General** tab in the Options section:

   Compare quantity
   Select one of these options for the on-hand quantity to use during the reconciliation process to which to compare entered counts:
   - **`Entry on-hand quantity`** to capture the quantity at the time the count is specified
   - **`Cutoff on-hand quantity`** to capture the quantity at the time the count is activated

   Exclude line locations
   Select one of these options for excluding line locations from the group when in a controlled warehouse:
   - **`Yes`**: The line locations are not included even if they meet some other cycle count criteria
   - **`No`**: The line locations are included if they are selected by another criteria

   Exclude unapproved items
   Select one of these options for excluding unapproved items or locations in a controlled warehouse:
   - **`Yes`**: The unapproved item or locations are not counted
   - **`No`**: The unapproved item or locations are counted if they are selected by another criteria

   Starting tag number
   Specify the first number to use when generating tag numbers or use the default number that is automatically generated. You can generate tag numbers when you create the count group or maintain the count group.

   Activate next count
   Select **`Yes`** to set a flag to indicate which count is active. When you activate a new group for cycle count, the active count is always 1.

   Generate tag numbers
   Select one of these options for how to generate tag numbers:
   - **`Yes`**: The tag numbers are automatically generated using the starting tag number indicated when the group is created.
   - **`No`**: To generate tag numbers later or manually specify the tag number later. The tag numbers can be generated through inventory count group maintenance.

6. Click the **Reports** tab to specify what to print after the inventory count group is created.

7 To print the Inventory Count Entry List, select the **Print** check box on the tab and complete the fields.
8 To print inventory tags, click the **Inventory Tags** tab, select the **Print** check box, and complete the fields.
9 Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.
10 Click **Submit**.

Planning Run host job

Use the Planning Run host job to examine the balance of each inventory item, starting with end-items. On any date where requirements exceed the projected available on-hand, a planned order is created for the quantity. The planned orders satisfies the net required quantity and other order sizing requirements for the item. The start date for the planned order is calculated from the lead times specified for the item in the Item Warehouses object. All start dates are calculated using actual work days, which are established when you build the production calendar.

As each planned order is created for an item, the planning run creates a requirement for each component of that item. These requirements are called generated requirements. A generated requirement is a statement that a certain quantity of the component is needed on a given date. For a generated requirement, the component part satisfies internal demand. Whereas, with a master level item (MLI) requirement, the component part satisfies external demand, such as a sales order. Internal demanded is a planned order for an item higher in the product structure. Each component item is examined and planned orders are created when needed to meet these generated requirements. The planning run continues this process through all levels of the bill of material until all component parts of all items have been examined.

The plan that is created is a collection of the requirements and the resulting planned orders for items that need to be replenished. The collection of requirements is for both MLI and generated requirements. The planned orders are a tentative production and purchasing schedule.

The **Warehouse Planning** card contains information you can use to perform these tasks:

- Establish planning horizon dates
- Set date intervals for consolidating requirements
- Establish planning run execution and report options

You should review these options before you initiate the planning run using this Planning Run host job.

To run the Planning Run host job, Materials Planning (MP) must be installed. You must be authorized to the proper level of security for the planning run and for the warehouse you select.

If EPDM is activated and the selected warehouse is defined for EPDM, information in the Item Revisions object is used. Otherwise, information in the Items object is used.

Running the Planning Run host job

Note: A planning run prevents some MRP activities from running, so you should schedule the planning run carefully; typically for overnight or over a weekend. Use the **Start date** and **Start time** attributes to schedule the planning run.

1 Select **File > Host Jobs**.

2 Click the **Planning Run** tab.

3 Select the **Execute** check box.

4 Complete the fields including this information in the Options section:

Extract independent demand
Select one of these options:

- **Yes**: Click to extract customer orders, including released intersite orders and expected customer orders from the respective data bases for informational and planning purposes
- **No**: Click to not extract customer orders at this time

This option is available when CSM is interfacing.

If EC is installed, expected customer orders are netted against the actual customer orders and the remaining quantities are included.

Transfer MPSP orders
Select one of these options:

- **Yes**: Click to transfer the new master schedule, planned and firm planned orders, from MPSP to MRP
- **No**: Click to not transfer the schedule at this time

This option is available when MPSP is installed.

Auto-release manufacturing orders
Select one of these options:

- **Yes**: Click to release manufacturing order items at the end of the planning run
- **No**: Click to not perform manufacturing order auto release

This option is available when MRP is interfacing to IM.

Auto-release purchase orders
Select one of these options:

- **Yes**: Click to release purchase order items at the end of the planning run
- **No**: Click to not perform purchase order auto release

This option is available when Purchasing is installed.

Auto-release intersite orders
Select **`By auto release code`** or **`All`** to auto-release intersite orders at the end of the planning. This option is available when ISL and MISL are installed.

Auto-reschedule manufacturing orders
Select one of these options:

- **Yes**: Click to automatically reschedule manufacturing order items
- **No**: Click to not reschedule manufacturing orders

This option is available when MRP is interfacing to IM.

Auto-reschedule purchase orders
Select one of these options:

- **Yes**: Click to automatically reschedule purchase orders
- **No**: Click to not reschedule purchase orders

This option is available when Purchasing is installed.

Auto-reschedule schedules
Select one of these options:

- **Yes**: Click to automatically reschedule REP production schedules
- **No**: Click to not reschedule REP production schedules

This option is available when REP is installed.

Planning run type
Select one of these values:

- **`Full planning run – Generation`**: Select this option to perform a planning run covering all items planned by MRP. Planned orders are replanned, except for firm planned orders, and dependent requirements are regenerated.
- **`Full planning run – Net change`**: Select this option to perform a planning run covering all items planned by MRP. Note that the planning run starts with only those items that have had activity since the last planning run.

  If you maintain horizon values, other than release and review days, a status message is issued stating that this warehouse was not planned because all items have become active.

  If your system is not tailored for Net change planning, a status message is issued.
- **`MLI planning run – Generation`**: Select this option to perform a planning run covering only the bill of material levels you requested during planning run execution options.
- **`MLI planning run – Net change`**: Select this option to perform a planning run covering only the bill of material levels for master level items, as described in the **`MLI planning run – Generation`** option. Planned orders are replanned and requirements regenerated, as described in the **`Full planning run – Net change`** option.

  If your system is not tailored for Net change planning, an error message is issued.

5 Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.
6 Click **Submit**.

Running the Publish job

Use the Publish host job to send current information, for selected warehouses, from XA to specified destinations using System-Link. You can choose to publish a single warehouse, manually selected warehouses, or warehouses in a subset. For more information, see your System-Link administrator.

1 Select **File > Host Jobs**.
2 Click the **Publish** tab.

3 Select the **Execute** check box.

4 Complete the fields including this information:

Replication destination
Specify the System-Link destination to which to send the warehouse information. If you leave the replication destination blank, the replication destination specified for the individual warehouses is used.

5 Optionally, click the **E-mail** tab, then specify the information for the email that confirms the execution of this host job.

6 Click **Submit**.

You can track the progress of the Publish host job in the Transaction Status object. Troubleshooting logs may display in the Transaction Status when logging is configured in System-Link by your administrator.

Chapter 29: Work schedule

The Work Schedule object contains start, end, break and lunch times for Time and Attendance and job shifts.

These times are used to calculate shift length, variance, and break times that are used in a number of inquiries and calculations. For example, an employee status found on the **Last Reported** view of the **Employee Summary** list page is considered an inquiry.

Shift date and time from a work schedule is used to determine employee status. Information from the work schedule is used to calculate elapsed time, match and link labor transactions, and determine ON for OF only reporting.

The Work Schedule object is active when OBPM and PMC are installed.

Variance time

Variance is the time lost between the end of one job and the beginning of the next. Variance time is the sum of the unreported or lost time between jobs. The variance time is calculated by subtracting the reported time from a balancing value.

A balancing value is calculated for each employee and is determined by the payment method specified in the work schedule for the employee. For pay by time and attendance, the sum of time and attendance elapsed times is used. For pay by job, the adjusted earliest job-on time is subtracted from the adjusted latest job-off time to create the balancing value.

Variance time is calculated by taking the balancing value and subtracting the total of these times:

- Job time of the employee
- Total of the paid breaks extracted
- Amount of lunch extracted

Unpaid breaks are not used for balancing time or for variance calculations. The unpaid breaks are used to reduce the individual job times in the balancing value.

After the variance is calculated, the variance is then compared to the variance limit. If the calculated variance is less than or equal to the variance limit, the calculated variance is awarded. When pay is by time and attendance, the entire variance is awarded. When pay is by job, no variance is awarded when the limit is exceeded.

Creating work schedules

1. Select **Production > Monitoring > Administration > Work Schedule > Maintain > Create**
2. Specify this information:

   Work schedule
   Specify a value between 001 and 999.

   Pay basis
   Select the option that indicates how pay is calculated for this employee. These values are valid:
   - **`Time and attendance only`**: Select this option if these conditions are true:
     - Employees are paid according to time and attendance records
     - You do not want order activity passed to payroll for the Order Distribution Register
   - **`Time attendance with job detail`**: Select this option if these conditions are true:
     - Employees are paid according to time and attendance records
     - You do want order activity passed to payroll for the Order Distribution Register
   - **`Job`**: Select this option if employees are paid by job time records

3. Click **Create**.

   If you select **Preview before create**, you can specify additional information on the **General** card tab.

Deleting a work schedule

If a work schedule is associated with employee records, then you cannot delete the work schedule.

1. Select the work schedule.
2. Select **Maintain > Delete**.
3. Click **Yes**.

Printing a Work Schedule List report

Use the Work Schedule List report to print a work schedule.

1. Select **Production > Order Based > Monitoring > Administration > Work Schedule > File**.
2. Optionally, select a work schedule.
3. Select **File > Host Print**
4. Select the **Print** check box..
5. Complete the fields on the **Content** tab.
6. Select the **E-mail** tab, then specify the information.
7. Optionally, select the **Attachments** tab to add attachments.

8 Click **Submit**.