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Setting Up Advanced Manufacturing

The NetSuite Advanced Manufacturing SuiteApp extends NetSuite manufacturing routing to provide shop floor and project control, multi-site facility management, finite capacity planning, lot and serial control, bill of materials, and improved data collection. Further refine your manufacturing process by accounting for downtime and loss, adding labor codes, defining locations, and capturing shop floor data on your company's mobile devices.

To set up Advanced Manufacturing, you must have a NetSuite account with the Advanced Manufacturing SuiteApp installed. This post-implementation reference guide is intended for administrators and describes the core manufacturing and advanced manufacturing features that must be configured, in conjunction with NetSuite Professional Services.


Use the following topics as a guide to setting up your Advanced Manufacturing SuiteApp with your NetSuite account:

- Configuring Advanced Manufacturing Prerequisites
- Defining Administration Settings
- Mobile Devices
- Configuring Assemblies and Routings
- Creating Advanced Manufacturing Records
- Advanced Manufacturing Administration Glossary
Configuring Advanced Manufacturing Prerequisites

Your NetSuite Professional Services Consultant works with your NetSuite Administrator to set up and configure the Advanced Manufacturing SuiteApp so that it can leverage important NetSuite data.

**Note:** Do not change these features and preferences after they are enabled.

For more information on how to enable prerequisite features and preferences in NetSuite, see the following:

- Prerequisite Features and Accounting Preferences
- Prerequisite Records
- CSV File Uploads

Prerequisite Features and Accounting Preferences

For more information about enabling features and preferences, see the following:

- Enabling Features
- General Accounting Preferences
- Order Management Accounting Preferences

**To enable prerequisite features:**

1. Go to Setup > Company > Enable Features.
2. On the **Company** subtab, check the following boxes:
   - Locations
   - Projects
   - Project Management
   - Multiple Units of Measure
   - Inline Editing
   - File Cabinet
3. On the **Accounting** subtab, check the following boxes:
   - Accounting
   - A/R
   - A/P
4. On the **Transactions** subtab, check the following boxes:
   - Sales Orders
   - Purchase Orders
   - Advanced Shipping
   - Pick, Pack and Ship
5. On the **Items & Inventory** subtab, check the following boxes:
   - Bar Coding and Item Labels
   - Inventory
   - Assembly Items
   - Work Orders
   - Serialized Inventory
   - Lot Tracking
   - Bin Management
   - Advanced Bin/Numbered Inventory Management
   - Demand Planning
   - Manufacturing Work in Process
   - Manufacturing Routing and Work Center

6. On the **CRM** subtab, check the **Sales Force Automation** box.

7. On the **SuiteCloud** subtab, check the following boxes:
   - Item Options
   - Custom Records
   - Client SuiteScript
   - Server SuiteScript
   - SuiteSignOn

8. Click **Save**.

**To set accounting preferences:**

1. Go to Setup > Accounting > Accounting Preferences.

2. Click the **Order Management** subtab.

3. Under the **Work Orders** section, choose one of the following in the **Default Work Status** field:
   - **Firm Planned** — Firm orders cannot be rescheduled.
   - **Open Planned** — Open orders can be rescheduled.
   - **Released** — Any work order in a Firm Planned state must be set to Released state to commit items to it.

4. In the **Check Completed Quantity in Prior Operations During Operation Completion** field, choose one of the following:
   - **No Verification** — Choose this option to not receive verification warnings.
   - **Require Confirmation before Saving** — Choose this option to receive verification warnings. The completed quantity can be greater than the previous completed quantity after the warning is acknowledged.
   - **Do Not Allow Saving** — Choose this option to require that the completed quantity is not greater than the previous completed quantity.

5. In the **Default Scheduling Method** field, choose the default method set on work orders created manually and by automated supply planning.

6. Click **Save**.
Prerequisite Records

After enabling important features and preferences, set up the following NetSuite records to work with Advanced Manufacturing records:

- Locations
- Bins
- Routings
- Manufacturing Cost Templates

Some Advanced Manufacturing records require a reference record to draw data from. For example, an Advanced Manufacturing location must refer to a NetSuite plant or warehouse location record that has the same name.

Locations

Location records isolate transaction information for individual manufacturing plants and warehouses. Advanced Manufacturing extends location information to provide added detail about the organization. For example, departments, work centers, and assets.

Each advanced manufacturing location record must have a matching NetSuite location record with the same name.

Before creating an advanced manufacturing location, you must create a manufacturing location. For more information, see the help topic Creating Locations.

Bins

Bins enable manufacturers to track inventory within their plants or warehouses. You must create at least two bins for each Advanced Manufacturing location. Any items consumed or produced from work orders must be set up to use bins.

For more information, see the help topics Creating Bin Records and Setting Up Item Records for Bins.

Routings

Routing and work center records enable you to schedule and record manufacturing activities for complex work orders that require multiple teams of employees or work centers. For example, Advanced Manufacturing records such as location, work bench, work order completions, and cost templates rely on NetSuite routing data.

For more information, see the help topic Manufacturing Routing.

Manufacturing Cost Templates

The Advanced Manufacturing SuiteApp uses conventional work orders, but does no cost calculations. The data collected is interpreted based on the location specific work order completion settings. This creates conventional NetSuite transactions which then use cost templates to calculate assembly costs.

A manufacturing cost template is a list of rates that can be associated with completing a specific operation. The template defines the activities that occur and related costs to be recorded each time this step is completed.
1. Advanced Manufacturing gathers the following data:
   - Downtime
   - Material Loss
   - Labor Codes

2. The following manufacturing features then interpret the data:
   - Manufacturing Routing Costing
   - Routing Work Order Completions
   - Manufacturing Cost Templates

CSV File Uploads

The NetSuite implementation team provides a Microsoft Excel workbook that works with the CSV Import Assistant to configure your Advanced Manufacturing SuiteApp. The workbook references items by name and number fields.

Align CSV file uploads with Advanced Manufacturing preferences to ensure the CSV uploads are interpreted correctly. This preference can be set temporarily during the CSV data import process and then reset.

To align CSV file uploads to Advanced Manufacturing preferences:

1. Go to Setup > Company > General Preferences.
2. To upload item data using CSV import, clear the Show Display Name with Item Codes box.
3. Click Save.

For more information about uploading content to NetSuite using CSV import, see the help topic CSV Imports.

To access the Advanced Manufacturing CSV templates, contact NetSuite Professional Services.
Defining Administration Settings

After prerequisite features and preferences are enabled, in Advanced Manufacturing SuiteApp Administration Settings, define how your employees interact with Advanced Manufacturing.

To set up the Advanced Manufacturing SuiteApp, configure the following:

- **Advanced Manufacturing Administration Records**
- **Work Order Completion Settings**
- **Mass Asset Assignment**
- **Mobile Devices**

### Advanced Manufacturing Administration Records

The Advanced Manufacturing Administration page enables you to track items using lots or serial numbers, move items between bins, enable subsidiaries, or display units of measure. Identifiable icons enable you to track work orders through the entire manufacturing process.

To learn more, see the [Advanced Manufacturing Administration Records video](#).

**To create an administration record:**

1. Go to Advanced Manufacturing > Administration/Setup > Admin > New.
2. Enter your **NetSuite Account** number.
   - To locate your NetSuite Account number, go to Setup > Company > Company Information. The account ID field is located near the bottom of the right column.
3. Check the following applicable boxes:
   - **Lot Control Enabled** – Use lot numbers to track items through the manufacturing process.
   - **Serialization Enabled** - Use serial numbers to track items through the manufacturing process.
   - **Bins Enabled** - Use bins for assembly and inventory items.
   - **Subsidiary Enabled** - If you are using a OneWorld account, enable subsidiary data management.
   - **Units Enabled** - Display the unit of measure from the bill of materials on the NetSuite travelers BOM.
4. In the **Work Order Management Images** pane, select icons to identify states in the manufacturing process.
   - For more information on how to select icons, see [Work Order Management Images](#).
5. In the **Scanner Shipping Status** list, select the item fulfillment status.
   - For more information, see the help topic [Pick, Pack, and Ship with Transfer Orders](#).
6. If the NetSuite Warehouse Management System (WMS) Advanced SuiteApp is installed in your NetSuite account, check the **WMS Installed** box.
7. Click **Save**.

### Work Order Management Images

The following table displays the work order management images setup as recommended by your NetSuite Professional Services Consultant.
To add work order management images:

1. To access the images, go to Advanced Manufacturing > Documentation > File Folders.
   Alternatively,
2. In the File Cabinet, go to **Suite Bundles** > **Bundle** (bundle number) > **src** > **Images**.

<table>
<thead>
<tr>
<th>Field</th>
<th>Name</th>
<th>Icons</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Status Icon</td>
<td>red_dot.png</td>
<td><img src="red_dot.png" alt="red_dot.png" /></td>
<td>Order information is incomplete and the order cannot be fulfilled.</td>
</tr>
<tr>
<td>Planned Firmed Status Icon</td>
<td>red_dot.png</td>
<td><img src="red_dot.png" alt="red_dot.png" /></td>
<td>Order information is complete and accurate, but the order is not in the production schedule.</td>
</tr>
<tr>
<td>Release Status Icon</td>
<td>blue_dot.png</td>
<td><img src="blue_dot.png" alt="blue_dot.png" /></td>
<td>Order is released to the plant for assembly and packaging.</td>
</tr>
<tr>
<td>In Process Status Icon</td>
<td>yellow_dot.png</td>
<td><img src="yellow_dot.png" alt="yellow_dot.png" /></td>
<td>Order is being built or assembled.</td>
</tr>
<tr>
<td>Completed Status Icon</td>
<td>green_dot.png</td>
<td><img src="green_dot.png" alt="green_dot.png" /></td>
<td>Order has finished processing and is ready for packaging and shipping.</td>
</tr>
<tr>
<td>Closed Status Icon</td>
<td>green_dot.png</td>
<td><img src="green_dot.png" alt="green_dot.png" /></td>
<td>Order has shipped.</td>
</tr>
<tr>
<td>On Hold Status Icon</td>
<td>red_dot.png</td>
<td><img src="red_dot.png" alt="red_dot.png" /></td>
<td>Order has been entered but cannot be scheduled until an issue is resolved.</td>
</tr>
<tr>
<td>Yellow Warning</td>
<td>Info.png</td>
<td><img src="Info.png" alt="Info.png" /></td>
<td>Warns that capacity is near or exceeds 85%.</td>
</tr>
<tr>
<td>Green Inwork</td>
<td>jobActive.png</td>
<td><img src="jobActive.png" alt="jobActive.png" /></td>
<td>Alerts that production results have been collected and the work order operation is in process.</td>
</tr>
<tr>
<td>Red Warning</td>
<td>InfoRed.png</td>
<td><img src="InfoRed.png" alt="InfoRed.png" /></td>
<td>Warns that the work order process is over capacity.</td>
</tr>
<tr>
<td>Calendar Icon</td>
<td>dateChooser.png</td>
<td><img src="dateChooser.png" alt="dateChooser.png" /></td>
<td>Calendar picker icon.</td>
</tr>
</tbody>
</table>

3. Click the icon you want to use.
   A browser window opens.
4. Copy the URL from the browser window navigation bar.
5. Paste the URL into the corresponding **Work Order Images Management** field.
   To learn more, see step 6 in the **Advanced Manufacturing Administration Records** procedure.
6. Repeat steps 2 and 3 for all the icon fields you need to define.

**Work Order Completion Settings**

Work order completion settings enable you to adjust how the Advanced Manufacturing SuiteApp interprets shop floor data when creating manufacturing transactions.

Advanced Manufacturing can automate transactions for both work order issuance (auto-issue) and work order completions (auto-complete).
To learn more, see the [Advanced Manufacturing Administration Settings](#) video

**To configure auto-issue and auto-completions for a location:**

1. Go to Advanced Manufacturing > Administration/Setup > Location Setup.
2. Beside the location you are working in, click **Edit**.
3. Click the **Work Order Completions** subtab.
4. To use work completion settings for assembly items, check the **Allow Assembly Override** box.
5. To initiate work order completions when data is entered for the routing’s last operation, check the **Process Only Last Operation** box. All intermediate operations will be completed and automatically issued one time for all operations following conventional backflush standards.
6. In the **Issuance Timing** field, select one of the following options:
   - **Issue Before Completion** - Run the material transaction before the completion transaction. Material costs are moved to WIP accounts and accumulated into the assembly cost. No costs will remain in the WIP account when the work order is closed. Be careful when staging automatically issued materials. Problems will delay the order assembly generation process.
   - **Issue After Completion** - Run the completion transaction after the material issue transaction. This ensures that automatically issued assembly items are created regardless of whether errors are encountered. If costs remain in the WIP account they must be handled during WO close. Issuance timing helps organizations avoid delays in assembly item inventory availability. This ensures that automatically issued materials are properly staged.

   **Skip Component** is the only **Controlled BOM Issuance** option.
7. In the **Uncontrolled BOM Issuance** field, select one of the following options:
   - **Do Not Issue** - Do not backflush material.
   - **Issue Standard Qty** - Backflush the full quantity and ignore component period settings.
   - **Issue Yield Adjusted Qty** - Issue the yield adjusted BOM quantity. Using backflush means that the components consumed for production are accounted for at the time of confirmation. Component consumption is based on the proportion designated on the original work order and the build quantity.

   For example, when Wolfe Manufacturing assembles a mountain bike, components such as wheels are consumed and issued to the production order automatically by backflushing the system.
8. To determine which bins will be used for material issuance transactions, select one of the following options in the **Bin Lookup Method** field:
   - **Location Bins** - Use one bin at the material issued location and one bin at the completion location.
   - **Work Center Bins** - Use staging bins near the work center.
9. If you selected Location Bins as your bin lookup method, in the **Issue From Bin** list, select a bin to stage material. In the **Complete to Bin** list, select a bin to receive production materials.
10. To automatically examine each component’s issue step and auto-issue setting, check the **Explicit Auto Issue** box.
Clear this box to examine the issue step to determine which components to issue.

**To track scrap:**
1. To track scrap, select **Scrap Records** from the **Scrap Source** list.
2. To choose whether components should be issued when an operation reports scrap, select a **Scrap Issuance** option:
   - **Do Not Issue for Scrap** - Do not issue BOM materials for reported scrap.
   - **Issue for Scrap** - Issue BOM raw material quantities for reported scrap and post the materials costs against the work order.
3. In the **Scrap Handling** field, select one of the following methods:
   - **Do Not Post** - Only record scrap for continuous improvement initiatives.
   - **Post As Scrap** - Record scrap in the NetSuite completion transaction.
   - **Post As Built and Move** - Record scrap as built in the NetSuite completion transaction and then move the assembly to the designated scrap bin.
4. If you selected Post as Built and Move as your scrap handling method, select a **Location Scrap Bin**. This is where scrapped assemblies will be stored.

**To track labor:**
1. Select a **Labor Resource Method** from the list:
   - **Default** - Use the NetSuite routing resource count.
   - **Override** - Specify a resource count.
2. If you selected Override as your labor resource method, enter a **Labor Resource Override** amount. This number must be less than the NetSuite labor value.
   The NetSuite labor value is set to the work order definition which can then be seen on any routing that uses that work center. It also appears on the WO completion transaction, where the value can be changed.
3. To determine how Advanced Manufacturing reports work order completion labor setup time, select a **Labor Setup Method**:
   - **Default** - Use NetSuite routing setup time and standard cost.
   - **Override** - Specify a fixed setup time associated with labor activities and costs.
   - **Use Downtime Records** - Track time against the selected labor setup downtime category.
   - **Use Labor Records** - Track time against the selected labor setup labor code category.
4. If you selected Override as your labor setup method, enter a **Labor Setup Override (mins)** time. For example, to set the labour setup override time to five minutes, enter 5.
5. If you selected Downtime as your labor setup method, select a **Labor Setup Downtime Category** from the list.
6. If you selected Labor as your labor setup method, select a **Labor Setup Labor Code** from the list.
7. Select a **Labor Run Method**:
   - **Default** - Use NetSuite routing setup time and standard cost.
   - **Override** - Specify a fixed setup time associated with labor activities and costs.
   - **Use Result Records** - Use production time (start and stop) to record labor against the work order.
   - **Use Labor Records** - Record actual hours against the work order.
8. If you selected Override as your labor run method, enter a **Labor Run Override** time. For example, to set the labour run override time to five minutes, enter 5.

**To track machines:**

1. Select a **Machine Resource Method** from the list:
   - **Default** - Use the NetSuite routing machine count.
   - **Override** - Specify a resource count associated with machine activities and costs.

2. If you selected Override as your machine resource method, enter a **Machine Resource Override**. This number must be less than the NetSuite machine value.

3. To determine how Advanced Manufacturing reports machine setup time during work order completions, select a **Machine Setup Method**.
   - **Default** - Use NetSuite routing setup time and standard cost.
   - **Override** - Specify a fixed setup time associated with machine activities and costs.
   - **Use Downtime Records** - Track time against the selected Machine Setup Downtime category.
   - **Use Labor Records** - Track time against the selected Machine Setup Labor Code category.

4. If you selected Override as your machine setup method, enter a **Machine Setup Override (mins)** time. For example, to set the machine setup override time to five minutes, enter 5.

5. If you selected Downtime as your machine setup method, select a **Machine Setup Downtime Category** from the list.
   All time associated with the a WO operation downtime category will be totaled and entered on the completion as the machine setup time.

6. If you selected Labor as your machine setup method, select a **Labor Setup Labor Code** from the list.
   All time associated with the selected WO operation labor code will be totaled and entered on the completion as the machine setup time.

7. Select a **Machine Run Method**.
   - **Default** - Use NetSuite routing setup time and standard cost.
   - **Override** - Specify a fixed run time.
   - **User Result Records** - Use production time (start and stop) against the work order to record labor.

   If you selected User Result Records, the duration on all WO operation result records will be totaled to determine the total machine run time entered on the completion.

8. If you selected Override as your machine run method, enter a **Machine Run Override (mins)** time. For example, to set the machine run override time to five minutes, enter 5.

9. Click **Save**.

**Work Bench Validation**

During the work order creation process, the Advanced Manufacturing SuiteApp searches for work bench records that are associated with the selected routing. Missing work bench records could cause some Advanced Manufacturing features to malfunction or fail.

The following procedure describes how to enable Advanced Manufacturing to automatically create missing work bench records that use manufacturing routing information.
To enable work bench validation:

1. Go to Customization > Scripting > Scripts.
3. Click the Deployments subtab.
4. Click AM Validate Work Bench Records.
5. Click Edit.
6. Clear the Deployed box.
7. Click Save.

Mass Asset Assignment

After work bench records are created, you must associate them with one or more assets from the affiliated work center. Use the mass update feature to assign all of your work center assets to a set of work bench records.

For more information, see the help topic Mass Changes or Updates.

To assign work center assets to a set of work bench records:

2. Expand Custom Updates.
3. Click AM Workbench Asset Mass Update.
4. Enter a Title of Action.
5. On the Criteria subtab in the Filter list, select Assembly Item.
6. On the Mass Update popup window, select the items you want to update.
7. Click Set and then click Save.

Setting Language Preferences

NetSuite supports multiple languages which enables you to display Advanced Manufacturing in your preferred language.

To enable multiple languages:

1. Go to Setup > Company > Setup Tasks > Enable Features.
2. On the Company subtab, in the International pane, check the Multi-Language box.
3. Click Save.

To select your language preference:

1. From your NetSuite dashboard, go to Home > Set Preferences.
2. On the General subtab, in the Localization section, select a Language.
4. Click **Save**.

   This preference does not affect others with access to your account. For the best results when viewing translated NetSuite pages, set your browser to view UTF-8 encoded pages.
   - In Internet Explorer, go to **View > Encoding > Auto-Select**.
   - In Firefox, go to **Tools > Options**. In the General options, click Languages. In the Default Character Encoding field, select Unicode (UTF-8).

To learn more, see the help topic **Choosing a Language for Your NetSuite User Interface**

### Mobile Devices

Employees who are assigned Administrator or Data Scanner roles can log in to the Advanced Manufacturing SuiteApp from a tablet or scanner.

### Tablets

Before a tablet can be used, a tablet data collection configuration record must be created and a tablet data role set up.

The tablet data collection configuration establishes the content, order, and sorting for each column in the tablet work queue table. This section describes the fields and default values that enable the tablet to function in its standard configuration.

### Tablet Requirements

- At least 256 MB flash memory
- Android 4.1 or higher
- 1D barcode scanner
- 4 inch or larger touch screen
- 802.11a/b/g enabled
- Bluetooth enabled
- HTML 5 and Javascript enabled browser (TLS 1.2 compliant)
- Interactive Sensor Technology (IST)
- Ruggedized or semi-ruggedized (optional)

### To create a tablet data collection configuration record:

1. Go to **Advanced Manufacturing > Administration/Setup > Tablet Data Collection Configuration > New**.
2. Enter a **Name** that describes the tablet setup or location. For example, Kitchener.
3. Select the **Location** where these settings are valid.
   
   Each location may require different tablet settings.
4. In the **Saved Search** field, enter **customsearchiqitydefaultoperations**. This internal ID displays entries in the work queue.
   
   You can use this search to display additional columns in the work queue. The internal ID entered in this field must be associated to a search against transaction records and be filtered to only display work orders.
5. In the **Work Order Field**, enter **tranid**.
   This work order number internal ID should only change if the saved search (step 4) is not based on
   work order transaction records.

6. In the **Operation Field**, enter **sequence**.
   This operation sequence number internal ID should only change if the saved search (step 4) is not
   based on work order transaction records.

7. In the **Work Center Field**, enter **manufacturingworkcenter**.
   This work center internal ID should only change if the saved search (step 4) is not based upon work
   order transaction records.

8. In the **Date Field**, enter the work order planned start date internal ID.

9. Optionally, in the **Date Field Join** field, enter **manufacturingoperationtask**. This is the joined
   record internal ID that contains the start date field.

10. In the **Quantity Field**, enter **quantity**.
    This work order quantity internal ID should only change if the saved search (step 4) is not based
    upon work order transaction records.

11. In the **Field Type Map** field, enter the comma separated string of `<Internal ID>:<type>` entries
    where `<Internal ID>` matches the ID fields in steps 5 to 10 and includes the word `item`. Type
    represents one of three values: string, number, or date. Enclose the list in curly braces as shown in
    the default next.

    By default enter `{"trandate":"date", "tranid":"string", "sequence":"string",
    "manufacturingworkcenter":"string", "item":"string", "quanity":"number", "built":"number"}`.

12. To display a logo in the upper left corner of the tablet interface, in the **Logo Url** field, enter the
    image file URL from the file cabinet.

13. To display labor codes associated with the skill codes (assigned to each operation’s associated work
    bench record), check the **Filter Labor Code By Operation** box.

14. Click **Save**.

**To assign a tablet role to an employee:**

1. Go to Lists > Employees > Employees.
2. Click **Edit** beside the employee using the tablet.
3. In the **Classification** section, select the **Location** where the employee will be using the tablet.
   The Location must match the AM Tablet Settings location.
4. Click the **Access** subtab.
5. Check the **Give Access** box.
6. On the **Roles** subtab, select **Data Scanner** from the **Role** list.
7. Click **Add**.
8. Click **Save**.

For more information about changing tablet date and language settings, see the help topic **Setting
General Account Preferences**.

**Scanners**

Employees using scanners must have an active NetSuite email address and password recorded in their
employee record. The employee using the scanner must be assigned Administrator or Data Scanner role.
RF Scanner Requirements

RF mobile devices are used to post real-time inventory and manufacturing updates to your NetSuite account.

Your RF mobile devices should include the following:

- 256 MB flash memory or higher
- Android 4.1 or higher
- 1D barcode scanner
- 4 inch or larger touch screen
- 802.11a/b/g enabled
- Bluetooth enabled
- HTML 5 and JavaScript enabled browser (TLS 1.2 compliant)
- Interactive Sensor Technology (IST)
- Ruggedized or semi-ruggedized (optional)

To configure your NetSuite account to use a scanner, you must first:

- Set up the scanner URL.
- Set up employees for scanners.
- Configure a scanner.

**Note:** Contact your account representative for assistance with deploying additional scanner features.

**To set up the scanner URL:**

1. Go to Customization > Scripting > Scripts.
2. If necessary, click the + icon to expand the Filters pane.
3. In the Type list, select Suitelet.
4. In the Scripts list, beside AM Scanner Login, click View.
5. Click the Deployments subtab.
6. Click Scanner Login.
7. On the Script Deployment page, copy the External URL link.
8. Enter the URL address into your scanner's browser.

**To set up employees for scanners:**

1. Go to Lists > Employees > Employees.
2. Click Edit beside the employee using the scanner.
3. Click the Advanced Manufacturing subtab.
4. Optionally, enter the employee ID number in the Badge Number field.
   The badge number is displayed in Employee field on the scanner.
5. Click the Access subtab.
6. Check the Give Access box.
7. On the Roles subtab.
8. Select Data Scanner from the Role list.
9. Click Add and then click Save.

To configure a scanner feature:
1. Go to Advanced Manufacturing > Administration/Setup > Scanner Feature Configuration > New.
2. Select a Custom Form from the list.
3. Enter a scanner Name.
4. Enter a Description of this scanner.
5. Check the Inactive box if you do not want this BOM to show in search lists on records and forms.
   Clear this box if you want this BOM to show in lists.
6. Check the Is Enabled box.
7. Optionally, in the Data field, enter configuration data as a JSON object.
8. Click Save.

To assign employee data scanner access:
1. Point to the Account Header to see a list of roles assigned to you.
2. Click View All Roles.
3. In the Choose Role page Default Role column, check the box beside the Data Scanner role.
   The default role preference is automatically saved. Only one role can be selected as the default role.

Express Production
Express Production is not enabled by default. A company can use Express Production to enable two or more employees to share a scanner and record each employee’s run time separately. The employee badge number must be recorded in the employee record in NetSuite.

To enable express production
1. Go to Advanced Manufacturing > Administration/Setup > Scanner Feature Configuration > New.
2. Select a Custom Form from the list.
3. Enter a Express Production as the scanner Name.
4. Check the Is Enabled box.
5. Check the Inactive box if you do not want this BOM to show in search lists on records and forms.
   Clear this box if you want this BOM to show in lists.
6. Click Save.

LPN Action
LPN (License Plate Number) Action is not enabled by default. LPN Action enables companies to create production records for lot controlled items, move items from one bin to another bin, and merge multiple LPNs.
To enable LPN action:

1. Go to Advanced Manufacturing > Administration/Setup > Scanner Feature Configuration.
2. Select a Custom Form from the list.
3. Enter a LPN as the scanner Name.
4. Check the Is Enabled box.
5. Check the Inactive box if you do not want this BOM to show in search lists on records and forms. Clear this box if you want this BOM to show in lists.
6. Click Save.

Setting up Conventional Work Orders


**Important:** Before you create a conventional work order, create NetSuite Work Center and an Advanced Manufacturing Work Center.

To learn more, see the help topic Creating Manufacturing Work Centers or Groups.

To enable pre-requisite features:

1. Go to Setup > Company > Enable Features.
2. On the Company subtab, check the Locations box.
3. Click the Items & Inventory subtab.
4. Check the Manufacturing Routing and Work Center box.
   Conventional work orders do not use routings but are associated to work centers through new fields on the record.
5. Optionally, check the Bin Management box.

To setup your tablet:

1. To set up conventional work orders to work with your tablet configuration, go to Advanced Manufacturing > Administration/Setup > Tablet Data Collection Configuration.
   To learn more, see Mobile Devices
2. Beside your tablet set up, click Edit.
   The AM Tablet Settings form displays your tablet configuration.
3. To enable the tablet to use conventional (non-routing) work orders, check the Show Conventional Work Orders box.
4. In the Conventional Work Orders Date Field, enter the field you want to display in the tablet work queue.
   For example, startdate or finishdate.
5. Click Save.

To setup a work center:

1. To set up work orders to use with conventional work orders, go to Lists > Relationships > Groups.
2. Select the work center group you want to use conventional work orders with.
   To learn more, see the help topic Creating Manufacturing Work Centers or Groups
3. In the Advanced Manufacturing subtab, select the Location where you want to use Conventional Work Orders.
   This restricts conventional work order use to the selected location.
4. Optionally, select an Issue Bin to identify the bin providing components.
5. Optionally, select the Assembly Bin to identify the bin receiving the finished goods.
6. Click Save.

To associate a work order to a work center:

1. To create a Work Order, go to Transactions > Manufacturing > Enter Work Orders.
2. Complete the Work Order form.
   To learn more, see the help topic Entering an Individual Work Order
3. Select the AM Work Center to associate with this work order.
4. Click Save.
Configuring Assemblies and Routings

A manufacturing routing is a list of the steps required to build an assembly item. Advanced Manufacturing refers to NetSuite routings to determine the work center, cost template, labor resources, and machine resources to be used in the manufacturing process. Routings are unique for each assembly item and can be shared across multiple locations.

To learn more, see the Configuring Assemblies and Routings video.

You must create the following links between NetSuite routings and Advanced Manufacturing:

- Advanced Manufacturing Locations
- Advanced Manufacturing Work Centers
- Manufacturing Work Benches

Advanced Manufacturing Locations

Each advanced manufacturing location record must have a matching NetSuite location record with the same name.

Before creating an advanced manufacturing location, you must create a manufacturing location that the advanced manufacturing location can refer to. For more information, see the help topic Creating Locations.

To create an advanced manufacturing location:

1. Go to Advanced Manufacturing > Administration/Setup > Admin > Location Setup > New.
2. Select a Location from the list.
3. In the AM Location field, enter the text exactly as it appears in the Location field.
4. On the Departments subtab, enter an AM Manufacturing Department Name.
   For example, enter Machine Shop.
5. Enter a Description of the department.
   To add more departments, click Add.
6. Click Save.
   The Work Center subtab only appears after the location is saved.

Advanced Manufacturing Work Centers

A work center is a group of resources (people, assets, or both) that perform a specific step in the manufacturing process. After you have defined a work center group, that work center can be assigned to cover specific steps in the manufacturing process. For example, your assembly process might require a manufacturing group, a quality assurance group, and a packing machine group.

You can use shop calendar data to help define rough cut capacity parameters.

Before creating an advanced manufacturing work center, you must create a manufacturing work center. For more information, see the help topic Creating Manufacturing Work Centers or Groups.

To create advanced manufacturing work centers:

1. Go to Advanced Manufacturing > Administration/Setup > Admin > Location Setup.
2. Click **Edit** beside the location you want to create a work center for.
3. Click the **Work Centers** subtab.
4. Click **New AM Work Center**.
5. Select a **NetSuite Work Center** from the list.
6. In the **AM Work Center** field, enter the text exactly as it appears in the NetSuite Work Center field.
7. Click the **Shop Calendar** subtab.

**To create a shop calendar:**

1. Enter a **Start Time**. The time the work day is scheduled to begin.
2. Enter an **End Time**. The time the work day is scheduled to finish.
3. Enter total operating **Hours**.
   - For example, if a Monday shift starts at 09:00 and ends at 16:30, Monday operating hours are 7.5.
   - For days that your shop is not operating, enter 0.
   - Deduct lunch break time from the total unless the work center continues to run during the break.
   - Schedule half days, off days, or work stoppages.
4. Repeat the previous three steps for each of the days the work center operates.
5. Click the **RCP Parameters** subtab.

**To define rough cut capacity plan parameters:**

1. In the **Machine Count** field, enter the number of machines available to be used.
   - This value must match the NetSuite work center Machine Resources value.
2. In the **Head Count** field, enter the number of workers available to use.
   - This value must match the NetSuite work center Labor Resources value.
3. In the **Hours per Day** field, enter the total man hours available in the work center each day (hours per day x head count).
   - This number may be less than the end time minus the start time if breaks or lunches affect total work center operating time.
4. In the **Labor Hours per Man Day** field, enter the number of hours the work center is active.
5. In the **Week Days** field, enter the number of days the location work center runs per week.
6. Click **Save**.
   - The Assets subtab appears after the work center is saved.
7. Click the **Assets** subtab.

**To add assets:**

1. To add an asset, click **New AM Asset**.
2. Enter a descriptive **Asset Name**.
   - Assets must be named uniquely across all subsidiaries and locations.
3. In the **Web Service Name** field, enter the text exactly as it appears in the Asset Name field.
4. In the **Department** list, select the department created in your NetSuite Manufacturing account.
5. Click **Save**.
Manufacturing Work Benches

Manufacturing work bench records extend NetSuite routing records to help you refine your manufacturing process by defining lag times, assigning assets, and incrementing batch production. Each routing step is represented by a unique work bench record.

To create a manufacturing work bench:

1. Go to Advanced Manufacturing > Administration/Setup > Manufacturing Work Bench > New.
2. From the NetSuite Routing Name list, select the NetSuite routing record that the work bench records are extending.
3. Select the Assembly Item that is associated with the selected NetSuite routing.
4. Enter an Operation Seq number from the routing record.
   The Advanced Manufacturing SuiteApp sequence number must match the NetSuite sequence number. From the assembly you can view the routing listing each operation by name and sequence number.
5. Select an Operation Name that matches the NetSuite operation name for the routing and operation sequence.
6. Select a Work Center that matches the NetSuite work center name.
7. In the MFG Work Bench field, enter a unique work bench record ID. This field does not support special characters.
   You should use the NetSuite routing name combined with the operation sequence. For example, Final Assembly.
8. To designate this operation’s manufacturing activity type, select a Process Type from the list.
9. To include instructions with the work bench, click the Work Instructions subtab, and then enter the information in the Process Steps field.
10. To attach a document to the workbench, click the Files subtab, and then click the Attach File field.
11. Click Save.

To complete the work bench Planning subtab:

1. In the Rates section enter a Std Rate (Min/Unit).
   The STD RATE (Unit/HR) is automatically populated.
2. Enter a Unit of Measure.
3. In the Lead Time and Off Sets section, enter a Setup Time (min) that matches the routing record setup time.
4. To determine how to schedule this operation to lag behind its predecessor, select a Lag Type.
5. In the Lag Value field, enter either the number of minutes or units to quantify the lag offset.
6. In the Hold Time field, enter the number of minutes that the asset should remain unavailable following a production run.
7. If this operation is batched, complete the following steps on the Batching subtab:
   a. In the Batch Minimum field, enter the smallest batch value that can be produced.
   b. In the Batch Maximum field, enter the largest batch value that can be produced.
      Batch minimum and maximum values must be greater than zero and in the same units as the assembly stock unit of measure.
   c. In the Incremental Qty field, enter the incremental batch size to step from a minimum batch to a maximum batch.
Use this value to determine the last batch size needed to fulfill a work order quantity.

d. If multiple batches can be processed at the same time, enter the Concurrent Assets allowed to run on a single work order.

The value must not exceed the total number of assets associated with the work center or this workbench record.

8. Click Save.

To complete the Assets subtab:

1. Select a Default or AM Asset View.
2. Select an AM Mfg Work Bench Asset option.
5. Select a Priority for this asset.
6. Click Save.

To complete the Labor Requirement subtab:

1. Select a Default or AM Labor Requirements View.
2. Select an AM Mfg Work Bench Labor option.
3. To Add an Advanced Manufacturing Work Bench Labor, click New AM Mfg Work Bench Labor.
5. Select a labor Allocation.
6. Enter the number of employees, or Head Count assigned to this work bench.
7. Enter the Labor Required.
8. Click Save.

To complete the Work Instructions subtab:

1. Select a Default or AM Work Instructions View.
2. Select an AM MFG Work Bench Wrk Inst option.
3. To Add an Advanced Manufacturing Work Bench Labor, click New AM Mfg Work Bench Wrk Inst.
4. In the AM Mfg Work Bench Wrk Inst form, enter a Display Sequence number.
5. Enter Work Instructions to accompany this work bench.
7. Click Save.

To complete the Quality/Inspection subtab:

1. Select a Default or AM WB Test Assignment View.
2. Select an AM MFG Work Bench Tests option.
3. To Add an Advanced Manufacturing Work Bench Labor, click New AM Mfg Work Bench Wrk Inst.
4. In the AM Mfg Work Bench Tests form, Operation Task Inspection section, select an Item.
5. Select an optional Test Name.
If you select a test, the Inspection Method, Type, and Results field are automatically populated.

6. Select an **Inspection Method**.
   For example, Visual Count or Measurement.

7. Enter a brief **Description** of the test.

8. Enter the name of the **Quality Management System Reference**.

9. Enter the **Operations Inspection Sequence** number.

10. In the **Measurement Standards and Attributes** section, select an **Inspection Type**.

11. Select an **Inspection Results** measure.

12. Enter a **Sample Size**.

13. Select a **Sample Frequency**.

14. Select an **Evaluation Criteria**.

15. Enter a **Minimum Percent** number.

16. Enter a **Target Value**.

17. Enter an **Upper Control Limit** and **Lower Control Limit**.

18. Select a **Unit of Measure**.

19. Select a **Default Corrective Measure**.

20. In the **Parameters** section, if this is a pass/fail test, check the **Pass/Fail Test** checkbox.

21. If test pass/fail certification is required, check the **Certificate Required** box.

22. If a test pass/fail signature is required, check the **Signature Required** box.

23. If this test is mandatory, check the **This Test is Mandatory** box.

24. Enter any **Notes** or attach any **Files** you want to accompany this test.

25. Click **Save**.

**To complete the Material Output subtab:**

1. Select a Default or Custom Default **View**.

2. Select an **AM MFG Work Bench Output** option.

3. To Add an Advanced Manufacturing Work Bench Labor, click **New AM Mfg Work Bench Output**.

4. In the **AM Mfg Work Bench Output** form, enter a **Operation Name**.

5. Select a **Coproduct Item**.
   For example, if you were processing beef, a primary or secondary cut is considered a coproduct.

6. Select any **Action Required**.
   For example, inventory adjustment.

7. Enter the output **Quantity**.

8. Select the **Calculation Method**.

9. Enter a **Unit Cost**.

10. Select a **Unit of Measure**.

11. Select an output **Bin**.

12. Enter any **Notes** or attach any **Files** you want to accompany this work bench output.

13. Click **Save**.
Conventional Work Order Plug-ins

NetSuite Advanced Manufacturing 2018.2 provides four plug-ins to help customers better manage their manufacturing workflow. Advanced Manufacturing plug-ins search for inventory details to accelerate data entry and standardize material use. They also help control material consumption and finished good production.

Plug-ins identify which bin to take material from and which bin to send finished items to. If NetSuite bins are not enabled, then the bin plug-in is not called. However, you can use NetSuite to run your operation without bins.

If bins are being used, the plug-in identifies the bin to use for each item. The lot/serial plug-in then determines the lot/serial number information to extract from the selected bin. If the item is associated with a lot/serial number, the plug-in provides details about material consumption and the lot/serial number you want to assign to the finished goods. If an item is not associated with a lot/serial number, the plug-in is not called.

NetSuite enables you to develop alternate implementations of any plug-in to better suit how you generate inventory details for assembly and component items.

To learn more, see the help topic **Managing Plug-ins**

NetSuite 2018.2 provides the following plugins and default implementations:

- **Assembly Item Plug-ins**
- **Bill of Materials Item Plug-ins**

Assembly Item Plug-ins

The assembly item inventory detail is assembled by calling two separate plug-ins, the Assembly Bin and Assembly Lot/Serial number plug-ins.

**Assembly Bin Plug-in**

The assembly bin plug-in searches for bins associated with the assembly item.

1. The plug-in reviews the work center to check whether a **Complete To** bin is assigned to it. If the work center has a bin assigned to it, the plug-in uses that bin.
2. If a completed to bin is not assigned, the plug-in checks the assembly item for a preferred bin. If the preferred assembly has a bin assigned to it, the plug-in uses that bin.
3. If the assembly is not associated with a bin, the plug-in returns a null. The operator then needs to identify a bin during production reporting on the tablet.

**Assembly Lot/Serial Plug-in**

The Assembly Lot/Serial plug-in returns a null to the tablet forcing the operator to provide lot/serial number(s) to complete the transaction.

**Bill of Materials Item Plug-ins**

The Bill of Materials (BOM) plug-in enables you to return one bin or a series of bins. It can draw materials from multiple bins needed to complete the work order.
## Component Item Bin Plug-in

1. The plug-in reviews the work order work center to check whether an **Issue From** bin is assigned to it.
   
   If the work center has a bin assigned to it, the plug-in uses that bin.

2. If an **Issue From** bin is not assigned, the plug-in checks the assembly for a preferred bin. If the assembly has a bin assigned to it, the plug-in uses that bin.

3. If the item does not have a preferred bin, the plug-in searches the location for bins containing the item and orders them from lowest quantity to highest quantity.

4. If no bins are specified, or item not in a bin, the plug-in pulls from inventory from the assigned location.

## Component item Lot/Serial Plug-in

1. This plug-in returns information about lot/serial numbers, for each bin identified, and orders them from the lowest quantity to the highest quantity.

2. If no bins are specified, the plug-in searches for lot/serial numbers, from the assigned location from lowest quantity to highest quantity.

The following table summarizes how the default Advanced Manufacturing plug-ins work:

<table>
<thead>
<tr>
<th>Item uses Bin Controlled</th>
<th>Bin Plug-in</th>
<th>Lot/Serial Plug-in</th>
<th>Available Quantity</th>
<th>Issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use bins controlled</td>
<td>One or more bins (work centers preferred, user defined)</td>
<td>Lot/serial numbers in plug-in bins and their quantities</td>
<td>Total of all lots in bins from plug-in Location quantity</td>
<td>Least quantity lots first from plug-in bins, Least quantity bins first from plug-ins</td>
</tr>
<tr>
<td></td>
<td>Least quantity bin first</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use bins not controlled</td>
<td>One or more bins (work centers preferred, user defined)</td>
<td>NA</td>
<td>Total of all lots in bins from plug-in Location quantity</td>
<td>Least quantity lots first from plug-in bins</td>
</tr>
<tr>
<td></td>
<td>Least quantity bin first</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No bins controlled</td>
<td>NA</td>
<td>Least quantity lot first One or more lots</td>
<td>Total quantity of lots in bins from plug-ins Location quantity</td>
<td>Least quantity lots first from plug-in bins</td>
</tr>
<tr>
<td>No bins not controlled</td>
<td>NA</td>
<td>NA</td>
<td>Location total</td>
<td>No restrictions</td>
</tr>
</tbody>
</table>
Creating Advanced Manufacturing Records

Advanced Manufacturing records compile shop floor data that can help managers and planners review manufacturing process efficiency and then decide whether changes need to be made to improve the process.

To learn more, see the Creating Advanced Manufacturing Records video.

Create the following advanced manufacturing records to help plan and improve the manufacturing process:

- Downtime
- Material Loss
- Labor Codes
- Travelers

Downtime

You can identify areas for process improvement by tracking downtime events that might occur during the manufacturing process.

Downtime categories identify the time an event caused a manufacturing process or operation to stop running. For example, maintenance, repair, or setup.

Downtime reasons provide insight into why manufacturing operations are not running. For example, e-stop (emergency stop), waiting on material, or waiting on operator.

To edit existing downtime events, go to Advanced Manufacturing > Administration/Setup > Downtime and then click Edit beside the category or reason.

To create a downtime category:

1. Go to Advanced Manufacturing > Administration/Setup > Downtime Categories > New.
2. Enter a descriptive Downtime Category name that is unique across all subsidiaries and locations.
3. Click Save.

To create a downtime reason:

1. Go to Advanced Manufacturing > Administration/Setup > Downtime Reasons > New.
2. To connect this reason to a category, select the Downtime Category.
3. Enter a descriptive Downtime Reason that is unique across all subsidiaries and locations.
4. To improve reporting, enter a brief Downtime Description.
5. If you are using a scanner to capture downtime, in the Downtime Scanner Code field, enter a bar code to represent the downtime reason code.
   You can use an abbreviation of the reason, excluding any spaces or special characters.
6. Click Save.

Material Loss

You can identify areas for process improvement by tracking material loss events and details that might occur during handling, storage, or manufacturing.
Material loss categories identify a manufacturing loss. For example, standard processing, shop floor, or processing loss.

Material loss reasons provide insight into why manufacturing losses are occurring. For example, container breakage or spoilage.

To view existing material loss events, go to Advanced Manufacturing > Administration/Setup > Material Loss and then click Edit beside the category or reason.

**To create a material loss category:**
1. Go to Advanced Manufacturing > Administration/Setup > Material Loss Categories > New.
2. Enter a descriptive **Loss Category** name that is unique across all subsidiaries and locations.
3. Click **Save**.

**To create a material loss reason:**
1. Go to Advanced Manufacturing > Administration/Setup > Material Loss Reasons > New.
2. To connect this reason to a category, select the **Material Loss Category**.
3. Enter a descriptive **Material Loss Reason** that is unique across all subsidiaries and locations.
4. To improve reporting, enter a brief **Material Loss Description** of the loss event.
   - If you are using a scanner to capture material loss, enter a bar code to represent this loss reason. You can use an abbreviation of the reason, excluding any spaces or special characters.
5. If you are using a scanner to capture material loss, in the **Material Loss Scanner Code** field, enter a bar code to represent the material loss reason code. You can use an abbreviation of the reason, excluding any spaces or special characters.
6. Click **Save**.

**Labor Codes**

Accurate labor codes enable you to define the competencies (skills, qualifications, or certifications) needed to perform specific operations. Defined labor codes help prevent potential errors and issues that might arise when unskilled operators perform jobs they are not trained to do.

To edit existing Labor Codes, go to Advanced Manufacturing > Administration/Setup > Labor Codes and then click Edit beside the code.

**To create a labor code:**
1. Go to Advanced Manufacturing > Administration/Setup > Labor Codes > New.
2. Select the **Location** you want to apply this labor code to.
3. Enter a **Planning Skill Code (Mfg WB Labor)**.
   - Skill codes describe an operation's labor needs. For example, Welding.
4. Enter a descriptive **Labor Code** name. For example, Apprentice Welder or Certified Welder.
5. If you are using a scanner to capture labor, enter a scanner bar code in the **Labor Scanning Code** field.
   - You can use an abbreviation of the reason, excluding any spaces or special characters.
6. To help improve reporting, enter a more complete labor code **Description**.
7. Click Save.

The Cost Type and Base Rate fields are used for reporting only.

Travelers

Work order travelers are physical documents that convey manufacturing information to shop floor operators. The Advanced Manufacturing SuiteApp includes a modifiable traveler template in Advanced Manufacturing > Documentation File Folders > Templates.

Use batch travelers when batch operations require multiple batches and one partial batch to complete the work order. The following instructions describe how to configure travelers, define traveler bar code size, and verify traveler generation errors.

To create a traveler:

1. Go to Advanced Manufacturing > Administration/Setup > Traveler Configuration > New.
2. To identify the document type, enter a unique Traveler Name. For example, Template Traveler.
3. Enter the NetSuite file cabinet Folder Name to save the document to. For example, AM Travelers.
4. Enter the traveler Sort Order display number for advanced manufacturing lists.
5. In the Script Name field, enter the scheduled script ID required to produce this type of document. For example, customscript_batch_traveler for batch traveler and customscript_template_traveler for template traveler.
6. In the Doc Type field, enter one of the following:
   - Work Order – The script produces documents for a list of work orders.
   - Work Center – The script produces documents for a list of work centers.
7. In the Parameter Prefix field, enter the string that identifies the scheduled script parameters. For example, batchtrv for batch traveler and tmptrv for template traveler.
8. In the Custom Templates Folder field, enter the custom templates file cabinet folder path.

   If you are using the customscript_template_traveler script, you can modify the standard document production XML templates. You must provide a copy of all templates even those not modified. Copying the XML templates to another folder protects your changes from future bundle updates.
9. Click Save.

To define traveler bar code size:

1. Go to Customization > Scripting > Scripts.
2. If necessary, click the + icon to expand the Filters pane.
3. In the Type list, select Scheduled.
4. Click Edit beside the AM Template or AM Batch Traveler.
5. Click the Deployments subtab.
6. Click the traveler title you want to modify.
7. Click Edit.
8. Click the Parameters subtab.
9. Modify the values in the Barcode Width (In) and Barcode Height (Pix) fields as necessary.
10. Click Save.
To verify traveler generation errors:

1. Go to Customization > Scripting > Scripts.
2. If necessary, click the + icon to expand the Filters pane.
3. In the Type list, select Scheduled.
4. Beside the traveler record you want to modify, click Edit.
5. Click the Execution Log subtab.

Errors are displayed in the Details column.

Control Traveler Generation

Travelers generated in Advanced Manufacturing follow the script usage limits that apply to all platform solutions. To ensure that your traveler requests do not fail, NetSuite monitors usage and may restart as it nears generation limits. The system checks each work order using a script deployment parameter that defines expected script usage per traveler.

Poorly defined script deployment parameters can cause Advanced Manufacturing to fail when generating large, complex travelers. If this number is set too low, large travelers can cause a time out before system self-monitoring can restart (to avoid the timeout). The solution is to increase the parameter setting.

To increase traveler parameter settings:

1. Go to Customization > Scripting > Script Deployments.
2. In the Script Deployments list, click edit beside the traveler you want to update.
3. Click the Parameters subtab.
4. Enter the default traveler value in the Yield At (Units) field.
   - Enter a value that enables NetSuite to move to the next traveler.
     - If no value is entered, Advanced Manufacturing uses a value of 100.
   - Setting a high value for large complex travelers reduces the chance of a timeout. It can also result in longer traveler generation times when many work orders are submitted.
   - Setting a lower value minimizes restarts and shortens traveler generation time when many work orders are submitted. It can also result in timeout.
5. Click Save.
# Advanced Manufacturing Administration Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly Item</td>
<td>An assembly item is an inventory item made of several components, but identified as a single item. Assemblies are manufactured by combining raw materials you stock.</td>
</tr>
<tr>
<td>Backflush</td>
<td>Backflush accounting delays the recording of costs until goods are built. Then, standard costs are used to work backwards to flush out the manufacturing costs. Typically used in Just-In-Time environments to eliminate the detailed tracking of costs.</td>
</tr>
<tr>
<td>Bill of Materials (BOM)</td>
<td>A list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts needed to manufacture a product.</td>
</tr>
<tr>
<td>Bins</td>
<td>Bin Management uses bins to identify where inventory items are stored and to track on-hand quantities.</td>
</tr>
<tr>
<td>Capacity Planning</td>
<td>Capacity planning enables you to determine the production capacity an organization needs to meet product demands. It is the maximum amount of work the organization is capable of in a period of time.</td>
</tr>
<tr>
<td>CSV Imports</td>
<td>CSV (comma-separated value) import transfers one to many, small to medium-sized data sets from other applications into NetSuite, avoiding the need for manual data entry.</td>
</tr>
<tr>
<td>Downtime</td>
<td>Downtime refers to a period of time that a system is unavailable or offline and fails to perform its primary function.</td>
</tr>
<tr>
<td>Finite Scheduling</td>
<td>Finite capacity scheduling produces a specific amount of work within a defined time period, taking resource limitations into consideration. This process ensures that work proceeds evenly and efficiently throughout the plant.</td>
</tr>
<tr>
<td>Lot Control</td>
<td>Lot Control ensures that each inventory item that flows through a warehouse can be tracked to its group of origin, or lot.</td>
</tr>
<tr>
<td>Material Loss</td>
<td>Material losses could come in the form of waste, scrape, spoilage and defects and occur during handling, storage, or manufacturing loss.</td>
</tr>
<tr>
<td>Rough Cut Capacity Planning (RCP)</td>
<td>RCP is the long-term planning process that balances available resources and required resources to the master schedule. The SuiteApp verifies that you have enough capacity to meet scheduled production.</td>
</tr>
<tr>
<td></td>
<td>The Advanced Manufacturing SuiteApp evaluates the demand for assembly items against the work center's availability to report percentage work center use over time.</td>
</tr>
<tr>
<td>Routing Records</td>
<td>A manufacturing routing is a template that contains the list of steps required to build an assembly item.</td>
</tr>
<tr>
<td>Scrap</td>
<td>The unusable loss which is measurable, has some value, and can be sold or repurposed.</td>
</tr>
<tr>
<td>Serialization</td>
<td>The process through which inventory items are identified by an associated serial number.</td>
</tr>
<tr>
<td>Subsidiaries</td>
<td>A subsidiary is a (child) company owned by another (parent) company. The Advanced Manufacturing SuiteApp uses subsidiaries in OneWorld accounts.</td>
</tr>
<tr>
<td>Throughput</td>
<td>Total volume of production through the facility (machine, work center, department, plant, or network of plants).</td>
</tr>
<tr>
<td>Traveler</td>
<td>A work order traveler tracks the status of operations in the Manufacturing process.</td>
</tr>
<tr>
<td>WMS</td>
<td>A warehouse management system (WMS) is a software application that supports daily warehouse operations. WMS programs enable centralized task management such as tracking inventory levels and stock locations.</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Work Bench</td>
<td>An Advanced Manufacturing work bench is linked to a NetSuite routing record.</td>
</tr>
<tr>
<td>Work Center</td>
<td>A work center can consist of one or more people and machines, and can represent a logical grouping of machines, a department, or a cost center.</td>
</tr>
<tr>
<td>Work Order</td>
<td>Work orders track the production of items and the quantities needed to replenish stock or to fill orders.</td>
</tr>
</tbody>
</table>