Manufacturing BOMs

Cavallo Support - 2025-06-11 - Manufacturing

Overview

Manufacturing Bill of Materials (BOM) functionality in SalesPad allows you to create a list of parts or components that are used to create a finished good.

This document covers the search and creation screens for Manufacturing BOMs.

Security

To create and access BOMs, you must enable the following security settings in the Security Editor:

Manufacturing BOM Audit – This enables Manufacturing BOM Audit Tab on the Manufacturing BOM Screen, which allows the user to view a change history on the Manufacturing BOM.

Manufacturing BOM Components

- Show Cost: True/False - *Determines if a user has permission to view the component cost.*

Manufacturing BOM Entry – Enables the Manufacturing BOM Entry screen, which allows the users to view, create, and edit Manufacturing BOMs.

- Can Edit: True/False - *Determines if a user can edit a BOM*
- Scripts
  - On Load Script - *Script that executes before a BOM is loaded.*
  - *Pre Save Script - Script that executes before a BOM is saved.*
- Pending Approval BOMs
  - Can Approve BOMs: True/False - *Determines if the user has permission to approve Pending Approval BOM types.*
  - *Can Manually Edit Pending Approval BOMs - Determines if the user can edit Pending Approval BOMs through the BOM Entry Screen*

Manufacturing BOM Line Mass Update – Enables the Manufacturing BOM Line Mass Update screen, this allows users to quickly view and edit Manufacturing BOM Lines across multiple Manufacturing BOMs from one location.

- Auto Search: True/False - *Determines if the form automatically searches when opened.*
- Can Export Grid: True/False - *Determines if a user has permission to export the grid to an Excel file.*
- *Show Cost: True/False - Determines if a user has permission to view the component cost.*

Manufacturing BOM Mass Update – Enables the Manufacturing BOM Mass Update screen, which will allow the user to add components, and update multiple Manufacturing BOMs all at one time.

- Auto Search: True/False - *Determines if the form automatically searches when opened.*
- Can Export Grid: True/False - *Determines if a user has permission to export the grid to an Excel file.*
- Show Cost: True/False - *Determines if a user has permission to view the component cost.*

Manufacturing BOM Properties – Enables the Manufacturing BOM Properties Panel on the Manufacturing BOM Entry screen header. This panel allows the user to view and edit properties on the Manufacturing BOM.

- Default BOM Category - *Specifies a default BOM Category when creating a new BOM.*
- Default BOM Type - *Specifies a default BOM Type when creating a new BOM.*
- Show Cost: True/False - *Determines if a user has permission to view the BOM Cost.*

Manufacturing BOM Search – Enables the Manufacturing BOM Search Screen, which allows the user to search for Manufacturing BOMs.

- Auto Search: True/False - *Determines if the form automatically searches when opened.*
- Can Export Grid: True/False - *Determines if a user has permission to export the grid to an Excel file.*

Manufacturing BOM User Fields – Enables User Defined Fields on Manufacturing BOMs.

- Allow Layout Customization: True/False - *Determines if a user has permission to edit the User Field layout*
- Read Only: True/False - *Determines if a user has permission to edit User Fields*

1. Manufacturing BOM Mass Approval
2. Manufacturing BOM Component Mass Delete
3. Manufacturing BOM Component Mass Update
4. Manufacturing BOM Mass Add Components
5. Manufacturing BOM Mass Update BOM

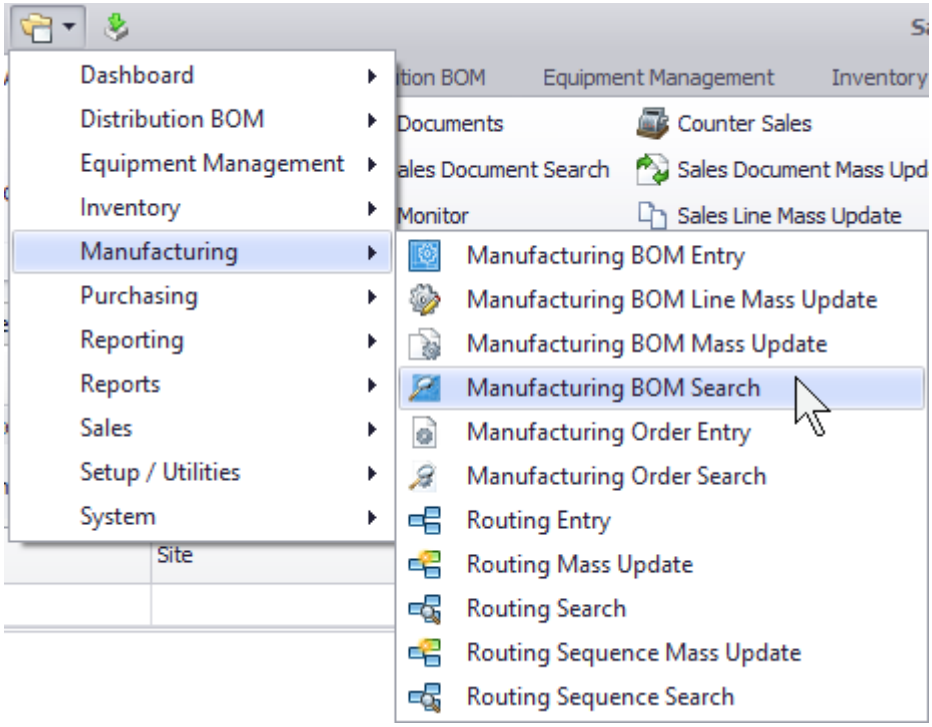
Settings

1. Save Engineering BOM as Pending Approval - If enabled, when modifying an Engineering BOM via Manufacturing BOM Mass Update or Manufacturing BOM Line Mass Update, the changes will instead be applied to a SalesPad BOM of Type: 'Pending Approval'. See Pending BOMs.
2. Effective In Date - Specify the number of days in the future that you want the effective in date to be when creating a new BOM.
3. Effective Out Date - Specify the number of days in the future that you want the effective out date to be when creating a new BOM.
4. Update BOM Revision Level: True/False - When enabled, and a BOM is changed and saved, this will automatically update the revision and save the previous version of the BOM as a historical revision.
5. Manufacturing BOM Line Columns to Include in Audit - Allows users to specify the columns that are included in the BOM audit.

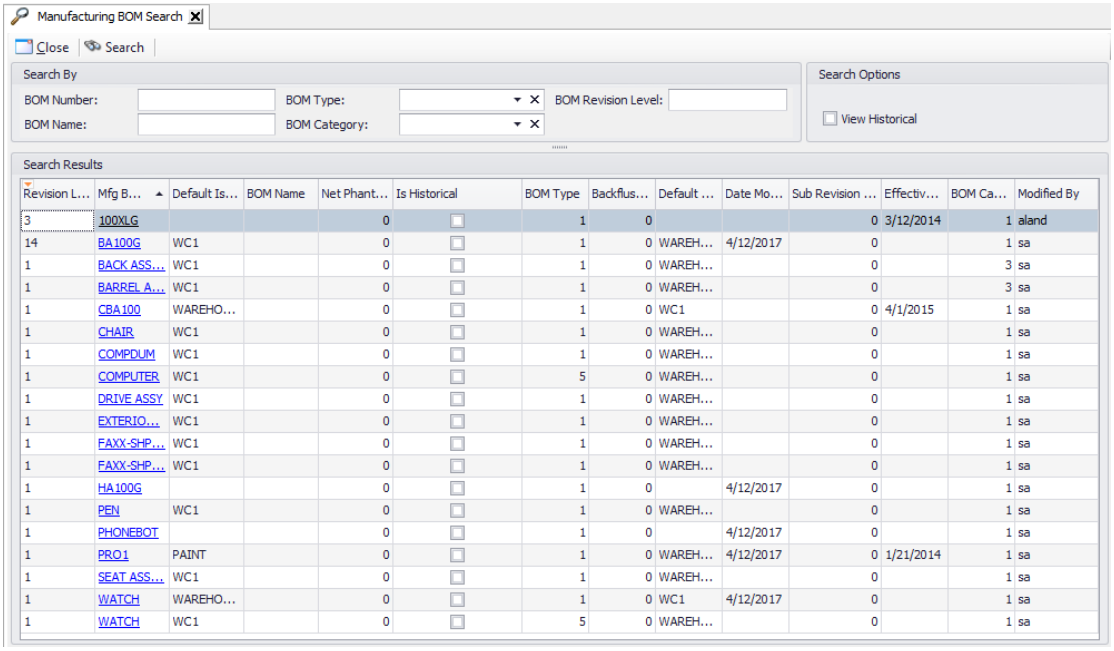
Usage

Finding and Opening an Existing Manufacturing BOM

Find and open existing Manufacturing BOMs on the Manufacturing BOM Search tab (Modules > Manufacturing > Manufacturing BOM Search):



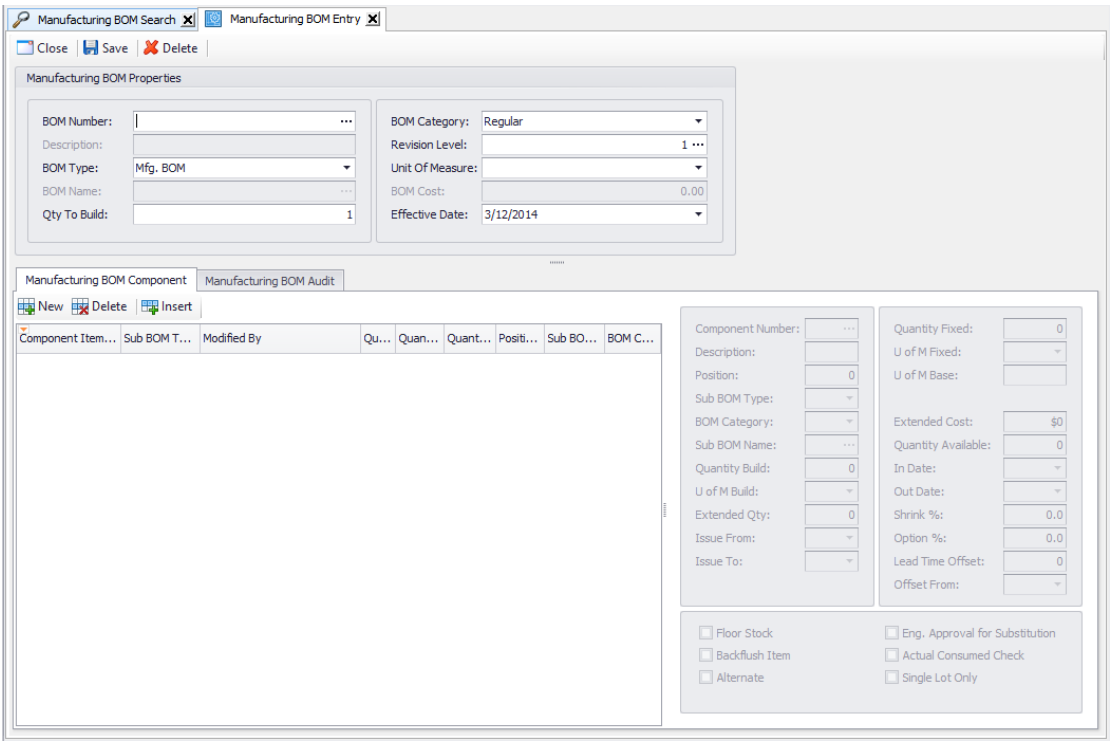
To search for Manufacturing BOMs, enter a full or partial BOM Number. You can narrow the results by entering full or partial entries for BOM Name, BOM Type, BOM Category, or BOM Revision Level. You can toggle between viewing Active Manufacturing BOMs and Historical Manufacturing BOMs by selecting View Historical under Search Options. Click **Search**.



You can further filter results using the Filter line (Refer to: SalesPad Grids - Filtering and customizing). To open the desired Manufacturing BOM, click the Mfg. BOM Number hyperlink, press space bar, or double click anywhere on the BOM line.

Creating a New Manufacturing BOM

To create a new Manufacturing BOM from the Manufacturing BOM Search Screen, click **New.** A new Manufacturing BOM Entry screen will open in a new tab:



Fill in the following fields: BOM Number, BOM Type, BOM Category, Revision Level, and Effective Date.

Pending Approval BOMs

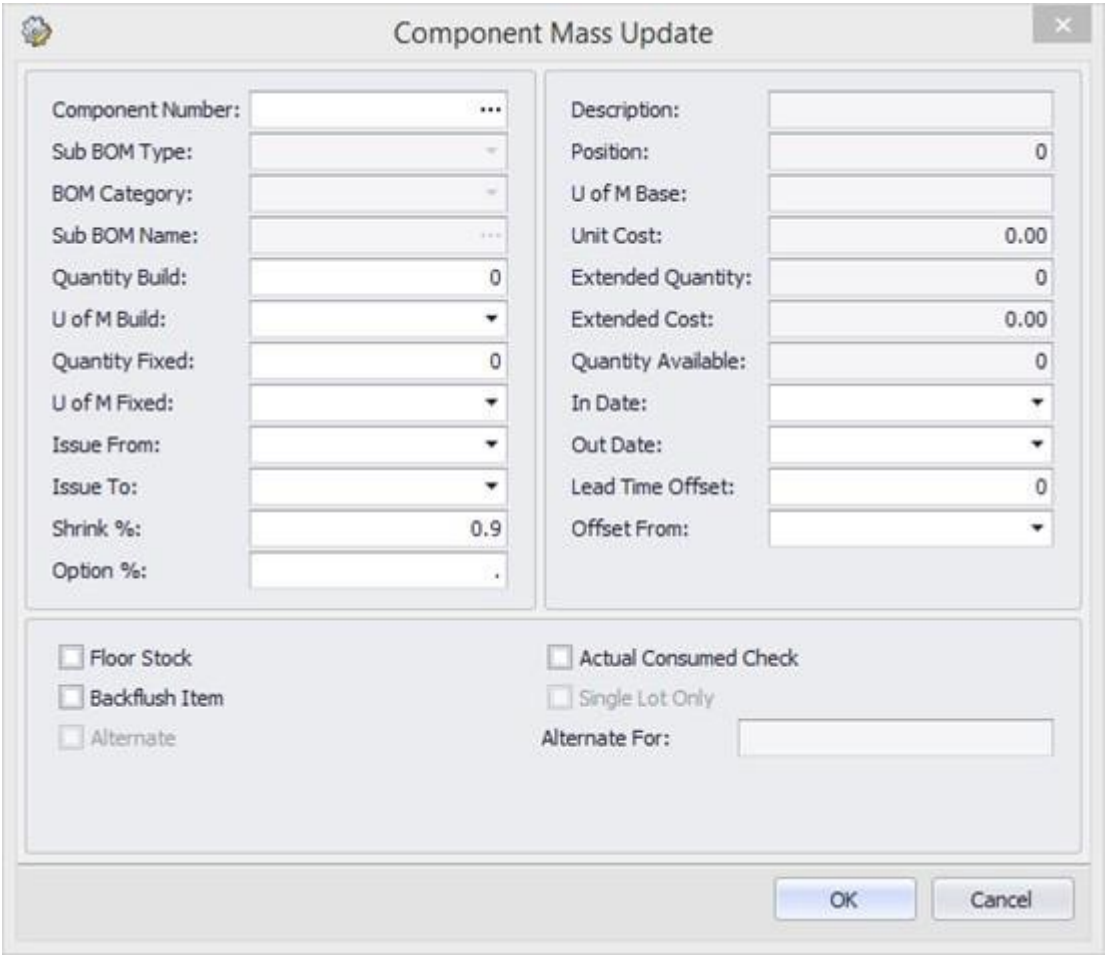
Pending Approval BOMs are created when a user makes a change to Engineering BOMs via either the Manufacturing BOM Mass Update, or Manufacturing BOM Line Mass Update screens. The Engineering BOM will remain unchanged in the system, and the changes are made on a BOM with type: Pending Approval.

Once the changes have been reviewed, the Pending Approval BOM can be approved from either the BOM Entry screen, or from the Manufacturing BOM Mass Update screen via the Manufacturing BOM Mass Approval plugin.

In the approval process, the Pending Approval BOM will replace the current Manufacturing BOM for that item number in the system. If there is no Manufacturing BOM for that item, then a new Manufacturing BOM will be created. Afterwards, the Pending Approval BOM will be removed from the system.

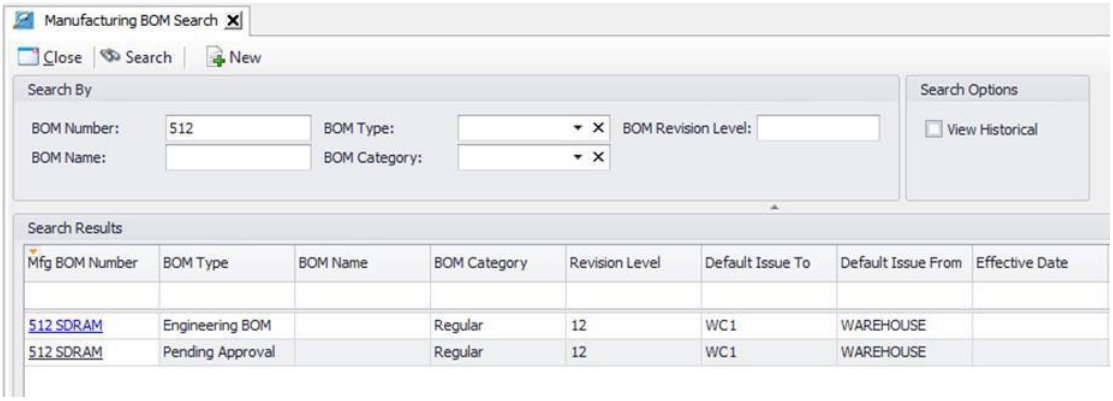
To use this functionality, you must enable the Setting: *Save Engineering BOM as Pending Approval*. Consider the following example:

A user searches a 512 SDRAM Engineering BOM in BOM Lines Mass Update, and modifies the component 256 SDRAM with a change to increase the Shrink Percent from .7 to .9

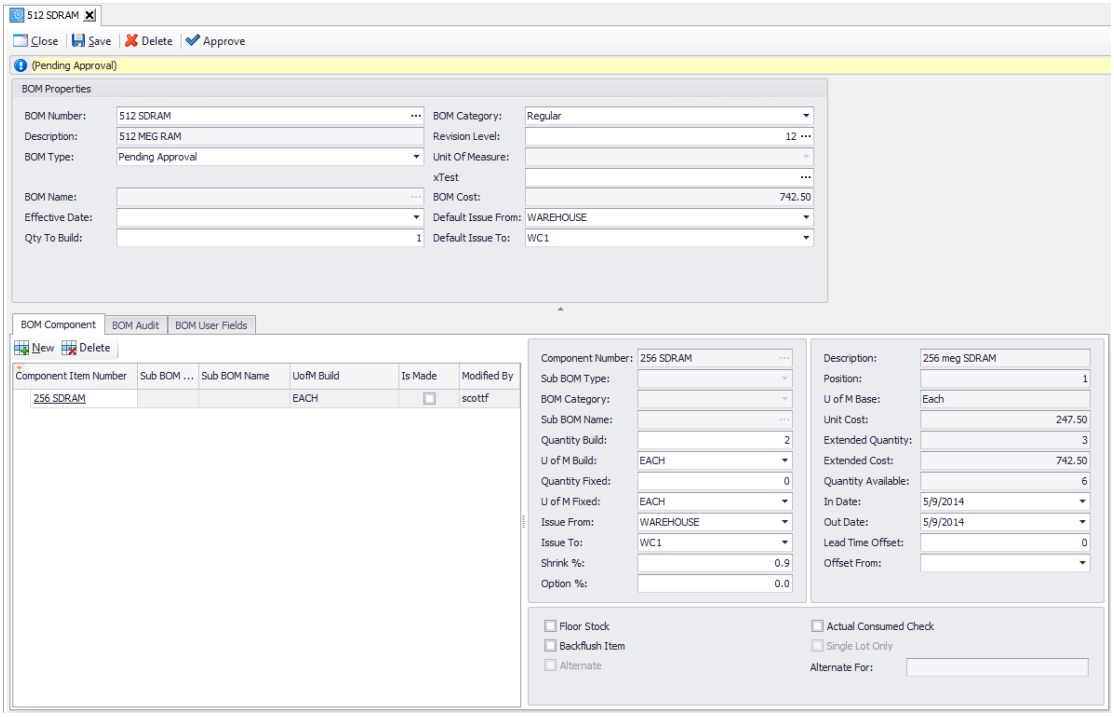


The change is then reviewed, and approved for production.

The user then searches for the 512 BOM from Manufacturing BOM Search and finds both the Pending Approval BOM with the changed Shrink Percent, and the original, unchanged Engineering BOM.



The user opens the 512 SDRAM Pending Approval BOM. An **Approve** button is on the taskbar if the user has the Security: **Can Approve BOMs** enabled.



Once approved, the Pending Approval BOM is flipped to a new Manufacturing BOM since there were none previously in the system.

The user could also Mass Approve Pending BOMs from the Manufacturing BOM Mass Update form, via the Manufacturing BOM Mass Approval plugin.

Dynamic Search Criteria

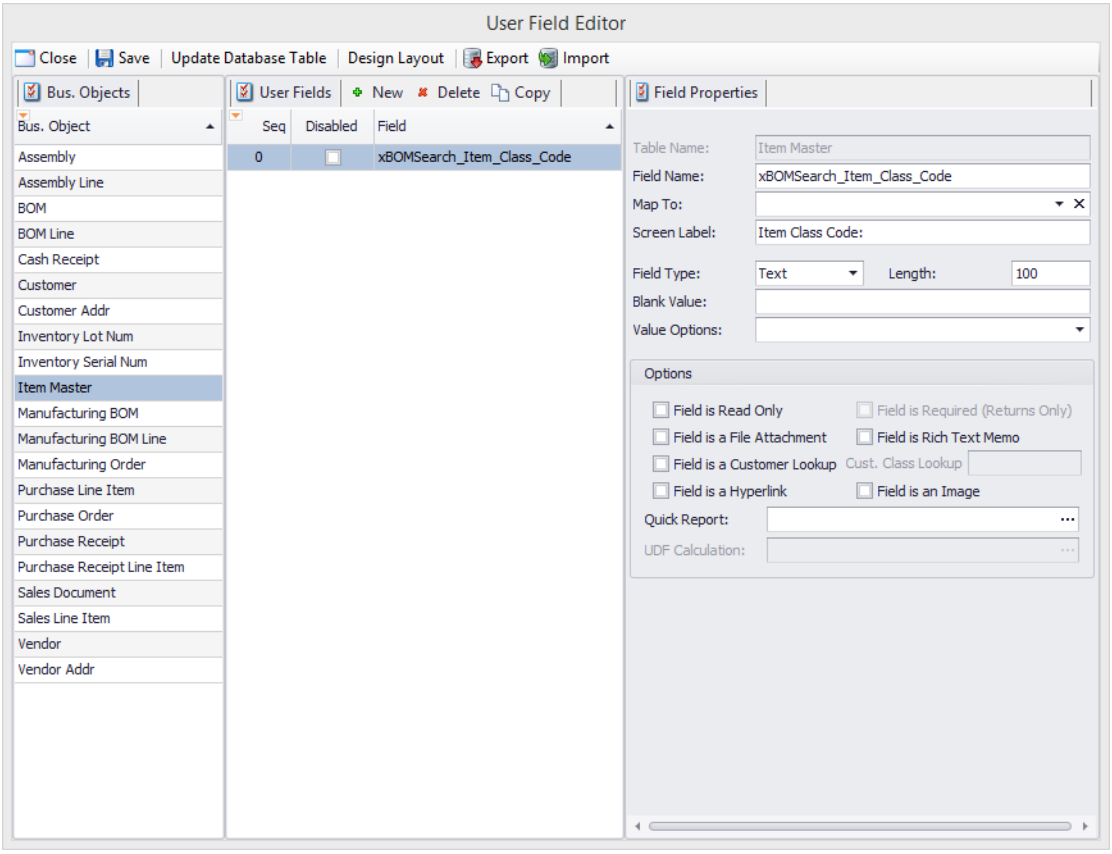
Using Item Master, Manufacturing BOM, and Manufacturing BOM Line User Defined Fields, we can refine our BOM and BOM Line searches.

To search for BOMs of a particular Item Class, we create an Item Master UDF. This UDF must be named with a suffix that is equivalent to the name of the field in spvItemMaster that we want to search on.

For a list of available fields in spvItemMaster see Available Fields in spvItemMaster

For more information on configuring SalesPad UDFs see User Defined Fields Editor

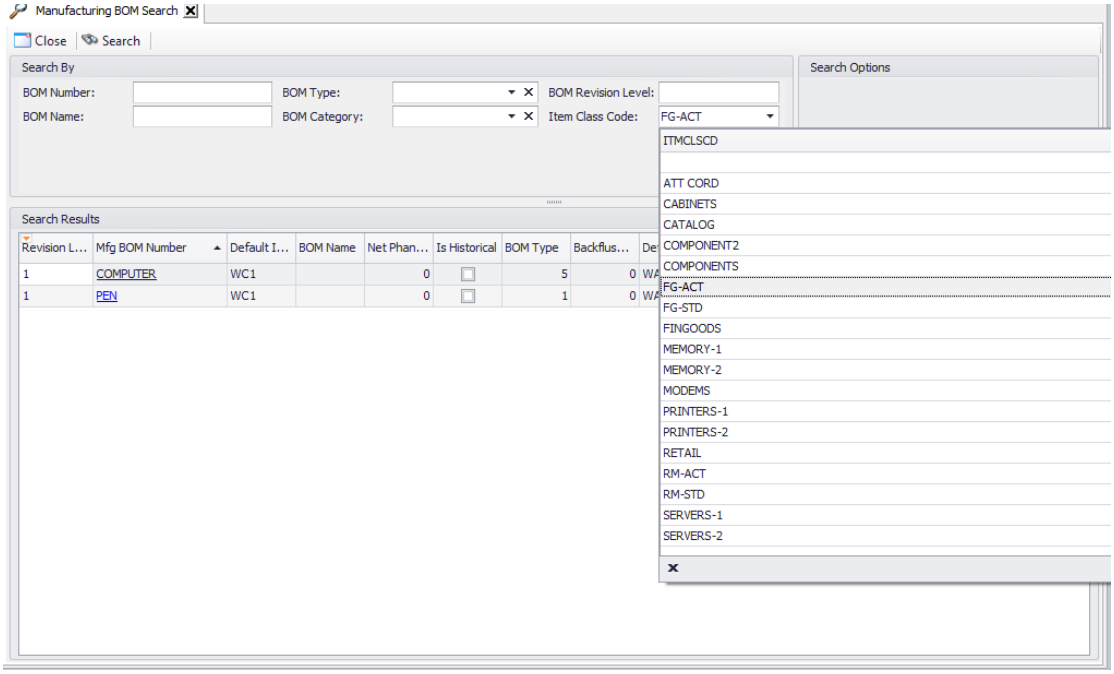
For this example, we will name our UDF “xBOMSearch_Item_Class_Code”, which will add search capabilities for “Item_Class_Code” in spvItemMaster



Additionally, we can input the following quick report that will allow us to select available Item Classes from a list rather than free typing them.

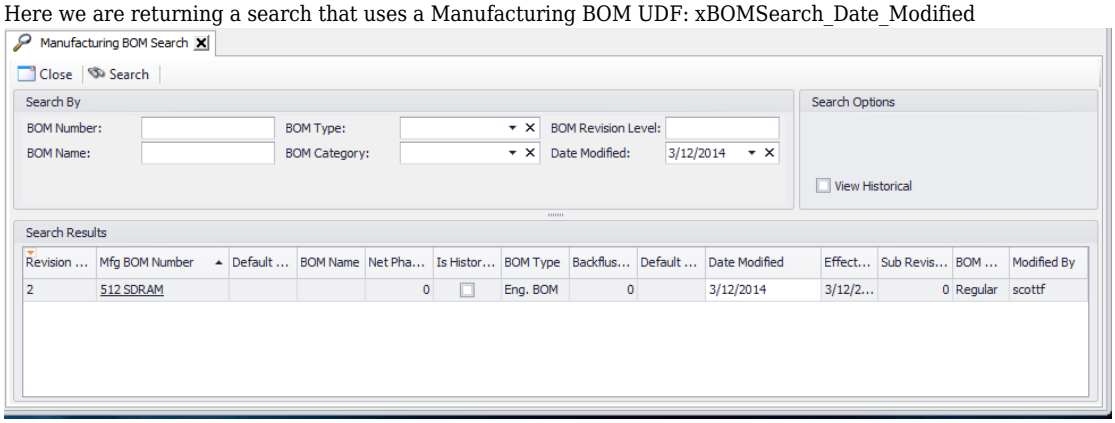
select ITMCLSCD=''
union
select ITMCLSCD from IV40400

If a user adds the xBOMSearch_Item_Class_Code UDF to the BOM Search or either of BOM Mass Update screens, user input will become part of the search criteria. In this case, we have returned all BOMs that have the Item Class: FG-ACT



The same process of creating UDFs to refine search criteria can also be applied to Manufacturing BOM and Manufacturing BOM Line UDfs

Here we are returning a search that uses a Manufacturing BOM UDF: xBOMSearch_Date_Modified



These UDF Dynamic Search fields can be added to the BOM Search, the Manufacturing BOM Mass Update, and Manufacturing BOM Line Mass Update forms.

Mass Update BOM and BOM Lines

There are two forms for Mass Updating fields on BOMs and on BOM components. These forms are: Manufacturing BOM Mass Update and Manufacturing BOM Line Mass Update, respectively. For each of these forms there are plugins that can be run to apply mass update operations on the BOMs or their components.

Manufacturing BOM Mass Update Plugins:

Manufacturing BOM Mass Approval: used to mass approve Pending BOMs

Manufacturing BOM Mass Update BOM: used to mass update BOM fields

Manufacturing BOM Mass Add Components: used to mass add components to BOMs

Manufacturing BOM Line Mass Update Plugins:

Manufacturing BOM Component Mass Update: used to mass update component fields

Manufacturing BOM Component Mass Delete: used to mass delete components from BOMs