MYOB Advanced

Release Notes

2020.3

Contents

Introduction

Welcome to the 2020.3 release of MYOB Advanced.

What's New in this Release?

The 2020.3 release adds a wide range of new features across the entire MYOB Advanced system.

Installing this Release

The 2020.3 release is automatically deployed to all production accounts.

> **Note:** An updated licence is required to enable configuration options for the new features. While accounts in our managed environment will have their licences updated automatically, a local installation must be updated manually by navigating to the Licence Maintenance (SM.20.15.10) screen and clicking the Update Licence button.

Upgrade Issue: Reports

The CounterEmailsForReport report table has been discontinued, which affects the following reports:

- Accounts Receivable Invoice/Memo (AR641000)
- Sales Orders Invoice & Memo (SO643000)
- Project Invoice/Memo (PM641000)

The default versions of these reports have been updated, but if you have customised these reports (or if you have created custom reports that use the affected table) you will need to update them manually. This can be done in one of two ways:

- Edit the reports and change references to the CounterEmailsForReport table to use the updated ARInvoice table instead.
- Revert the reports to the defaults after upgrading to 2020.1, then re-apply your customisations.

See the White Paper "Updating Reports in 2020.1" for more information on editing reports. This document is available on the MYOB Advanced Education Centre website.

> **Note:** The CounterEmailsForReport table remains available in the MYOB Advanced system for now, to give you time to update your reports, but it will be deleted in a future release.

New Features

Finance

Aging Report Improvements

In previous versions of MYOB Advanced, the AR Aged Past Due (AR631000) and AR Aged Past Due MC (AR631100) reports showed open AR documents, regardless of the date a user specified in the **Aging Date** field on the Report Parameters tab of the respective report screen. That is, the reports showed open AR documents even if they were dated later than the specified aging date. The aging date was used only to break down the listed documents by aging periods, and users could not view document balances as of a specific date.

As of this release, the improved AR Aging (AR631000) and AR Aging MC (AR631100) reports show released AR documents whose document dates are earlier than or the same as the date specified by the user in the **Age as of Date** field on the Report Parameters tab. The reports also show the document balances as of the aging date, each of which is calculated as the difference between the original amount of the document and the application amounts of the documents that were applied no later than the specified aging date.

If the AR Aging report is run with the **Detailed with Retainage** format selected on the Report Parameters tab, the report shows only released retainage invoices with a document date earlier than or the same as the aging date. The unreleased retainage is calculated as the total retainage amount of an invoice minus the sum of the original document amounts of the linked retainage invoices.

For details, see "Using AR Aging Reports" in the User Guide.

UI Changes

The following UI changes have been introduced to support these improvements:

- AR Aged Past Due (AR631000) has been renamed to AR Aging (AR631000)
- AR Aged Past Due MC (AR631100) has been renamed to AR Aging MC (AR631100)
- AR Aged Outstanding (AR631500) has been renamed to AR Coming Due (AR631500) and AR Aged Outstanding MC (AR631600) has been renamed to AR Coming Due MC (AR631600), because these reports show documents with expected future payments, but not aged documents.
- On the AR Aging and AR Aging MC screens, the **Aging Date** box on the Report Parameters tab has been renamed to **Age as of Date**.

Application of Payments to Particular Lines of AP Documents

In many industries, organizations need to manage expenses and payments at a granular level—that is, by the individual lines of accounts payable bills.

In previous versions, the system allowed users to apply payments fully or partially, to only an accounts payable bill as a whole. As a result, if a bill was partially paid, the payment could not be linked to specific lines of it.

This release introduces the ability to pay accounts payable documents by individual lines. When the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen (CS100000), users can still apply payments fully or partially, but they can also choose whether to apply payments to the entire document or to individual document lines. For details, see "Applying Payments to Particular Lines of AP Documents" in the User Guide.

If the *Retainage Support* feature is also enabled on the Enable/Disable Features screen, users can now track retainage by the individual document line.

Changes to the Bills and Adjustments Screen

The following changes have been made to the Bills and Adjustments screen (AP301000):

- A **Pay by Line** check box has been added to the summary area (shown in the screenshot below).

  If the check box is cleared, payments are applied to the outstanding balance of the entire document (as the system worked previously). If the check box is selected for a document, payments can be applied to individual document lines.

  > **Note:** The functionality that gives users the ability to pay accounts payable documents by line currently does not support withholding taxes and VAT recalculated on cash discounts; it also does not support group or document discounts. A user can apply these taxes or discounts to an accounts payable document only if the Pay by Line check box is cleared. For details, see Limitations.

  For each new accounts payable document, the check box inherits its default value from the settings of the supplier that is selected in the document. This setting is specified for an individual supplier in the Default Payment Settings section on the Payment Settings tab of the Suppliers screen (AP303000). On the Bills and Adjustments screen, the Pay by Line check box can be selected or cleared only if no lines have been added to the document. For prepayment documents, the check box is cleared and unavailable for editing.

- On the Document Details tab, the following columns have been added:
  - **Line Nbr.**: The number of the document line.
  - **Balance**: The outstanding balance of the individual document line. The balance of the line includes the applicable taxes (except for use taxes); document-level taxes are prorated among all the lines of a document. If a payment applied to the document line has been released, the balance is updated accordingly.

    This column is hidden until the payment document is released.

  - **Unreleased Retainage**: A hidden column that reflects the retainage amount that has been associated with the document line but has not been released yet. If the Retain Taxes check box is selected on the Accounts Payable Preferences (AP101000) screen, this column includes the corresponding retained tax amount (excluding use taxes) for each line of the document.
  - **Retained Tax**: The amount of tax calculated based on the value in the Retainage Amount column. If the Retain Taxes check box is selected on the Accounts Payable Preferences screen, the retained tax amounts will be included in retainage bills. This column is hidden by default.
  - **Tax Amount**: The total tax amount calculated for the line (excluding use taxes). The column is hidden by default and appears in the table when the original document is released. For retainage bills, this column displays the total of all retained taxes (excluding use taxes).

Note: If the **Pay by Line** check box is cleared for the bill on the Bills and Adjustments screen, the values in the Balance, Unreleased Retainage, Retained Tax, and Tax Amount columns are not calculated and are always 0.

- On the **Applications** tab, the Auto Apply button is unavailable if the Pay by Line check box is selected on the Financial Details tab.
- On the Retainage tab, the Released Retainage box has been added and is displayed for accounts payable documents for which the Apply Retainage check box (in the Summary area of this screen) is **selected**. The system calculates the value in this box as the difference between the original (total) retainage and the unreleased retainage for the line.

For details, see "To Enter a Bill to be Paid by Line", "To Enter a Bill with Retainage Paid by Line", and "To Create a Retainage Bill for Multiple Lines" in the User Guide.

Changes to the Cheques and Payments Screen

The following columns, which are shown in the screenshot below, have been added to the Documents to Apply tab of the Cheques and Payments screen (AP302000):

- **Line Nbr.**: The system-specified number of the document line to which the payment can be applied. If the line represents the entire document, 0 is specified.
- **Inventory ID**, **Project**, **Project Task**, **Cost Code**, and **Account**: The inventory item, project, project task, cost code, and account associated with the document line.

  The **Cost Code** column is available only if the *Cost Codes* feature is enabled on the Enable/ Disable Features screen (CS100000).

The functionality of the **Load Documents** button on the table toolbar of the Documents to Apply tab has changed. When a user clicks this button, the system now works as follows:

- If the Payment Amount in the Summary area is 0, the system loads all bills or individual document lines (depending on the Pay by Line setting) with a nonzero outstanding balance for the selected supplier.
- The system does not load documents or individual document lines that have unreleased payment applications.

A user can add lines from different bills that are associated with the same supplier. A document line can be included in a payment only once. If a document line has been included in a payment that has not been released yet, that line cannot be included in a different payment. If a document with a payment applied to a document line has been released but the document line has not been fully paid, the user can open another payment document and select the document line to pay the remaining balance.

For each document line, the user can manually specify a full or partial amount to be paid. When the payment is released, the amounts paid and the balances of the document lines are updated accordingly.

Changes to the Release AP Retainage Screen

The following columns have been added to the Release AP Retainage screen (AP510000):

- **Line Nbr.**: The system-specified number of the document line to which the payment can be applied. If the line represents the entire document, 0 is specified.
- **Inventory ID**, **Project**, **Project Task**, **Cost Code**, and **Account**: The inventory item, project, project task, cost code, and account associated with the document line.

  The **Cost Code** column is available only if the *Cost Codes* feature is enabled on the Enable/ Disable Features screen (CS100000).

Changes to the Prepare Payments Screen

The following columns have been added to the Documents to Pay and Exceptions tabs of the Prepare Payments (AP503000) screen:

- **Line Nbr.**: The system-specified number of the document line to which the payment can be applied. If the line represents the entire document, 0 is specified.
- **Inventory ID**, **Project**, **Project Task**, **Cost Code**, and **Account**: The inventory item, project, project task, cost code, and account associated with the document line.

  The **Cost Code** column is available only if the *Cost Codes* feature is enabled on the Enable/ Disable Features screen (CS100000).

Changes to the Suppliers Screen

A **Pay by Line** check box has been added to the Default Payment Settings section on the Payment Settings tab of the Suppliers screen (AP303000). If it is selected, by default, payments can be applied to individual lines of accounts payable documents for which the supplier is selected; that is, if the supplier is selected on the Bills and Adjustments screen (AP301000), the **Pay by Line** check box is selected by default.

This check box is cleared by default for existing suppliers when the *Payment Application by Line* feature is enabled on the Enable/Disable Features (CS100000) screen. After the feature is enabled, newly created suppliers inherit the default state of this check box from the supplier class selected for them.

Changes to the Supplier Classes Screen

In the Default Financial Settings section on the General Settings tab of the Supplier Classes screen (AP201000), the following check boxes have been added:

- Pay by Line: If this check box is selected, the ability to apply payments by line is turned on for suppliers of the class that are created after this setting has been specified; that is, the Pay by Line check box is selected on the Suppliers screen (AP303000) for these suppliers.

  When an administrator enables the Payment Application by Line feature for the first time, this check box is cleared by default for existing supplier classes. For supplier classes created after the feature is enabled, it is also cleared by default.

  Note: If a user selects or clears this check box for an existing supplier class, the state of this check box does not change for existing suppliers of the class.

- Apply Retainage: If this check box is selected for a supplier class, the retainage functionality will be turned on by default for all suppliers that are subsequently created and assigned to this supplier class. That is, for these suppliers, the Apply Retainage check box will be selected on the Suppliers screen (AP303000).

  When an administrator enables the Retainage Support feature for the first time, this check box is cleared by default for existing supplier classes. This check box is also cleared by default for new supplier classes.

  Note: If a user selects or clears this check box for an existing supplier class, the state of this check box does not change for existing suppliers of the class.

Updated Reports and Inquiry Screens

On the Check Form with Remittance (AP641000), Check Form (AP640500), and Additional Remittance Form (AP642000) reports, a displayed check contains one aggregated line for all lines paid for a bill, with the total payment amount shown for the document.

Disabling of the Payment Application by Line Feature

If an organization enables the *Payment Application by Line* feature on the Enable/Disable Features screen (CS100000) and starts using it, we recommend that the organization not disable it. Instead, settings should be specified at the supplier or supplier class level to turn off the use of the feature by default for the appropriate entities.

If at least one accounts payable document exists in the system that has the Pay by Line check box selected and a user attempts to disable this feature, a warning will be displayed on the Enable/Disable Features screen. If the user disables the feature despite the warning, existing unpaid documents with the Pay by Line check box selected will still have to be paid by line in one of the following ways:

- By selecting the document on the Bills and Adjustments screen (AP301000) and selecting Actions > Pay Bill/Apply Adjustment
- By using the Prepare Payments screen (AP503000)

The Cheques and Payments screen (AP302000) cannot be used to apply payments to these documents.

Upgrade Notes

After the upgrade to MYOB Advanced 2020.3, for a released or unreleased document that was created in a previous version of MYOB Advanced, the Pay by Line check box on the Bills and Adjustments screen (AP301000) will be cleared and unavailable if the document has at least one line.

Limitations

The following limitations apply to the new functionality:

- In MYOB Advanced, users currently cannot apply withholding taxes and VAT recalculated on cash discounts to accounts payable documents for which the Pay by Line check box is selected on the Bills and Adjustments screen (AP301000).
- Group and document discounts are not supported for accounts payable documents that have the Pay by Line check box selected on the Bills and Adjustments screen.
- On the Approve Bills for Payment screen (AP502000), the approval of individual lines is not supported—that is, only documents can be approved for payment.

Application of Payments to Particular Lines of AR Documents

In many industries, organizations need to manage sales and payments at a granular level—that is, by the individual lines of accounts receivable invoices.

In previous releases, the system allowed users to apply payments fully or partially to only an accounts receivable invoice as a whole. As a result, if an invoice was partially paid, the payment could not be linked to specific lines of it.

This release introduces the ability to enter payments for accounts receivable documents by individual lines. When the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen (CS100000), users can still apply payments fully or

partially, but they can also select whether to apply payments to the entire document or to individual document lines.

If the *Retainage Support* feature is also enabled on the Enable/Disable Features screen, users can now track retainage by the individual document line. For details, see "Applying Payments to Particular Lines of AR Documents" in the User Guide.

Changes to the Invoices and Memos Screen

The following changes have been made to the Invoices and Memos screen (AR301000):

- In the Summary area, a **Pay by Line** check box has been added (shown in the screenshot below).

  If the check box is cleared, payments are applied to the outstanding balance of the entire document (as the system worked previously). If the check box is selected for a document, payments are applied to individual document lines.

  The functionality that gives users the ability to pay accounts receivable invoices by line currently does not support the processing of group and document discounts. A user can apply these discounts to an accounts receivable document only if the Pay by Line check box is cleared.

  For each new accounts receivable document, the check box inherits its default value from the settings of the customer that is selected in the document. This setting is specified for an individual customer in the Financial Settings section on the General Info tab of the Customers (AR303000) screen. On the Invoices and Memos screen, the Pay by Line check box can be selected or cleared only if no lines have been added to the document. For credit memos, overdue charges, and credit write-offs, the check box is cleared and unavailable for editing.

- On the Document Details tab, the following columns have been added:
  - **Line Nbr.**: The number of the document line.
  - **Balance**: The outstanding balance of the individual document line. The balance of the line includes the applicable taxes; document-level taxes are prorated amongall the lines of a document. If a payment applied to the document line has been released, the balance is updated accordingly.

    This column is hidden until the original document (invoice or a debit memo) is released.

  - **Unreleased Retainage**: A hidden column that reflects the retainage amount that has been associated with the document line but has not been released yet. If the **Retain Taxes** check box is selected on the Accounts Receivable Preferences screen (AR101000), this column includes the corresponding retained tax amount for each line of the document.
  - **Retained Tax**: The amount of tax calculated based on the value in the Retainage Amount column. If the **Retain Taxes** check box is selected on the Accounts Receivable Preferences screen, the retained tax amounts will be included in retainage invoices. This column is hidden by default.
  - **Tax Amount**: The total tax amount calculated for the line. The column is hidden by default and appears in the table when the original document is released. For retainage invoices, this column displays the total of all retained taxes.
  - **Cash Discount Balance**: The balance of cash discounts for the whole document, distributed proportionally among all document lines. This column is hidden by default and appears in the table when the original document is released.

If the **Pay by Line** check box is cleared for the invoice on the Invoices and Memos screen, by default, the Balance, Unreleased Retainage, Retained Tax, Cash Discount Balance, and Tax Amount columns are not visible on the screen. In this case, if a user adds the columns to the screen by using the Column Configuration dialog box, the values in these columns are not calculated and are always 0.
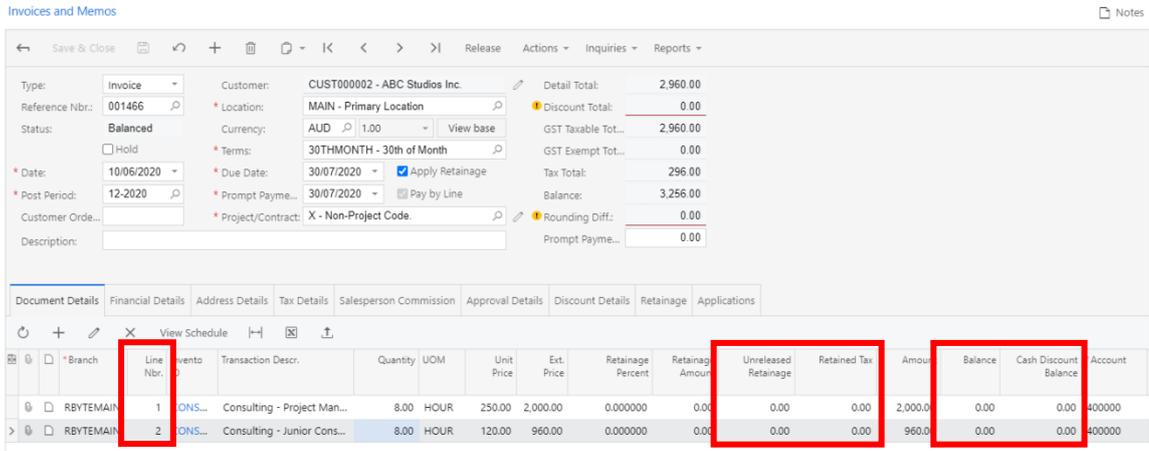
- On the Retainage tab, a **Released Retainage** field has been added and is displayed for AR documents for which the **Apply Retainage** check box (in the Summary area of this screen) is selected. The system calculates the value in this field as the difference between the original (total) retainage and the unreleased retainage for the document.

For details on creating invoices, see "To Enter an Invoice with Retainage that Can Be Paid by Line" in the User Guide.

Changes to the Payments and Applications Screen

The following columns, which are shown in the screenshot below, have been added to the Documents to Apply tab of the Payments and Applications screen (AR302000):

- **Line Nbr.**: The number of the document line to which the payment can be applied. If the line represents the entire document, 0 is specified.
- **Inventory ID**, **Project**, **Project Task**, **Cost Code**, and **Account**: The inventory item, project, project task, cost code, and account, respectively, associated with the document line.

    The Cost Code column is available only if the *Cost Codes* feature is enabled on the Enable/Disable Features screen (CS100000).

The functionality of document loading on the Documents to Apply tab has changed. Users load documents and individual document lines either manually or by clicking **Load Documents**. When a user applies filters in the Load Options dialog box that opens when the user clicks **Load Documents**, the system loads documents and individual document lines.

A user can add lines from different invoices that are associated with the same customer. If a document line has been included in a payment that has not been released yet, that line cannot be included in a different payment. If a document with a payment applied to a document line has been released but the document line has not been fully paid, the user can open another payment document and select the document line to pay the remaining balance.

For each document line, the user can manually specify a full or partial amount to be paid. When the payment is released, the document balance and the balances of the document lines are updated accordingly. For details on paying invoices by line, see "To Pay Separate Lines of an AR Invoice" in the User Guide.

Changes to the Release AR Retainage Screen

The following columns have been added to the Release AR Retainage (AR510000) screen:

- **Line Nbr.**: The number of the document line that can be selected for processing.
- **Inventory ID**, **Project Task**, **Cost Code**, and **Account**: The inventory item, project task, cost code, and account, respectively, associated with the document line.

  The **Cost Code** field is available only if the *Cost Codes* feature is enabled on the Enable/ Disable Features screen (CS100000).

Changes to the Customers Screen

A **Pay by Line** check box has been added to the Financial Settings section on the General Info tab of the Customers screen (AR303000). If it is selected, by default, for customer invoices created on the Invoices and Memos screen (AR301000), the **Pay by Line** check box is selected and payments can be applied to individual lines of these invoices.

When the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen (CS100000), newly created customers inherit the default state of the **Pay by Line** check box from the customer class selected for them.

Changes to the Customer Classes Screen

In the Default Financial Settings section on the General Settings tab of the Customer Classes screen (AR201000), the following check boxes have been added:

- **Pay by Line**: If this check box is selected, the ability to apply payments by line is turned on for customers of the class that are created after this setting has been specified; that is, the Pay by Line check box is selected on the Customers screen (AR303000) for these customers.

  When an administrator enables the *Payment Application by Line* feature, this check box is cleared by default for existing customer classes. For customer classes created after the feature is enabled, it is also cleared by default.

  If a user selects or clears this check box for an existing customer class, the state of this check box does not change for existing customers of the class.

- **Apply Retainage**: If this check box is selected for a customer class, the retainage functionality will be turned on by default for all customers that are subsequently created and assigned to this customer class. That is, for these customers, the **Apply Retainage** check box will be selected on the Customers screen.

  When an administrator enables the *Retainage Support* feature for the first time, this check box is cleared by default for existing customer classes. This check box is also cleared by default for new customer classes.

  If a user selects or clears this check box for an existing customer class, the state of this check box does not change for existing customers of the class.

Support of Auto-Application

The auto-application functionality is also supported for AR documents that can be paid by line. Users can select the **Auto-Apply Payments** check box on the General Info tab of the Customers screen (AR303000) for the automatic application of a selected document or use the Auto-Apply Payments screen (AR506000) for the auto-application of multiple documents.

Upgrade Notes

After the upgrade to MYOB Advanced 2020.3, for a released or unreleased document that was created in a previous version of MYOB Advanced, the **Pay by Line** check box on the Invoices and Memos (AR301000) screen will be cleared and unavailable if the document has at least one line.

Limitations

The following limitations apply to the new functionality:

- In MYOB Advanced, users currently cannot apply GST recalculated on cash discounts to accounts receivable documents for which the **Pay by Line** check box is selected on the Invoices and Memos screen (AR301000).
- Group and document discounts are not supported for accounts receivable documents that have the **Pay by Line** check box selected on the Invoices and Memos screen.
- The **Reverse and Apply to Memo** action on the Invoices and Memos screen cannot be used for the documents with the Pay by Line check box selected. Users should instead select the **Reverse** action and then create an application to a credit memo on the Payments and Applications screen (AR302000).
- An invoice with the **Pay by Line** check box selected cannot be applied to a credit memo on the Applications tab of the Invoices and Memos screen. Users should apply this credit memo to document lines on the Payments and Applications screen instead.
- The feature is not compatible with migration mode. If the **Activate Migration Mode** check box is selected in the Posting Settings section on the General Settings tab of the Accounts Receivable Preferences screen (AR101000), the **Pay by Line** check box on the Invoices and Memos screen is cleared and unavailable for editing.
- The feature is not compatible with the Invoice Rounding feature.
- Balance write-off cannot be performed at the line level.

Approval of AR Invoices, Credit Memos, and Debit Memos

Some organizations might require accounts receivable documents to be approved by authorized employees before they can be released. In this release, the approval functionality has been extended and can now be used for the approval of invoices, credit memos, and debit memos.

> **Note:** Approval maps are available in the system only if the *Approval Workflow* feature is enabled on the Enable/Disable Features screen (CS100000).

Document Types to be Approved

The approval process can now be configured for the following accounts receivable documents generated on the listed screens:

- AR invoices, credit memos, and debit memos created on the Invoices and Memos screen (AR301000).
- AR invoices generated from the Recurring Transactions screen (AR203500)
- AR invoices generated from the Prepare Dunning Letters screen (AR521000)
- AR invoices generated from the Run Contract Billing screen (CT501000)
- AR invoices generated from the Bill Expense Claims screen (EP502000)
- Credit memos generated from the Generate VAT Credit Memos screen (AR504500)
- AR invoices generated from the screens related to field services
- AR invoices generated from the screens related to projects

> **Note:** This approval functionality is not applicable to credit write-offs, overdue charges, or invoices generated from the screens related to sales orders.

Configuration of Approval for Accounts Receivable Documents

In order to implement the approval of invoices, debit memos, and credit memos, the administrative user should perform the following instructions:

1. Make sure that the *Approval Workflow* feature is enabled on the Enable/Disable Features screen (CS100000).
2. On the Assignment and Approval Maps screen (EP205000), create an approval map (or multiple maps, if needed) for the document types to which the approval process must be applied, as described in Managing Assignment and Approval Maps.
   In the **Entity Type** box, select the new "Invoices and Memos" option.
3. On the Approval tab of the Accounts Receivable Preferences screen (AR101000), add a row to the table for each type of documents that requires approval and select the relevant approval map.
   As of this release, in addition to the Customer Refund and Cash Return types (which were available previously), users can select any of the following types: Invoice, Credit Memo, and Debit Memo.
4. Make sure the check box in the **Active** column is ticked.
5. **Optional:** On the Notification Templates screen (SM204003), create a template that the system uses to generate notification emails for employees who approve accounts receivable documents.
   Alternatively, the user can select the AR Invoice predefined notification template in the **Notification ID** box in the Summary area of this screen and update it, if necessary.
6. **Optional:** If the user created a notification template, they should select it in the **Pending Approval Notification** column on the Approval tab of the Accounts Receivable Preferences screen.

For details, see "To Set Up Approval of Accounts Receivable Documents" in the User Guide.

Changes on the Invoices and Memos Screen

If the *Approval Workflow* feature is enabled on the Enable/Disable Features screen (CS100000) and the **Active** check box is ticked for any row (that is, any document type) on the Approval tab of the Accounts Receivable Preferences screen (AR101000), the Invoices and Memos screen (AR301000) changes as follows:

- The Approval Details tab is displayed on the screen.
- The Approve and Reject commands are added to the Actions menu. These commands are available only for documents with the Pending Approval status.
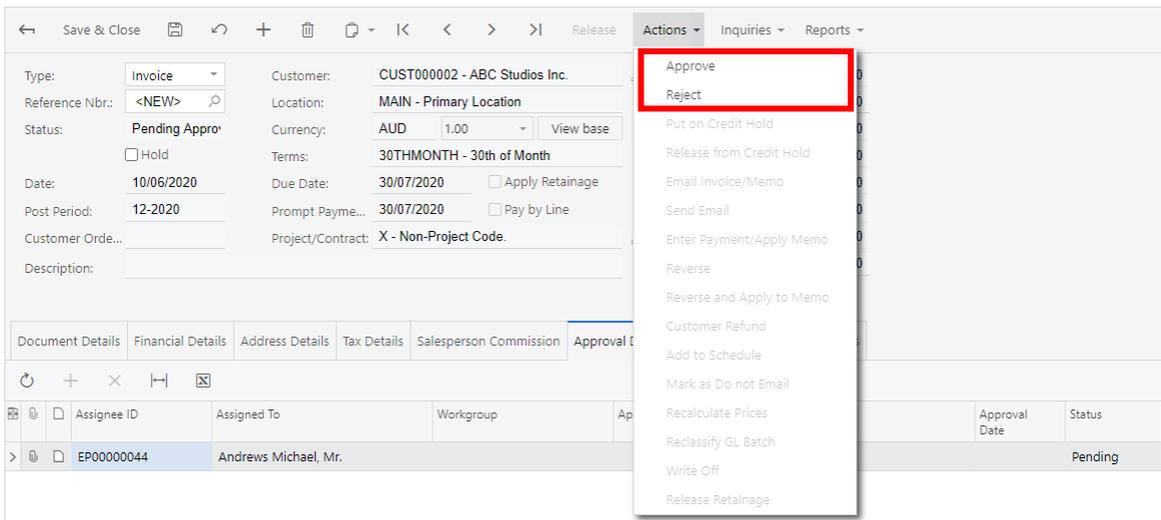
Approval of Invoices, Credit Memos, and Debit Memos

Approval of the documents processed on the Invoices and Memos screen (AR301000) proceeds as follows:

1. On the Invoices and Memos screen, a document of a document type that requires approval— that is, a document for which a relevant approval map is specified for the document type on the Approval tab—is always created with the "On Hold" status, even if the **Hold Documents on Entry** check box is cleared on the Accounts Receivable Preferences screen.
2. Once the user clears the **Hold** check box in the Summary area of the screen, if the conditions configured in the approval map are met, the document's status changes to "Pending Approval" until the approver or approvers specified in the approval map approves or rejects the document.
If a notification template is specified for the applicable document type in the Pending Approval Notification column on the Approval tab of the Accounts Receivable Preferences screen, a notification is sent to each approver.
3. Each of the assigned approvers either approves or rejects the document and the processing continues as follows:
   - Approved documents are assigned one of the following statuses depending on the settings specified in the Data Entry Settings section on the General Settings tab of the Accounts Receivable Preferences screen:
     - Pending Printing—if the **Require Invoice/Memo Printing Before Releas**e check box is selected
     - Pending Email—if the **Require Invoice/Memo Printing Before Release** check box is cleared and the **Require Invoice/Memo Emailing Before Release** check box is selected

- Balanced—if both the **Require Invoice/Memo Printing Before Release** check box and **Require Invoice/Memo Emailing Before Release** check box are cleared

  Then the processing of the document continues as usual according to the workflow described in the User Guide under "Working with AR Invoices: General Information".

  o If a document is rejected, it is assigned the Rejected status. Rejected documents can be put on hold for further editing, or they can be deleted or left in the system.
  Rejected documents appear in the following reports that show unreleased documents: AR Edit (AR611000) and AR Edit Detailed (AR610500).

For details, see "To Approve Invoices, Debit Memos, and Credit Memos" in the User Guide.

Improved Loading of AR Documents for Payment Application

Improvements have been introduced to the Payments and Applications (AR302000) and Invoices and Memos (AR301000) screens to simplify selecting documents to be paid and application of payments.

Automatic Loading of AR Documents for Payment Application

When a payment of the Payment or Prepayment type is created on the Payments and Applications screen (AR302000), once the user selects a customer in the Summary area, the system automatically moves to the Documents to Apply tab the documents to which this payment can be applied. That is, the system loads open account receivable documents of the Invoice, Debit Memo, Credit Memo, and Overdue Charges types, except for AR documents that have unreleased applications.

If more than 100 open documents exist in the system for the selected customer, a warning is displayed instead, and the user is prompted to load documents by clicking **Load Documents** on the table toolbar of the Documents to Apply tab and using the dialog box that opens.

When the payment is saved with the On Hold or Balanced status, only documents that the payment has been applied to are kept in the table.

Manual Loading of AR Documents for Payment Application

On the Documents to Apply tab of the Payments and Applications screen (AR302000), a user can manually load the documents to which the payment can be applied by clicking **Load Documents** on the table toolbar. This button is available if all of the following conditions are met:

- "Payment", "Prepayment", or "Credit Memo" is selected as the document type in the Summary area of the screen.
- The document has not been closed.
- A customer is selected in the Summary area.

When a user clicks **Load Documents**, the Load Options dialog box opens, where the user can specify the criteria based on which the documents to load will be selected—see "Changes to the Load Options Dialog Box" on page 16.

When a user clicks **Load** or **Reload** in the dialog box, the system loads all open AR documents that match the criteria selected in the dialog box, except for documents to

which payments have been applied and applications have not yet been released. The **Load** button adds the documents that match the selected criteria to any documents that have already been added to the table, whereas the **Reload** button first removes any documents from the table and then loads only the documents that match the selected criteria.

The types of AR documents that are loaded for payment application depend on the payment type selected in the Summary area of the Payments and Applications screen, as shown in the following table.

Payment Type	Types of Loaded AR Documents
Payment	• Invoice • Debit Memo • Credit Memo • Overdue Charges
Prepayment	• Invoice • Debit Memo • Credit Memo • Overdue Charges
Credit Memo	• Invoice • Debit Memo • Overdue Charges

When the payment is saved with the On Hold or Balanced status, only documents that the payment has been applied to are kept in the table.

For more information, see "Manual Payment Application" in the User Guide.

Changes to the Payments and Applications Screen

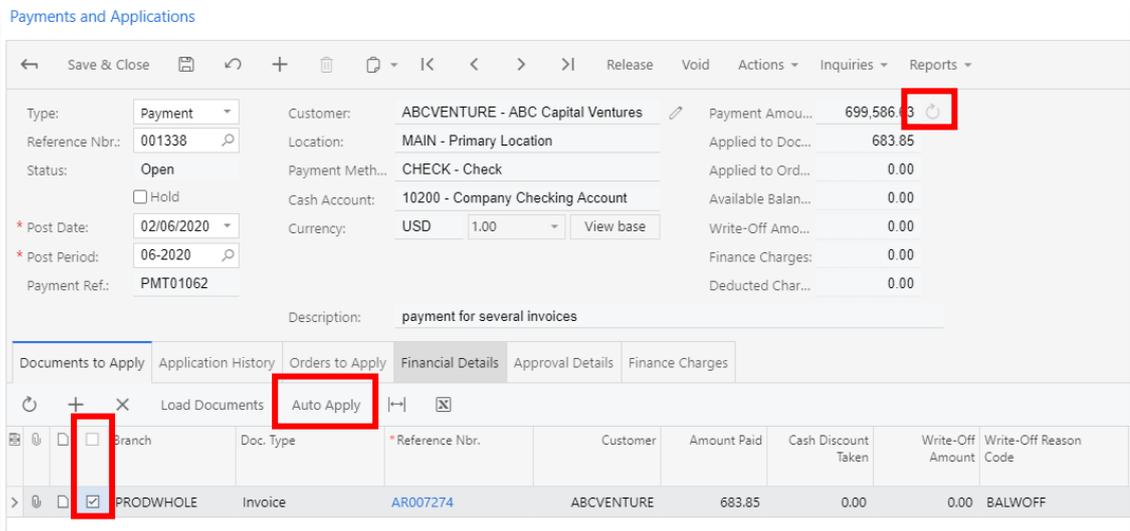The following changes have been made on the Payments and Applications screen (AR302000):

- On the table toolbar of the Documents to Apply tab, an **Auto Apply** button has been added. When a user clicks this button, the payment amount (the value in the **Payment Amount** box) is applied to the loaded documents, starting with the first line displayed in the table (even if the lines are sorted or filtered), until the available balance to be applied is zero.
  The button is available if the payment amount is nonzero. If a user changes the payment amount and then clicks **Auto Apply**, one of the following happens, depending on the new available balance:
  - o If the new available balance is positive (that is, the user has increased the payment amount), it will be applied to the documents for which the paid amount is still less than the document amount; the lines with documents with the document amount paid in full are not recalculated.
  - o If the new available balance is negative (that is the user has reduced the payment amount), the payment amount will be reapplied to the loaded lines.
- On the Documents to Apply tab, an untitled column with a check box has been added. The system automatically selects this check box for documents selected for payment application when a user performs the **Auto Apply** action.
  A user can select or clear this check box for all lines, by clicking the check box in

the table header, or for any individual table line. When a check box is selected for a table line, the Amount Paid column for the document in the line is filled as follows:

- o For documents with the On Hold or Balanced status, the Amount Paid value becomes equal to the document balance.
- o For documents with the Open or Reserved status, the Amount Paid value becomes equal to either the document balance, or the available balance (if the available balance is less than the document balance). When the available balance becomes negative, a warning is shown to the user.

When a user clears this check box for a line, the **Amount Paid** value becomes zero. The system selects this check box automatically when the user changes the amount in the **Amount Paid** column to a nonzero value.

- In the Summary area of the screen, a Refresh button has been added right of the Payment Amount box. When a user clicks this button, the amount in the Payment Amount is updated to reflect the total of the amounts in the Applied to Documents and Applied to Orders boxes.

Changes to the Load Options Dialog Box

The Load Options dialog box is displayed when a user clicks Load Documents on the table toolbar of the Documents to Apply tab. The following changes have been made to this dialog box:

- A **Company** field has been added. It is displayed only if the *Multi-Branch Support* feature is enabled on the Enable/Disable Features screen (CS100000).
- The **Start Ref. Nbr.** and **End Ref. Nbr.** fields have been renamed to **From Ref. Nbr.** and **To Ref. Nbr.**, respectively.
- An **Automatically Apply Amount Paid** check box has been added. This check box is selected by default. If the check box is cleared, the documents are loaded with the **Amount Paid** value empty. When this check box is selected, the Amount Paid value is filled when the user loads the documents, as follows:
  - o If the **Payment Amount** is zero, for each loaded document, the **Amount Paid** becomes equal to the document balance.
  - o If the **Payment Amount** is nonzero, the payment amount is applied to lines sequentially starting with the first displayed line, and the **Amount Paid** of the line becomes equal to the lesser of the document balance and available balance.

- A **Reload** button has been added. When a user clicks this button, the previously loaded documents are removed from the table on the Documents to Apply tab, and new documents are loaded according to the selected criteria.
- The Order By section is now called Sort Order.
- The default value of the **Max. Number of Documents** has been changed to 100.

Loading of Payments for an AR Document

MYOB Advanced supports the loading of payments that can be applied to a particular accounts receivable document on the Invoices and Memos screen (AR301000).

For a document of the Invoice or Debit Memo type, a user can load the applicable payments by clicking **Load Documents** on the table toolbar of the Applications tab of the Invoices and Memos screen. The system then loads documents of the Credit Memo, Payment, and Prepayment types.

Changes to the Invoices and Memos Screen

The following changes have been made to the Applications tab of the Invoices and Memos screen (AR301000):

- A **Load Documents** button has been added to the table toolbar.
- The **Auto Apply** button on the table toolbar now works as follows: When a user clicks this button, the balances of the payment documents that have been added to the Applications tab are applied to the AR document, starting with the first payment document displayed in the table (even if the rows have been sorted or filtered) until the document balance becomes zero or until all payments are applied.
- If a document other than credit memo is selected in the Summary area, an untitled column with a check box has been added to the table. This check box is used to select the payment documents to apply to the current accounts receivable document. The check box is selected automatically by the system when the **Auto Apply** action is performed, or manually by the user. When this check box is selected, the **Amount Paid** value is updated with the payment document's balance. If the payment document's balance is greater than the document balance, an error is displayed.
  When a user clears this check box for a line, the **Amount Paid** value of the line becomes zero.
  The system selects the check box automatically when the user changes the amount in the **Amount Paid** column to a nonzero value.

When the document is saved with the "On Hold" or "Balanced" status, only payment documents that have been applied are kept in the table.

Restricted Use of Control Accounts

In previous versions MYOB Advanced did not restrict posting to general ledger accounts that were used as control accounts in subledgers. This sometimes resulted in situations when the GL balance of an account did not equal the subledger balance of the same account. The two typical reasons for these discrepancies were the following:

- A transaction was entered directly in the general ledger.
- A control account was used as an expense or revenue account in a subledger document.

To prevent these discrepancies, this release adds the ability to restrict direct posting from the general ledger or from other subledgers to control accounts specified for a subledger. For details, see Control Accounts.

Changes to the Chart of Accounts Screen (GL202500)

The following changes have been introduced on the Chart of Accounts screen (GL202500), which is shown in the screenshot below:

- A **Control Account Module** column has been added, with a list of subledgers available for selection. For each GL account, a user can indicate that this account is a control account for the selected subledger. The options available for selection in the list depend on which features have been enabled on the Enable/Disable Features screen (CS100000). The AP, AR, and TX values are always available.
- An **Allow Manual Entry** column has been added. In a particular row, the check box in this column is available for selection if a subledger is selected for a particular account in the **Control Account Module** column of the row. If the check box is cleared, users cannot post transactions directly to this control account; only transactions generated in the specified subledger can be posted to the control account. If the check box is selected, users can post to this control account from all subledgers, but the system will display a warning every time a user posts a transaction manually.
- For cash accounts (those with the Cash Account check box selected), the **Control Account Module** and **Allow Manual Entry** columns are unavailable.
- The **Require Units** column has become hidden.
- The **Use Default Sub** column has been renamed to **Use Default Subaccount**.

- The default order of columns on the screen has been rearranged (the screenshot shows the new order).

In the screen view of an account record on the Chart of Accounts screen, which opens when the user clicks the **Switch Between Grid and Form** button on the screen toolbar, a **Control Account Module** field and an **Allow Manual Entry** check box have been added:

Changes to Maintenance and Data Entry Screens

Maintenance and data entry screens related to accounts payable, accounts receivable, inventory, fixed assets, deferred revenue, taxes, purchase orders, and sales orders have been modified to support the restricted use of control accounts—accounts that have a subledger selected in the Control Account Module column on the Chart of Accounts screen (GL202500). When users select GL accounts on these screens, the system performs the following validations:

- If a control account for a subledger is selected in a box or column for which a control account is expected for this subledger, no warning is displayed.
- If a control account for a subledger is selected in a box or column for which a control account is expected for a different subledger, an error is displayed.
- If a non-control account is selected in a box or column for which a control account is expected, a warning is displayed.

- If a non-control account is selected in a box or column for which a non-control account is expected (for example, a sales or expense account), no warning is displayed.
- If a control account is selected in a box or column for which a non-control account is expected (for example, a sales or expense account) and the **Allow Manual Entry** check box is cleared for the control account on the Chart of Accounts screen, an error is displayed.
- If a control account is selected in a box or column for which a non-control account is expected (for example, a sales or expense account) and the **Allow Manual Entry** check box is selected for the control account on the Chart of Accounts screen, a warning is displayed.

For automatically generated documents, the system skips validation, with the exception of transactions generated on the Journal Vouchers screen (GL304000).

Upgrade Notes

After the system has been upgraded to MYOB Advanced 2020.3, the **Control Account Module** column on the Chart of Accounts screen (GL202500) will be empty for all accounts and the **Allow Manual Entry** check box will be cleared and unavailable. After the upgrade, a user will be able to select a subledger in the **Control Account Module** column for any account, except for a cash account. If a subledger is selected, **the Allow Manual Entry** check box becomes available.

The system will display warnings when a user updates records if a non-control account is selected in a box for which a control account is expected.

Other UI Changes

The following other UI changes have been introduced to support the restricted use of control accounts:

- On the Cash Accounts screen (CA202000), in the **Account** field, control accounts are not visible in the list of accounts and cannot be selected.
- On multiple data entry screens related to accounts payable, accounts receivable, inventory, fixed assets, deferred revenue, taxes, purchase orders, and sales orders, cash accounts are not visible in the list of accounts displayed in lookup boxes for which the selection of a control account is expected.

Sales Tax Support in Accounts Payable

The following scenarios of accounting for tax expenses are now available:

- Users can register AP bills and purchase orders with sales taxes.
- Users can post expenses associated with sales and use taxes under the projects used in AP bills to accurately record project expenses.

To make the first scenario possible, the ability to calculate sales taxes in purchase orders and AP documents has been added.

Changes to the Taxes screen (TX205000)

The **Use Tax Expense Account** check box has been added to the GL Accounts tab of the Taxes screen (TX205000), as shown in the following screenshot.

This check box appears on the screen if "Sales" or "Use" is selected in the **Tax Type** box for the selected tax. Currently, for these two tax types, the check box is always selected and unavailable for editing.

For sales taxes, the **Tax Expense Account** and **Tax Expense Subaccount** fields are now required if the user selects a reporting group with the Input type on the Tax Schedule tab.

> **Note:** If the Tax Expense account is not included in any account group, tax expenses will be posted under the X-Non-Project Code project ID.

For details, see "To Create a Sales Tax for Use in AP" in the User Guide.

Support of Sales Taxes in Purchase Orders, AP Documents, and Cash Disbursements

If a sales tax with the Input group type has been configured on the Taxes screen (TX205000), when a user creates a purchase order on the Purchase Orders screen (PO301000) or AP document on the Bills and Adjustments screen (AP301000) that includes this sales tax, the system calculates the sales tax if it applies to the vendor's tax zone and the item's tax category. The sales tax amount is included in the document total. The user can also add a sales tax with the Input group manually on the Tax Details tab of the Purchase Orders or Bills and Adjustments screen.

The same rules apply when a user enters a cash transaction with the Disbursement type on the Transactions screen (CA304000) or creates a quick check on the Quick Cheques screen (AP304000).

The system recalculates the sales tax for AP bills created from purchase orders or purchase order receipts by using the vendor's tax zone, tax category, and tax ID, all of which are copied from the purchase order.

When the system posts transactions to the general ledger, it inserts the project ID and the tax amount of each line posted to the Tax Expense account specified for the use tax and the sales tax of the Input type. Tax entries are grouped if they have the same project ID, task ID, cost code, account group, and inventory ID. If the *Projects* group of features is disabled on the Enable/Disable Features screen (CS100000), the system creates one line for each tax that is applicable to a document.

When a user is processing old documents (that is, those created before MYOB Advanced 2020.3), if a new line is added to an existing unreleased purchase order or AP bill, and sales tax is now applicable for the new line, the sales tax is applied to this new line. If an old purchase order (created before the sales tax with the Input type was created) is being billed, the system copies the tax settings from the purchase order to the new bill, so that no new tax is applied. For details, see "Taxes in Purchase Orders, AP Documents, and Cash Transactions" in the User Guide.

Support of Sales Taxes in Projects

If a project code is specified in a line of an AP bill, the tax expense amount will be posted to the general ledger with the project code of the line. Based on GL transactions, the system will create project transactions, and the tax expense amounts will be reflected on the project balance. Use tax and sales tax amounts are posted with the project code of the corresponding AP document line if the tax expense account is included in the account group; otherwise, tax expenses will be posted under the X-Non-Project Code project ID.

If multiple document lines have the same combination of project ID, project task ID, cost code, inventory item, and GL account, the system will create an aggregated GL entry with that code and the total tax expense amount.

In the following example, an AP bill for $9095.00 with a 7% sales tax ($595) and a 3% use tax is created with lines that have the settings represented in the rows of the table.

Project	Task	Amount	Sales Tax Amount	Use Tax Amount	Description
03-001	16-100	3000.00	210.00	90.00	Fire protection
03-002	15-300	4000.00	280.00	120.00	Electrical subjob
03-002	15-300	500.00	35.00	15.00	Electrical subjob
03-005	15-200	1000.00	70.00	30.00	Painting job
		8500.00	**595.00**	**255.00**	

When the user posts the bill, the system creates the GL entries that are indicated in the rows in the following table.

Account	Project	Task	Debit	Credit	Description
AP	X		0.00	9095.00	
Tax Payable	X		0.00	255.00	Use tax
Expenses	03-001	16-100	3000.00	0.00	Fire protection
Expenses	03-002	15-300	4000.00	0.00	Electrical subjob
Expenses	03-002	15-300	500.00	0.00	Electrical subjob
Expenses	03-005	15-200	1000.00	0.00	Painting job
Tax Expense	03-001	16-100	210.00	0.00	Sales tax
Tax Expense	03-002	15-300	315.00	0.00	Sales tax
Tax Expense	03-005	15-200	70.00	0.00	Sales tax
Tax Expense	03-001	16-100	90.00	0.00	Use tax
Tax Expense	03-002	15-300	135.00	0.00	Use tax
Tax Expense	03-005	15-200	30.00	0.00	Use tax

For details, see "Taxes in Projects" in the User Guide.

Changes to the Posting of Retained Sales and Use Taxes to the General Ledger

The following subsections describe the posting of sales and use taxes to general ledger accounts when these taxes are applied to account payable documents with retainage.

Posting of Retained Sales Taxes

Suppose that a sales tax is applied to an accounts payable document with retainage—that is, the **Apply Retainage** check box is selected on the Bills and Adjustments screen (AP301000). Further suppose that tax retainage is set up—that is, the **Retain Taxes** check box is selected on the Accounts Payable Preferences screen (AP101000). On release of the original and retainage bills, sales tax amounts are posted to the general ledger accounts as follows:

- On release of the original bill:
  - The total sales tax amount is debited to the tax expense account specified for the tax in the **Tax Expense Account** field of the GL Accounts tab of the Taxes screen (TX205000).
  - The amount of taxes calculated on retainage is credited to the retainage payable account specified for the bill in the **Retainage Payable Account** field on the Financial Details tab of the Bills and Adjustments screen.
- On release of the retainage bill: The retained sales tax amount is debited to the retainage payable account specified for the bill in the **Retainage Payable Account**

field on the Financial Details tab of the Bills and Adjustments screen. The amount is also credited to the accounts payable account specified for the bill in the **AP Account** field on the Financial Details tab on the Bills and Adjustments screen.

Posting of Retained Use Taxes

Suppose that a use tax is applied to an accounts payable document with retainage—that is, the **Apply Retainage** check box is selected on the Bills and Adjustments screen. Further suppose that and tax retainage is set up—that is, if the **Retain Taxes** check box is selected on the Accounts Payable Preferences screen. On release of the original and retainage bills, use tax amounts are now posted to the general ledger accounts as follows:

- On release of the original bill:
  - The total use tax amount is debited to the tax expense account specified for the tax in the **Tax Expense Account** field on the GL Accounts tab of the Taxes screen.
  - The use tax amount that is not retained is credited to the tax payable account specified for the tax in the **Tax Payable Account** field on the GL Accounts tab of the Taxes screen.
  - The retained use tax amount is credited to the retainage tax payable account specified for the tax in the Retainage Tax Payable Account box on the GL Accounts tab of the Taxes screen.
- On release of the retainage bill: The retained use tax amount is debited to the retainage tax payable account specified for the tax in the **Retainage Tax Payable Account** box on the GL Accounts tab of the Taxes screen. The amount is also credited to the tax payable account specified for the tax in the **Tax Payable Account** box on the GL Accounts tab of the Taxes screen.

Release from Credit Hold for AR Invoices

In previous versions of MYOB Advanced, users could not release an AR invoice from credit hold if the customer's credit limit was exceeded. As of this release, users can release invoices from credit hold.

Changes to the Invoices and Memos Screen

The following changes have been made to the Invoices and Memos screen (AR301000), as shown in the screenshot below:

- A **Credit Hold** check box has been added to the Summary area.

  When a user saves an AR document or clears the **Hold** check box, the system validates the customer's credit limit and places the document on credit hold if the validation has failed (which can occur due to the credit limit being exceeded or a document that is long past due). When the system places the document on credit hold, it selects the **Credit Hold** check box for this document automatically and changes the document status to "Credit Hold".

- A **Release from Credit Hold** menu command has been added to the Actions menu. This action becomes available if the document has the "Credit Hold" status.
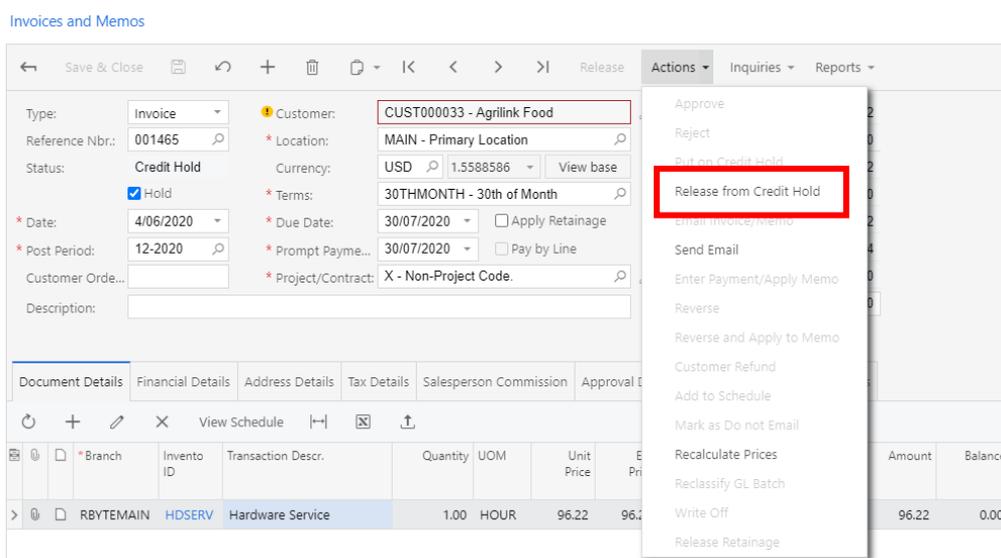
To release a document from credit hold, a user can click **Actions > Release from Credit Hold** or clear the **Credit Hold** check box in the Summary area. When a user releases a document from credit hold, the system sets the document status to "Balanced". If a user modifies a document that has been released from credit hold, the system puts this document on credit hold again if the updated invoice amount is greater than the amount at the moment when the invoice was released from credit hold.

If approvals are configured for AR documents—that is, if the *Approval Workflow* feature is enabled on the Enable/Disable Features screen (CS100000) and an approval map is defined on the Approval Maps screen (EP205015)—an invoice is assigned the "Pending Approval" status when a user clears the **Credit Hold** check box. Once this invoice is approved, it is assigned the "Credit Hold" status and can then be released from credit hold.

Upgrade Notes

After the upgrade to this release, AR documents created automatically by other subledgers and by AR processes will get the "Credit Hold" status if the customer's credit limit is exceeded or the customer is currently on credit hold.

Improvements to the Straight-Line Depreciation Method

The depreciation calculation engine has been redesigned in this release for more efficient calculation of depreciation amounts and their rounding.

As of this release, for depreciation methods that use the Straight-Line calculation method with the Full Period averaging convention, the state of the **Accelerated Depreciation for SL Depr. Method** check box on the General Settings tab of the Fixed Asset Classes screen (FA201000) is ignored by the system. If these settings are specified in MYOB Advanced 2020 R1, the asset's net value may not become zero at the end of its useful life if the useful life was changed or the asset was revalued.

If there is at least one book for an asset that uses a depreciation method based on the Straight-Line calculation method and the Full Period averaging convention, the system now displays a warning about the changed behaviour in the following cases:

- When a user clicks **Actions > Calculate Depreciation** on the Fixed Assets screen (FA303000), the system displays a warning on the Balance tab.
- When a user selects an asset and clicks **Process** on the toolbar of the Calculate Depreciation screen (FA502000), the system displays a warning when the processing is completed.

If the user wants the system to maintain the behaviour provided when the **Accelerated Depreciation for SL Depr. Method** check box was selected in the previous versions of MYOB Advanced, when an asset will have reached zero net value at the end of its useful life, the user should change the depreciation method to a method based on the Remaining Value calculation method. To do this, the user changes the option in the **Depreciation Method** column on the Balance tab of the Fixed Assets screen.

Calculation Example

The following example shows the difference in the calculated depreciation of a fixed asset with the **Accelerated Depreciation for SL Depr. Method** check box selected in MYOB Advanced 2020.3 and in previous versions. To demonstrate the differences in the calculated depreciation, the example consists of the following parts: the depreciation history of an asset without additions, the depreciation history of the asset with an addition calculated in previous versions of MYOB Advanced, and the depreciation history of the asset with an addition in MYOB Advanced 2020.3.

For this example, suppose that a fixed asset with the following settings on the Fixed screen Assets (FA303000) has been purchased:

- **Asset Class**: COMPUTER
- **Useful Life, Years**: 2
- **Placed-in-Service Date**: 1/1/2019
- **Orig. Acquisition Cost**: 2400

The asset has been depreciated using the Straight-Line calculation method and the Full Period averaging convention, with the **Accelerated Depreciation for SL Depr. Method** check box on the Fixed Asset Classes screen (FA201000) selected. The following table illustrates the depreciation history for this asset; this history is applicable to all versions of MYOB Advanced.

Period	Depreciated	Accumulated Depreciation	Net Value
01-2019	100.00	100.00	2300.00
02-2019	100.00	200.00	2200.00
03-2019	100.00	300.00	2100.00
04-2019	100.00	400.00	2000.00
05-2019	100.00	500.00	1900.00
06-2019	100.00	600.00	1800.00
07-2019	100.00	700.00	1700.00

Period	Depreciated	Accumulated Depreciation	Net Value
08-2019	100.00	800.00	1600.00
09-2019	100.00	900.00	1500.00
10-2019	100.00	1000.00	1400.00
11-2019	100.00	1100.00	1300.00
12-2019	100.00	1200.00	1200.00
01-2020	100.00	1300.00	1100.00
02-2020	100.00	1400.00	1000.00
03-2020	100.00	1500.00	900.00
04-2020	100.00	1600.00	800.00
05-2020	100.00	1700.00	700.00
06-2020	100.00	1800.00	600.00
07-2020	100.00	1900.00	500.00
08-2020	100.00	2000.00	400.00
09-2020	100.00	2100.00	300.00
10-2020	100.00	2200.00	200.00
11-2020	100.00	2300.00	100.00
12-2020	100.00	2400.00	0.00

At the end of the useful life, the net value of the asset became $0.00.

Suppose that an addition of $1200 was made to the asset on 1 January 2020. In this case, for previous versions of MYOB Advanced, the following table reflects the depreciation history for the asset with the **Accelerated Depreciation for SL Depr. Method** check box.

Period	Depreciated	Accumulated Depreciation	Net Value
01-2019	100.00	100.00	2300.00
02-2019	100.00	200.00	2200.00
03-2019	100.00	300.00	2100.00
04-2019	100.00	400.00	2000.00
05-2019	100.00	500.00	1900.00

Period	Depreciated	Accumulated Depreciation	Net Value
06-2019	100.00	600.00	1800.00
07-2019	100.00	700.00	1700.00
08-2019	100.00	800.00	1600.00
09-2019	100.00	900.00	1500.00
10-2019	100.00	1000.00	1400.00
11-2019	100.00	1100.00	1300.00
12-2019	100.00	1200.00	1200.00
01-2020	200.00	1400.00	2200.00
02-2020	200.00	1600.00	2000.00
03-2020	200.00	1800.00	1800.00
04-2020	200.00	2000.00	1600.00
05-2020	200.00	2200.00	1400.00
06-2020	200.00	2400.00	1200.00
07-2020	200.00	2600.00	1000.00
08-2020	200.00	2800.00	800.00
09-2020	200.00	3000.00	600.00
10-2020	200.00	3200.00	400.00
11-2020	200.00	3400.00	200.00
12-2020	200.00	3600.00	0.00

At the end of the useful life, the net value of the asset with the addition was still $0.00 because the **Accelerated Depreciation for SL Depr. Method** check box was selected.

With the new calculation engine in MYOB Advanced 2020.3, the depreciation history of this asset with the addition of $1200 is as shown in the following table. Thus, the net value at the end of the useful life is greater than zero, regardless of whether the **Accelerated Depreciation for SL Depr. Method** check box is selected or cleared.

Period	Depreciated	Accumulated Depreciation	Net Value
01-2019	100.00	100.00	2300.00
02-2019	100.00	200.00	2200.00
03-2019	100.00	300.00	2100.00
04-2019	100.00	400.00	2000.00
05-2019	100.00	500.00	1900.00
06-2019	100.00	600.00	1800.00
07-2019	100.00	700.00	1700.00
08-2019	100.00	800.00	1600.00
09-2019	100.00	900.00	1500.00
10-2019	100.00	1000.00	1400.00
11-2019	100.00	1100.00	1300.00
12-2019	100.00	1200.00	1200.00
01-2020	150.00	1350.00	2250.00
02-2020	150.00	1500.00	2100.00
03-2020	150.00	1650.00	1950.00
04-2020	150.00	1800.00	1800.00
05-2020	150.00	1950.00	1650.00
06-2020	150.00	2100.00	1500.00
07-2020	150.00	2250.00	1350.00
08-2020	150.00	2400.00	1200.00
09-2020	150.00	2550.00	1050.00
10-2020	150.00	2700.00	900.00
11-2020	150.00	2850.00	750.00
12-2020	150.00	3000.00	600.00

In this part of the example, the net value of the asset at the end of its useful life remains $600.

Upgrade Notes

After an upgrade to MYOB Advanced 2020.3, to use the calculations shown in the second table of the example, before depreciating fixed assets, a user has to change the depreciation method of the posting book of the needed assets to another depreciation method that uses the Remaining Value calculation method. To do this, the user has to change the value in the **Depreciation Method** column on the Balance tab of the Fixed Assets screen (FA303000) for every needed asset.

Including Tax Amounts in the Cost of Purchased Items

Some companies may need to include tax amounts in the cost of stock items. As of this release, users can now configure taxes so that the applicable tax amounts will be posted to the inventory accounts of the stock items being purchased.

Configuration of a Tax for Inclusion in the Items' Cost

To include tax amounts in the costs of items in purchase orders, the following actions must be completed in the system:

- A tax reason code of the Adjustment type must be defined on the Reason Codes screen (CS211000), and specified as the **Tax Reason Code** on the Purchase Orders Preferences screen (PO101000).
- In the tax settings, the **Use Tax Expense Account** check box must be cleared on the GL Accounts tab on the Taxes screen (TX205000).

Inclusion of Tax Amounts in Costs for Stock Items

For a stock item with the Average, Specific, or FIFO valuation method, on release of an AP bill prepared for a purchase order that includes the item, an inventory adjustment transaction is automatically generated to post tax amounts to the item's inventory account. The system shows the link to the generated inventory adjustment transaction in the **Adjustment Nbr.** box on the Financial Details tab on the Bills and Adjustments screen (AP301000) for the AP bill.

For stock items with the Standard valuation method, in the GL transaction generated on AP bill release, the tax amount is posted directly to the account defined by the **Tax Reason Code**.

If an accounts payable bill is processed for a purchase order before the purchase receipt is created, the tax amounts are posted to the inventory account on release of the purchase receipt.

When the tax amount is posted to item's inventory account, the system generates the following GL transactions:

- Inventory Account, Dr, Tax Amount
- PO Accrual account, Cr, Tax Amount

> **Note:** For partially deductible GST taxes, only the expense part is posted on the item's inventory account.

Taxes in Purchase Returns and on Bill Reversal

On the reversal of an AP bill for which the inventory adjustment with included taxes has been processed, the system generates a debit adjustment. On release of this debit adjustment, the system also generates a reversing inventory adjustment transaction (that is, an inventory adjustment for which the opposite GL batch is generated).

When a purchase return for taxable stock items with taxes included in items' cost is released, the system automatically generates a debit adjustment with the appropriate tax amounts to be posted to the account specified in the tax reason code. The system calculates the tax amounts to be subtracted from items' cost on return depending on the state of the **Return by Original Receipt Cost** check box in the purchase return on the Purchase Receipts screen (PO302000).

Inclusion of Tax Amounts in Costs for Non-Stock Items

For non-stock item with the **Require Receipt** check box selected on the Non-Stock Items screen (IN202000), the system calculates the taxes and accrues them in the **COGS/Expense Account** specified in the purchase receipt line on the Purchase Receipts screen (PO302000).

The following GL transactions are generated and posted:

- Tax Reason Code account, Dr, Tax Amount
- PO Accrual account, Cr, Tax Amount

Known Limitations

The following limitations are currently applicable to the inclusion of tax amounts in items' costs:

- The inclusion of taxes in items' costs is applicable to use taxes, sales taxes of the Input tax group, and GST with the **Partially Deductible GST** check box selected on the Taxes screen (TX205000).
- The accrual of tax amounts to inventory accounts is currently not possible for landed cost documents.

Cheque Register Inquiry

A new inquiry screen, Cheque Register (AP404500), has been added in this release. Users can run this inquiry to find out whether a particular cheque number has been used and, if it has, by which AP cheque.

On the Release Payments screen (AP505200), a user can return a printed AP cheque to the "Pending Print" status for further reprinting. The user can either reprint the AP cheque with the same number (the system will reuse the check number) or with a new number (the system will void the previous cheque number). The Cheque Register inquiry enables visibility of the voided cheque numbers.

The screenshot below shows the inquiry with the cash account, payment method, and cheque number specified in the selection area.

By default, access to the new inquiry has been granted to the following predefined financial roles:

- AP Clerk
- AP Admin
- AP Viewer

Inclusive Output Tax at the Document Level

In previous releases, it was not possible to calculate inclusive taxes at the document level. If a tax amount was included in the price of a product or service, the only possible way to calculate the taxes was at the line level; the system calculated the tax amount for each line based on the tax rate and rounded it according to the currency precision. Then the results were summed to get the tax amount of the document.

As of this release, users can create an AR document in which total inclusive tax will be extracted from the document amount, but not totalled from the taxes calculated for the document lines.

Calculation Rules

A new tax engine has been implemented to calculate and round inclusive tax amounts based on document amounts. The system uses the following rules to calculate tax amounts:

1. The amount of the document before taxes is calculated as follows:
   a. Line amounts of the document with the same applicable taxes are totalled (Line Amount = Ext. Price – Line, Group, and Document Discounts). If more than one tax is applicable to a document, the system groups document lines by the rates of the applied taxes.
   b. The amount before taxes is extracted from the sum of the document line amounts. The result is not rounded.
2. The tax amount based on the unrounded amount before taxes is calculated. The result is then rounded to the currency precision.
3. The exact amount before taxes is calculated by subtracting the rounded tax amount from the sum of the document line amounts.

To prepare journal entries posted to GL on release of a document with inclusive GST at the document level, the system still calculates line-level taxes for each line to get the amounts before taxes that are posted to the revenue account specified in the lines. Because the document-level tax posted to the tax payable account may differ from the total of tax amount of each line, to balance the transaction the system posts the difference to a special gain and loss account.

The example below illustrates how the system calculates the amount before taxes and the tax amount for each line.

Item	Line Amount	Tax Rate	Line Tax Amount (rounded)	Line Amount Before Taxes to Post to Revenue Account
Item 1	105.55	19%	105.55 / 1.19 * 0.19 = 16.85	105.55 – 16.85 = 88.70
Item 2	112.99	19%	112.99 / 1.19 * 0.19 = 18.04	112.99 – 18.04 = 94.95
Item 3	87.70	19%	87.70 / 1.19 * 0.19 = 14.00	87.70 – 14.00 = 73.70

The system has calculated these amounts as follows:

- Line amount before taxes:
  - Line 1: 105.55 / 1.19 = 88.697479
  - Line 2: 112.99 / 1.19 = 94.9495798
  - Line 3: 87.70 / 1.19 = 73.697479
- Line tax amount:
  - Line 1: 88.697479 * 0.19 = 16.852521 ~ 16.85
  - Line 2: 94.9495798 * 0.19 = 18.0404202 ~ 18.04
  - Line 3: 73.697479 * 0.19 = 14.002521 ~ 14.00
- Rounded line amount before taxes to post to revenue account:
  - Line 1: 105.55 − 16.85 = 88.70
  - Line 2: 112.99 − 18.04 = 94.95
  - Line 3: 87.70 − 14.00 = 73.70

In the next step, the system calculates the document amount before taxes and the tax amount as follows:

- Document amount before taxes:
  - Sum of the line amounts: 105.55 + 112.99 + 87.70 = 306.24
  - Amount before taxes: 306.24 / 1.19 = 257.344538
- Document tax amount: 257.344538 * 0.19 = 48.8954622 ~ 48.90
- Rounded document amount before taxes: 306.24 − 48.90 = 257.34

As a result of the calculations, there is a difference between the amount before taxes by lines (257.35) and the document amount before taxes: (257.34). The difference will be posted to the Tax Rounding Gain/Loss account. The system generates the GL batch whose details are shown in the following table.

Account	Debit	Credit
Accounts Receivable	306.24	
Revenue of line 1		88.70
Revenue of line 2		94.95
Revenue of line 3		73.70
Tax Payable		48.90
Tax Rounding Gain/Loss	0.01	
	306.25	306.25

On the Taxes screen (TX205000), the **Calculate On** field on the Tax Settings tab has been renamed to **Calculation Rule**. The options that users can select in this box have been also renamed as shown in the following table.

Previous Option Name	New Option Name
Extract From Item Amount	Inclusive Line-Level
Calc. On Item Amount	Exclusive Line-Level
Calc. On Item + Tax Amount	Compound Line-Level
Calc. On Document Amount	Exclusive Document-Level
Calc. On Document + Tax Amount	Compound Document-Level

A **Tax Calculation Mode** field has been added to the following screens:

- Customers (AR303000): The Default Location Settings section on the Delivery Settings tab
- Customer Locations (AR303020): The Location Settings section on the General Info tab
- Customer Classes (AR201000): The Default General Settings section on the General Settings tab
- Invoices and Memos (AR301000): The Tax Info section on the Financial Details tab
- Cash Sales (AR304000): The Tax Info section on the Financial Details tab
- Business Accounts (CR303000): The Default Location Settings section on the Delivery Settings tab
- Account Locations (CR303010): The Location Settings section on the General Info tab
- Opportunities (CR304000): The Additional Details section on the Details tab
- Sales Quotes (CR304500): The Financial Details section on the Details tab
- Sales Orders (SO301000): The Financial Information section on the Financial Settings tab
- Invoices (SO303000): The Tax Info section on the Financial Details tab
- Service Orders (FS300100): The Financial Information section on the Financial Settings tab
- Appointments (FS300200): The Financial Information section on the Financial Settings tab

The **Tax Calculation Mode** field appears on the screens if the *Net/Gross Entry Mode* feature has been enabled on the Enable/Disable Features screen. In this field, one of the following options should be selected:

- **Tax Settings**: The system inserts the value specified for the selected customer location. This is the default value.
- **Gross**: The tax amount is included in the item price.
- **Net**: The tax amount is not included in the item price.

For inclusive document taxes to be calculated, the following conditions must be met:

- The "Gross "option has to be selected in the **Tax Calculation Mode** field on the screen where the document is created.
- The user can apply to the document only GST and sales taxes for which the Exclusive Document-Level option is selected in the **Calculation Rule** field on the Taxes screen.

Upgrade Notes

After the upgrade to MYOB Advanced 2020.3, the **Tax Settings** option will be selected by default in the Tax Calculation Mode box on the Customers (AR303000), Customer Classes (AR201000), Customer Locations (AR303020), Business Accounts (CR303000), and Account Locations (CR303010) screens for all existing documents that have been created on these screens.

If the *Net/Gross Entry Mode* feature has been enabled on the Enable/Disable Features screen (CS100000), after the upgrade, the system updates the mandatory boxes on the new Tax Preferences screen (TX103000) with the values specified in the Rounding Settings section on the General Ledger Preferences screen (GL102000) or leaves them empty. If the system leaves the boxes empty, users will have to specify the accounts and subaccounts (if applicable) in these boxes; otherwise, an error message will be displayed on an attempt to release a document with inclusive document-level taxes and a calculated rounding amount.

Saving Bank Transaction Matching Settings per Cash Account

The MYOB Advanced database now holds the bank transaction match and relevance calculation settings configured for a particular cash account in the Transaction Match Settings dialog box, which is opened when a user selects a cash account on the Process Bank Transactions screen (CA306000) and clicks the **Match Settings** button on the screen toolbar.

In previous releases, when a user updated the settings for a cash account in the Transaction Match Settings dialog box, the updated values were effective for only the duration of the user's session. When the user was signed out, the account-specific settings were reset to the default values, which are configured on the Bank Statement Settings tab of the Cash Management Preferences screen (CA101000).

As of this release, the settings saved for a particular cash account in the Transaction Match Settings dialog box are maintained in the database and not limited to a particular user's session. On the Process Bank Transactions screen, when a user selects a cash account for which custom settings were previously saved and opens the Transaction Match Settings dialog box, the settings that have been specified for the cash account are now displayed in this dialog box.

A user can reset the settings specific to a cash account to the default values by clicking the new **Reset to Default** button in the Transaction Match Settings dialog box, as shown in the following screenshot.
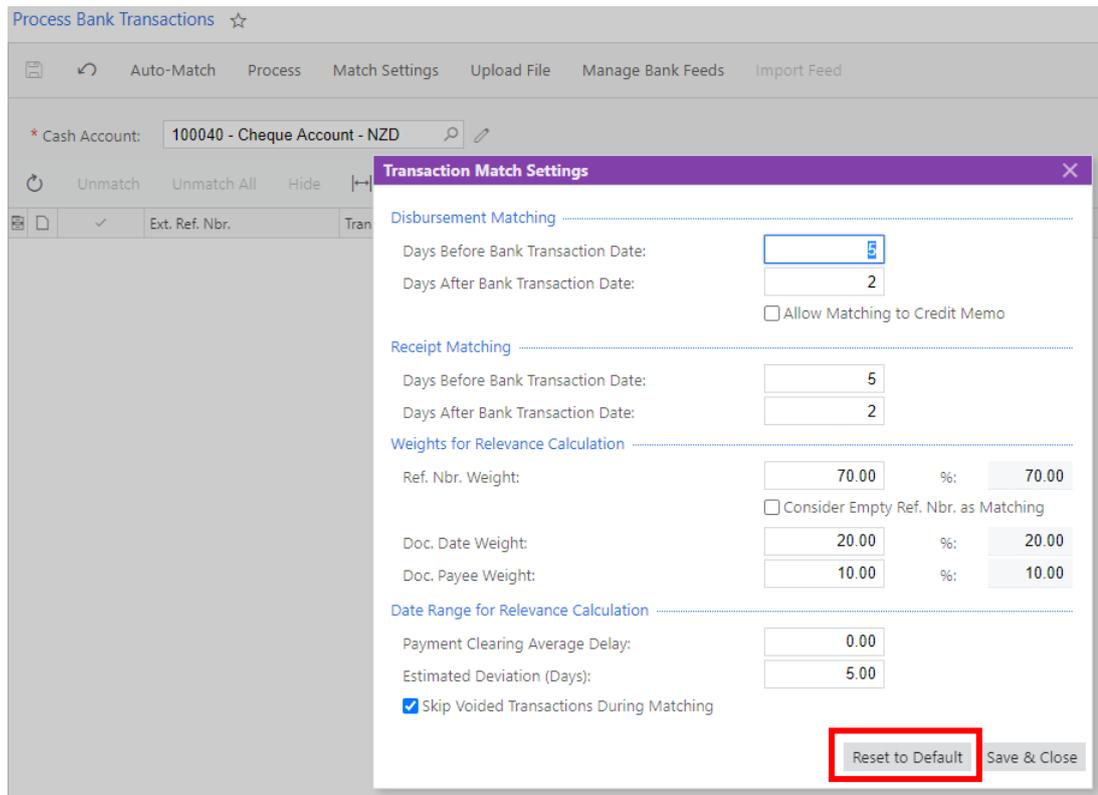
For more information, see "To Set Up Transaction Matching Settings Applicable to a Particular Cash Account" in the User Guide.

Other Enhancements

This release introduces the following additional enhancements to the finance functionality.

Combined Enabling of Centralized Period Management and Multiple Calendar Support Features

The *Centralized Period Management* and *Multiple Calendar Support* features are mutually exclusive. That is, *Multiple Calendar Support* can be enabled if *Centralized Period Management* is disabled, and *Centralized Period Management* can be enabled if *Multiple Calendar Support* is disabled.

In previous releases, to ensure the consistent state of the check boxes corresponding to these features on the Enable/Disable Features screen (CS100000), each of these check boxes was unavailable for editing if the other was selected. However, this system behaviour was not clear for the users. To improve the user experience, as of this release, these check boxes are available, and if the check box selections are not valid, the system displays appropriate error messages informing the users about the use of the features.

Changed Location of the GL Accounts Tab on the Taxes Screen

On the Taxes screen (TX205000), the GL Accounts tab has been moved and is now located in the bottom part of the screen, as shown in the screenshot below. This change has been introduced because GL accounts are attributes of a tax. Thus, the change supports the uniformity of the user interface of the Taxes screen and other MYOB Advanced screens on which the Summary area is displayed for all tabs.

Changed Presentation of Data on the Customer Details Screen

In previous releases, when auto-numbering was enabled for customer accounts—that is, when the **Auto Number** check box was selected for the CUSTOMER segmented key on the Segmented Keys screen (CS202000)—it was difficult for users to distinguish between the child accounts to which documents on the Customer Details screen (AR402000) were related.

As of this release, the **Customer** column in the table on the Customer Details screen displays the customer name after the customer ID, as illustrated in the following screenshot.

Renaming of Screens in the Fixed Asset Subledger

In order to have consistent screen names in the General Ledger and the Fixed Asset subledger, the following UI changes have been introduced to screens in this release:

- Book Calendars (FA206000) has been renamed to Book Calendar Setup (FA206000).
- Generate FA Calendars (FA501000) has been renamed to Generate Book Calendars (FA501000).
- Book Periods (FA304000) has been renamed to Book Calendars (FA304000).

Payment Application by Lines Not Allowed for Debit Adjustments

If the *Payment Application by Line* feature has been enabled on the Enable/Disable Features screen (CS100000), debit adjustments created in the system manually or by reversing a document cannot be applied by line. In other words, for debit adjustments created on the Bills and Adjustments (AP301000) screen, the Pay by Line check box in the Summary area will always be cleared and unavailable for editing.

After an upgrade to this release, if any debit adjustments with payment application by line exist in the system, they will be processed by using the logic that had been applied before this change.

Changes to the Load Options Dialog Box

The following changes have been introduced to the Load Options dialog box of the Payments and Applications screen (AR302000), which a user brings up by clicking **Load Documents** on the table toolbar of the Documents to Apply tab:

- The new Company/Branch box has replaced the separate Company and Branch boxes.
- The Max. Number of Documents box has been renamed to Max. Number of Rows.
- The UI elements have also been rearranged as shown in the screenshot below.

Project Accounting

Budget Control on Document Entry

In MYOB Advanced 2020.3, the project budget can be exceeded as users enter documents. The system can check whether an entered document is within the cost budget of the project, taking into consideration the portion of the budget that has already been consumed.

To cause the system to control the project budget, an administrative user selects "Show a Warning" in the **Budget Control** field on the General Settings tab of the Projects Preferences screen (PM101000).

When a user enters an amount that exceeds the cost budget, or when a document with such an amount is saved with any status except Open for AP bills and purchase orders of Open and Drop Ship types and Closed for change orders, the system shows a warning, as shown in the screenshot below. The document approver also sees this warning if the amount exceeds the project budget. The warning is shown in the **Ext. Cost** column on the Document Details tab of the Purchase Orders (PO301000) and Bills and Adjustments (AP301000) screens, in the **Amount** column on the Commitment tab of the Change Orders (PM308000) screen, and in the Summary area of these screens.

The warning message in the document line displays the applicable amounts of the following:

- **Budgeted**: The revised budgeted amount of the corresponding project budget line in the project currency
- **Consumed**: The sum of the actual amount and the committed open amount of the corresponding project budget line in the project currency
- **Available**: The difference between the Budgeted and Consumed amounts
- **Document**: The sum of the Ext. Cost minus the Discount Amount amounts of all the document lines that impact the same budget line in the validated document
- **Remaining**: The difference between the Available and Document amounts

All the budget overruns of a project can be reviewed on the Project Budget Overruns screen (PM404000), which is shown in the following screenshot.

Detail Level of the Project Budget

For both the revenue budget and the cost budget, MYOB Advanced now supports the following detail levels of the project budget:

- Task
- Task and item
- Task and cost code

MYOB Advanced also supports the following options of update of the project budget with project transactions for both the revenue budget and the cost budget:

- Detailed
- Summary

Detail Level of the Project Budget

On the Summary tab of the Projects screen (PM301000), a **Cost Budget Level** field has been added to the Project Properties section. The same setting has been added to the Project Templates screen (PM208000). By using this setting, a user can now define the detail level of the cost budget. (A similar setting, **Revenue Budget Level**, already exists on this screen for the revenue budget.) The selected level also determines whether the **Inventory ID** and **Cost Code** columns are shown or hidden on the Cost Budget tab. The level can be one of the following options:

- **Task**: The project cost is budgeted at the task (Task ID) level. With this option selected, the **Inventory ID** and **Cost Code** columns are hidden.
- **Task and Item**: The project cost is budgeted at the task (**Task** ID) and item (**Inventory ID**) level. With this option selected, the Cost Code column is hidden.
- **Task and Cost Code**: The project cost is budgeted at the task (**Task ID** and cost code (**Cost Code**) level. With this option selected, the **Inventory ID** column is hidden.

> **Note:** The **Task and Cost Code** option is available and the **Cost Code** column is shown on the Cost Budget tab of the Projects screen only if the *Cost Code* feature is enabled on the Enable/Disable Features screen (CS100000).

Update of the Project Budget

On the General Settings tab of the Projects Preferences screen (PM101000), a **Revenue Budget Update** field has been added to the General Settings section. By using this field, an administrative user can define the way the system updates the revenue budget of projects with project transactions. (A similar setting, **Cost Budget Update**, already exists on this screen for the cost budget.)

The system updates the corresponding project when any of the following actions occur: a project transaction is posted, a change order line is released, a commitment line is saved, a pro forma invoice line is saved, an accounts receivable invoice line is saved, and a new change request line is saved or linked to a change order. If the revenue budget of the project has a line with the same project task, account group, inventory item, and cost code, the system updates the **Actual Quantity**, **Actual Amount**, and **Draft Invoices Amount** of this line on the Revenue Budget tab of the Projects screen (PM301000) with the quantity and amounts, respectively, of the transaction. Otherwise, the system adds a new revenue budget line.

The system updates the revenue budget based on the option selected in the **Revenue Budget Update** field. The following options are available:

- **Detailed** (default): The system updates the revenue budget of the project depending on the Revenue Budget Level of the project specified on the Summary tab of the Projects screen as follows:
  - **Task**: The system updates the revenue budget line that has the same project task as the transaction does. If the revenue budget has no line that has this project task, a new line with the project task is added.
  - **Task and Item**: The system updates the revenue budget line that has the same inventory item as the transaction does. If the revenue budget has no line that has this inventory item, a new line with the inventory item is added.
  - **Task and Cost Code**: The system updates the revenue budget line that has the same cost code as the transaction does. If the revenue budget has no line that has this cost code, a new line with the cost code is added.
- **Summary**: The system updates the revenue budget of the project depending on the Revenue Budget Level of the project specified on the Summary tab of the Projects screen as follows:
  - **Task**: The system updates the revenue budget line that has the same project task as the transaction does. If the revenue budget has no line that has this project task, a new line with the project task is added.
  - **Task and Item**: The system updates the revenue budget line with the same inventory item as the transaction does. If the revenue budget has no line that has this inventory item, a new line with the empty item code is added.
  - **Task and Cost Code**: The system updates the revenue budget line that has the same cost code as the transaction does. If the revenue budget has no line that has this cost code, a new line with the default cost code is added.

In the same way, the system updates the cost budget of projects with project transactions based on the option selected in the **Cost Budget Update** field on the General Settings tab of the Projects Preferences screen and on the Cost Budget Level of the project specified on the Summary tab of the Projects screen.

Updating the Quantities of the Project Budget

When the system updates an existing project budget line based on a source document line on the Revenue Budget or Cost Budget tab of the Projects screen (PM301000), the quantity of the budget line is updated only if the UOM is specified for the budget line and for the source line and if the UOM of the source line can be converted to the UOM of the budget line by using the list of unit conversions defined on the Units of Measure screen (CS203100). Otherwise, the system does not update the quantity of the budget line.

When the system creates a new project budget line based on a source document line on the Revenue Budget or Cost Budget tab of the Projects screen, if the source line has an inventory item specified, the system fills in the UOM of the budget line with the base unit of measure of this inventory item and the quantity of the budget line with the quantity of the source line. Otherwise, if the source line has no inventory item specified or has the empty item code (N/A) specified, the system does not fill in the UOM and quantity of the budget line.

Two-Tier Change Management

MYOB Advanced provides comprehensive change management capabilities for projects, which are used to analyse profitability and to track and control project changes. This release introduces the Change Requests feature. Change requests are detailed breakdowns of potential changes to the project budget and commitments, such as additions, deletions, or edits to the existing cost or revenue budget. This feature gives organizations the ability to set up two-tier change management for change orders: In the first tier, users create change requests, and the second tier involves users grouping multiple change requests into a single change order to be approved.

Markups can be set up and calculated for change requests. A markup can be applied to an individual line of a change request or to the total amount of the document.

Enabling Two-Tier Change Management

To start using the functionality of change requests, on the Enable/Disable Features screen (CS100000), an administrative user enables the *Change Requests* feature. The Change Requests feature can be enabled only if the Change Orders feature has been enabled.

The two-tier change management is controlled at the level of a change order class. If the **2-Tier Change Management** check box is ticked for a particular class on the Change Order Classes screen (PM203000), as shown in the following screenshot, change orders of the selected class support two-tier change management and can include change requests; also, on the Details tab (also shown in the screenshot), the **Cost Budget** and **Commitments** check boxes become automatically selected and unavailable for editing.
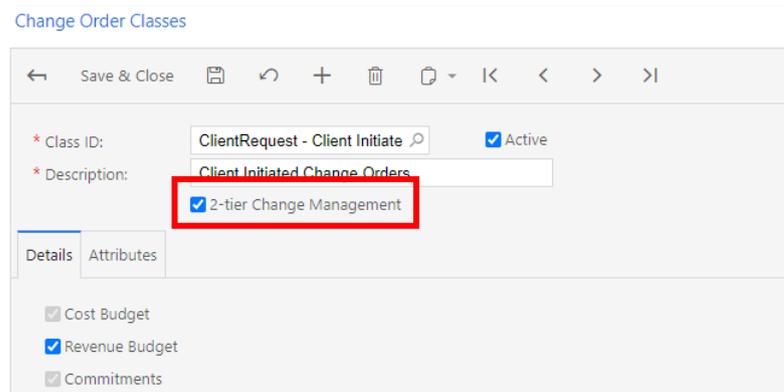
Configuration of Change Requests

On the General Settings tab of the Projects Preferences screen (PM101000), the following settings have been added so that the use of change requests can be configured (see the following screenshot):

- **Change Request Numbering Sequence**: The numbering sequence the system uses to assign reference numbers to change requests.
- **Change Request Approval Map**: The approval map to be used to assign change requests to employees for approval. If no value is specified in this box, approval is not required.
- **Pending Change Request Approval Notification**: The notification template that the system uses to generate notification emails for employees who approve change requests. An employee receives a notification about pending approval when a change request requires approval from this employee.
- **Markups** section: The settings that define the default price markup and the default markups for projects. These markups (if specified) can be modified for each project. For details about markups, see "Markups" on page 45.

On the Account Groups (PM201000) screen, the Settings tab has been added. (See the screenshot below.) This tab contains the following settings:

- **Creates Commitment**: A check box that indicates (if selected) that a change request line that has this cost account group specified will result in a commitment line on the Change Orders (PM308000) screen once you link the change request with this line to a change order.
- **Default Line Markup, %**: The default markup percentage to be specified as Line Markup (%) for a change request line that has this account group specified as the cost account group. For details about markups, see "Markups" on page 45.

Change Requests Screen

On the Change Requests screen (PM308500) (shown in the following screenshot), a user can create a new change request or view, modify, or delete an existing change request.

A change request can have one of the following statuses, which is displayed in the **Status** box in the Summary area of the screen:

- **On Hold**: The change request is a draft. The user can edit or delete the change request, but cannot link it to a change order.
- **Pending Approval**: The change request has been taken off hold (that is, the Hold check box was cleared for the change request). On the Approvals (EP503010) screen, a change request with this status is visible to the employee who has been assigned to approve the change request in accordance with the change request approval map specified on the Projects Preferences (PM101000) screen. This status is available only if the *Approval Workflow* feature is enabled on the Enable/Disable Features (CS100000) screen and a change request approval map has been defined and then specified in the Change Request Approval Map box on the General Settings tab of the Projects Preferences screen.
- **Rejected**: The system assigns this status to the change request if the employee who was assigned to approve the change request has rejected it. The change request can be saved with the On Hold status for further editing. This status is available only if the Approval Workflow feature is enabled on the Enable/Disable Features screen and a change request approval map has been defined and then

specified in the Change Request Approval Map box on the General Settings tab of the Projects Preferences screen.

- **Open**: The system assigns this status to the change request if the employee who was assigned to approve the change order has approved it. If no approval map is defined for change requests, the system assigns this status to the change request immediately after the user clears the Hold check box. The user can link this change request to a change order or save it with the On Hold status for further editing.
- **Closed**: The system assigns this status to the change request whose cost and commitment part and revenue part have been linked to one or two change orders (depending on whether the cost and commitment part and the revenue part are processed jointly or separately—see Relations Between Change Requests and Change Orders for details).

The Estimation tab of that screen lists potential changes that will affect the revenue budget, the cost budget, and the commitments of the selected project when the related change orders are released. Until the related change orders are released, these potential changes are also tracked for the project in the **Potential CO Quantity** and **Potential CO Amount** columns on the Revenue Budget and Cost Budget tabs of the Projects screen (PM301000).

Markups

The following types of markup are supported for change requests:

- **Line-level markups**: This type of markup applies to an individual estimation line of a change request. This type includes the following markups:
  - **Price Markup (%)**: The markup specified for the item. If the item has no defined markup, the system uses the **Default Price Markup, %** specified on the General Settings tab of the Projects Preferences screen (PM101000). This markup can be changed for each change request line manually.
  - **Line Markup (%)**: The markup specified for the cost account group. The default value can be manually overridden for each change request line.
- **Document-level markups**: This type of markup applies to the total amount of a change request. For a change request, default markups are inherited from the related project and can be manually overridden on the Markups tab of the Change Requests screen (PM308500). For the project, default markups are inherited from the Markup section of the General Settings tab of the Projects Preferences screen and can be manually overridden on the Settings tab of the Projects screen (PM301000), as the following screenshot shows. The following markup types can be defined:
 - **%**: A markup whose amount is calculated as follows:

    Markup Amount = Line Total * % Markup Value / 100

    There can be as many markups of this type as necessary, with the markup subtotal calculated as a sum of all markup amounts.

  - **Cumulative %**: A markup whose amount is calculated as follows:

  Markup Amount = (all the previously applied % markups) * Cumulative % Value / 100

  - **Flat Fee**: A markup whose amount is specified manually to be added to the total markup.
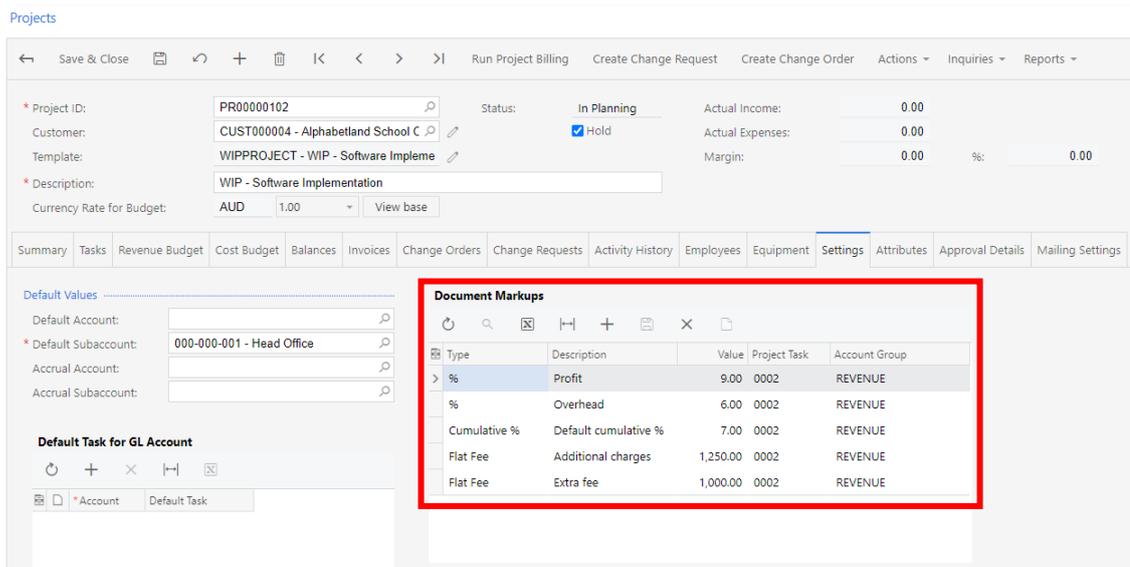
A document-level markup is applied to a change request only if all the project budget key attributes—project task, account group, and optionally inventory item or cost code—are defined for the markup at the change request level. The visibility of the inventory item or cost code columns depends on the **Revenue Budget Level** of the project specified in the Project Properties section on the Summary tab of the Projects screen.

A price markup is an item-specific markup. It can be specified on the Price/Cost Info tab of the Stock Items screen (IN202500) or on the Price/Cost Information tab of the Non-Stock Items screen (IN202000). The markup percent specified for the item is retrieved by default as **Price Markup (%)** when the item is selected for the corresponding line on the Estimation tab of the Change Requests screen (PM308500). If no markup is specified for the item, the system uses the default price markup specified in the **Default Price Markup, %** field (Markup section) on the General Settings tab of the Projects Preferences screen (if specified). The calculation of amounts is performed as follows:

- Ext. Cost = Quantity * Unit Cost
- Unit Price = Unit Cost + Unit Cost * Price Markup (%) / 100
- Ext. Price = Quantity * Unit Price

Line markup, which is a default markup that is specific to an account group, is specified on the Settings tab of the Account Groups screen (PM201000). The markup percent specified for the account group is retrieved by default as the **Line Markup (%)** when the cost account group is selected for the corresponding line on the Estimation tab of the Change Requests screen. The calculation of the line amount is performed as follows:

Line Amount = Ext. Price + Ext. Price * Line Markup (%) / 100

Default markup values are specified in the Markup section of the General Settings tab of the Projects Preferences screen. The values are copied into each new project and can be overridden. When a new change request is created for a project, it inherits the project-specific markup values, which can be also overridden.

Adding a Change Request to a Change Order

On the Change Requests screen (PM308500), you can create a change order for the selected change request by clicking the **Create Change Order** button on the screen toolbar. To be able to do that, a change order class that supports two-tier change management must be selected as the **Default Change Order Class** in the General Settings section on the General Settings tab of the Projects Preferences screen (PM101000).

On the Change Orders screen (PM308000), you can also add change requests to the selected change order. To do that, on the table toolbar of the Change Requests tab, click the **Select Change Requests** button to open the Select Change Requests dialog box. In the dialog box, you select the change requests to be included in the change order.

Changes to the Change Orders Screen

For a change order with the two-tier change management enabled, the following change request totals become available in the Summary area of the Change Orders screen (PM308000):

- **Change Request Cost Total**: The total of the change request total amount values on the Cost Budget tab.
- **Change Request Line Total**: The total of the change request total amount values on the Revenue Budget tab. The system includes in this total only the lines that include line-level markups.
- **Change Request Markup Total**: The total of the change request total amount values on the Revenue Budget tab. The system includes in this total only the lines that include document-level markups.
- **Change Request Lite Total**: The sum of the **Change Request Line Total** and **Change Request Markup Total** values.

A Change Requests tab, which lists all change requests related to the change order, has also been added to the screen. The **Select Change Requests** button on the table toolbar opens the Select Change Requests dialog box (shown in the following screenshot), where the user can select the change requests to be included in the change order.

On the Revenue Budget tab (shown in the following screenshot) and the Cost Budget tab of the Change Orders screen, the following elements become available:

- **Change Request Total Quantity** column: The total quantity of the change request lines related to the selected revenue budget or cost budget line of the change order.
- **Change Request Total Amount** column: The total amount of the change request lines related to the selected revenue budget or cost budget line of the change order.
- **View Change Request Details** button: Opens the Change Request Details dialog box, which displays all change request lines (that is, estimation lines and markup lines for the revenue budget and estimation lines for the cost budget) of the change request related to the selected revenue budget or cost budget line of the change order.

On the Commitments tab, the **Change Request Ref. Nbr.** column, shown in the following screenshot, has been added. This column displays the reference number of the change request; this reference number is a link you can click to view the particular change request on the Change Requests screen (PM308500). A commitment change order line that originates from a change request is always linked with only the corresponding estimation line of the change request.

Relations Between Change Requests and Change Orders

If the project cost budget and commitments need to be updated through a separate change order before the revenue part has been approved, a revenue change order and a cost change order may be used. A change request may be associated with both a revenue change order and a cost change order, or with just a revenue change order.

A cost change order is a change order that contains only the cost and commitment parts of the change request and belongs to a change order class that has the **Revenue Budget** check box cleared and the **Cost Budget** or **Commitments** check box selected on the Details tab of the Change Order Classes screen (PM203000).

A revenue change order is a change order that contains the revenue part of the change request and belongs to a change order class that has the **Revenue Budget** check box selected on the Details tab of the Change Order Classes screen.

The user can release the cost change order as early as necessary to create commitments and change the project cost budget accordingly without having to have the revenue part approved at the same time. The revenue change order may be approved later.

Most commonly, however, a change request relates to only one change order that contains all types of estimation lines—that is, revenue budget, cost budget, and commitment lines. In this case, the change order belongs to a change order class that has the **Revenue Budget** check box selected and the **Cost Budget** or **Commitments** check box selected on the Details tab of the Change Order Classes screen.

A user can unlink a change request from the change order selected on the Change Orders screen (PM308000), by deleting the line with the change request on the Change Requests tab.

A change request cannot be unlinked from the cost and commitment change order if it is also linked to a change order that affects the revenue budget.

The revenue part of a change request that has been unlinked from a change order can be updated as needed.

When a change request is on hold, the cost and commitment parts of the change request can be updated. (To be able to put the change request back on hold, the user should first unlink it from the cost change order.)

A change order that has any number of linked change requests cannot be deleted. To be able to delete such a change order, the user should first unlink all the change requests related to the change order and then put them back on hold.

Printing and Emailing Change Requests

You can print a change request with any status. For the printing of change requests, the system uses the report that is specified for the *CHANGE REQUEST* mailing of the corresponding project on the Mailing Settings tab of the Projects screen (PM301000). By default, this is the Change Request report (PM643500). This report supports the printing of the estimation lines and markups of a change request.

When you email a change request, the system uses the notification template of the same *CHANGE REQUEST* mailing of the corresponding project.

On the Mailing Settings tab of the Projects screen, you can specify a custom format and an email notification template for the *CHANGE REQUEST* mailing that should be used for the printing and emailing of the change requests prepared for the particular project. When you create a new project, the system copies all the predefined mailing settings from the Mailing Settings tab of the Projects Preferences screen (PM101000), but you can override these settings.

The Change Order report (PM643000), which is the default report for the printing of change orders, now supports the printing of related change requests.

Corporate Cards

MYOB Advanced now supports the use of corporate credit cards on the Expense Claim (EP301000) and Expense Receipt (EP301020) screens. This helps employees to categorize and track the expenses, including the expenses related to a project. For example, while in the field, the workers of a construction company or professional service provider can buy something that they want to charge on a project and pay for it with a corporate card. Employees can still have out-of-pocket expenses that are reimbursed through the standard process.

The corporate card functionality provides the following advantages:

- Administrative users can manage corporate cards.
- Expense receipts and expense claims can be paid with corporate cards on the MYOB Advanced website and in the MYOB Advanced mobile app.
- Corporate cards support foreign currencies.
- Expense receipts in a foreign currency can be paid with a corporate card.
- A single expense claim can be created for all corporate card expenses, as long as they have the same card currency.
- Bank transaction matching and reconciliation process support corporate card statements so that card statement records can be matched to expense receipts.

To start using the functionality of expense claims and expense receipts, which includes the corporate card functionality, on the Enable/Disable Features (CS100000) screen, an administrative user enables the *Expense Management* feature.

Configuring Corporate Cards

Corporate credit cards can be configured on the Corporate Cards screen (CA202500) (see the following screenshot). The **Card Number** is used for matching transactions on a bank statement. Multiple employees can use a single corporate card; these employees are listed in the table on the screen.

In order to create corporate cards on the Corporate Cards screen, GL accounts, cash accounts, payment methods, and employees must be configured as described below.

> **Note:** The **Card Number** can does not have to be the exact credit card number— for security or privacy reasons, you can truncate the number to the last four digits.

If the card currency differs from the currency of an employee who uses the corporate card, for this employee, the **Enable Currency Override** and **Enable Rate Override** check boxes must be selected on the General Info tab (Employee Settings section) of the Employees screen (EP203000), as the following screenshot shows. (The **Currency ID** field, where the employee currency is specified, can also be found in this section of the screen.)

The cash account that is used for corporate cards should be configured as follows:

- A separate GL account should be configured for each bank and currency.
- Each GL account has a separate cash account with the following settings specified on the Cash Accounts screen (CA202000), as shown in the screenshot below:
    o The **Clearing Account** check box is cleared.
    o The **Restrict Visibility with Branch** check box is cleared.
    o The **Use for Corporate Cards** check box is selected.
    o Only one payment method can be associated with the cash account.
    o Optionally, the **Requires Reconciliation** check box is selected; if it is, a numbering sequence must be specified in the **Reconciliation Numbering Sequence** field. The predefined CARECON numbering sequence can be selected.

Although the cash account that is used for a corporate card must have only one associated payment method, this payment method can be selected for multiple cash accounts. If a payment method is selected for a cash account that is used for a corporate card, in the Summary area of the Payment Methods screen (CA204000), the **Use in AP** check box is selected. Also, on the Settings for Use in AP tab of the screen, this payment method should have the following settings.

- **Not Required** (Additional Processing section): Selected
- **Require Unique Payment Ref.** (Payment Settings section): Cleared

Paying Expense Receipts with Corporate Cards

On the Expense Receipt screen (EP301020), in the **Paid With** box (in the Expense Details section of the Receipt Details tab), a user can select how the expense receipt has been paid, as shown in the following screenshot. The following options are available:

- **Personal Account**: The company's expenses that the employee paid with his or her own funds and the company will need to reimburse this amount to the employee. This is the default option if the employee has no active corporate card assigned.
- **Corporate Card**, **Company Expense**: The company's expenses that are paid with a corporate card. This is the default option if the employee has an active corporate card assigned.
- **Corporate Card**, **Personal Expense**: The employee's personal expenses that are paid with a corporate card.

In the **Corporate Card** field (also shown in the screenshot above), the user selects his or her corporate card. This box is unavailable on the screen if "Personal Account" was selected in the **Paid With** box. The default corporate card, if any, is selected as follows:

- The corporate card used in the employee's most recent expense receipt is selected, if it is available. The most recent receipt is determined by the receipt's creation date (CreatedDate).
- If the corporate card that was used most recently is unavailable—that is, inactive, deleted, or not assigned to the employee—the employee's only active card or the first active card the system finds for the employee. The first corporate card is the first card in the employee's card list; this list is sorted alphabetically by name.

Corporate card expenses cannot be split. That is, on the Expense Receipt screen, in the Expense Details section of the Receipt Details tab, the **Employee Part** of an expense receipt paid with a corporate card must be zero.

The **Ref. Nbr.** box, where a user can enter the reference number that usually matches the number of the original receipt, must be filled in if the **Require Ref. Nbr. in Expense Receipts** check box is selected on the General Settings tab of the Time and Expenses Preferences screen (EP101000).

Processing Expense Claims for Expense Receipts Paid with Corporate Cards

On the Expense Claim screen (EP301000), an expense claim can contain all the employee's expense receipts paid with corporate cards as long as they have the same card currency. Each expense claim line refers to an expense receipt. On release of an expense claim, the system creates documents as follows for the expense claim lines, depending on the value in the Paid With column:

- **Personal Account**: A single AP bill is created on the Bills and Adjustments screen (AP301000) for all the expense claim lines with positive amounts and a single AP debit adjustment is created on the same screen for all the expense claim lines with negative amounts. This is the workflow that existed in previous versions.
- **Corporate Card, Company Expense**: An AP quick check is created on the Quick Cheques screen (AP304000) for each expense claim line, if the **Post Summarized Corporate Card Company Expenses** check box is cleared on the General Settings tab of the Time and Expenses Preferences screen (EP101000). In the AP check, the vendor is the employee who submitted the expense claim.

  If the **Post Summarized Corporate Card Company Expenses** check box in selected, the system creates a separate AP quick check for each group of the expense claim lines with the same expense date, corporate card, and reference number.

  On release of such an AP quick check, the system credits the card liability account and debits the expense account of the expense item specified in the expense receipt.

- **Corporate Card, Personal Expense**: A single AP debit adjustment is created on the Bills and Adjustments screen for all the expense claim lines.

  On release of this AP debit adjustment, the system credits the card liability account and debits the employee's AP account.

Bank Transactions Matching and Reconciliation

On the Import Bank Transactions screen (CA306500), an accountant can upload bank statement records for the liability cash account of a corporate card. If a bank statement record contains the corporate card number in text format, this number is shown in the new **Card Number** column on the screen. A single bank statement may contain transactions of all the corporate cards associated with the same cash account. For more information about importing bank transactions, see Importing Transactions.

On the Process Bank Transactions screen (CA306000), for the liability cash account of a corporate card, the accountant can match an uploaded bank statement record to an existing payment, AP bill, or expense receipt as well as create a cash transaction if such a transaction has not found in the system.

In the left pane of the Process Bank Transactions screen, where the system shows the list of bank statement records, imported bank transactions now contain the corporate card number in text format in the new **Card Number** column.

The system uses the available information about imported transactions for searching for matching documents and for calculating the relevance rate, which is a measure of how closely a document matches the selected transaction.

The system uses the settings in the Weights for Relevance Calculation section of the Transaction Match Settings dialog box—**Ref. Nbr. Weight**, **Doc. Date Weight**, and **Doc. Payee Weight**—for searching payments and invoices as matching candidates. For more information about the matching process and the relevance calculation, see "Transaction Matching Settings" in the User Guide.

In the Transaction Match Settings dialog box, an Expense Receipt Matching section has been added (also shown in the screenshot above). This section is displayed only for cash accounts that have the **Use for Corporate Cards** check box selected on the Cash Accounts screen (CA202000) and hidden for regular bank accounts. The section contains the following matching settings for expense receipts:

- **Amount Difference Threshold (%)**: The evaluated difference between the amount of the bank transaction and the amount of the expense receipt in the claim currency.
- **Amount Weight**: The relative weight of the evaluated difference between the amounts of the bank transaction and the expense receipt.

The default matching settings are defined on the Bank Statement Settings tab of the Cash Management Preferences screen (EP101000).

If no payment or invoice is found, the system uses certain settings in the Weights for Relevance Calculation and Expense Receipt Matching sections of the Transaction Match Settings dialog box—**Ref. Nbr. Weight**, **Doc. Date Weight**, and **Amount Weight**—for searching expense receipts for matching candidates.

Unlike the relevance calculation for payments and invoices, for calculating the relevance rate for expense receipts, the system includes in the calculation the amount weight instead of the payee weight, using the following formula:

```
AmountDistance() = NORMDIST(x, 0, DifferenceAmount, probability mass function) /
NORMDIST(0, 0, DifferenceAmount, probability mass function)
x = ABS(BankTransactionAmount - ExpenseCardCurrencyAmount)
DifferenceAmount = Amount Difference Threshold (%) * BankTransactionAmount / 100
```

Payments and invoices are selected as matching candidates by the exact amount of a bank transaction, which is consistent to the logic of bank transaction matching for regular bank accounts. The **Amount Difference Threshold (%)** is not applied for matching of payments and invoices and applied for matching of expense receipts that are recorded with the expense currency that differs from the card currency and therefore a difference between the amount of a bank transaction and the amount of an expense receipt may take place.

The AmountDistance() formula returns a decimal number that ranges in value from 0 to 1. The system calculates the relevance rate for an expense receipt by using the following formula:

```
Match Relevance = DocDateWeight*DateDistance() + RefNbrWeight*RefNbrDistance() +
AmountWeight*AmountDistance()
```

If the user selects an imported bank transaction in the left pane of the Process Bank Transactions screen, in the right pane, the system shows the list of matching documents it has found. Payments are shown on the Match to Payments tab. AP documents are shown on the Match to Invoices tab. A cash transaction can be created for the bank transaction on the Create Payment tab. Expense receipts are shown on the Match to Expense Receipts tab, which is displayed on the screen only for cash accounts that are

used for corporate cards—that is, cash accounts for which the **Use for Corporate Cards** check box selected on the Cash Accounts screen.

When a user auto-matches bank transactions, for each bank transaction, in the right pane, the system selects the Matched check box for the best candidate among all the found candidates by using the following rules:

1. The best match is the document with the highest match relevance that is greater than 0.75.
2. If multiple documents have the same highest match relevance, the system selects the first found document with the following priority: a payment, an AP document, and an expense receipt.
3. If no documents have a match relevance greater than 0.75, the best match is a document that has a match relevance is equal to or greater than 0.2.

   For example, if the match relevance of one document is 0.25 and the match relevance of another document is 0.5, the system selects the document with the match relevance of 0.5.

   If more than one document satisfies this condition, the system selects the first found document with the following priority: a payment, an AP document, and an expense receipt.

1. If only one document is found, it is the best match if its match relevance is equal to or greater than 0.2.

If none of the conditions above has been met, there is no best match for the transaction of the bank statement.

Once an expense receipt and its corresponding bank statement record have been matched and processed on the Process Bank Transactions screen, they are no longer displayed on the screen.

Notes on the Matching Process

There are the following limitations of the matching process:

- If a user matches a bank transaction to an expense receipt in a different currency with the amount within the amount difference threshold, releases the corresponding claim, and the cash transaction is posted, and then the user unmatches the bank transaction from the expense receipt, the cash transaction will not appear as a candidate for matching on the Process Bank Transactions screen (CA306000) because the amounts differ.
- If a cash transaction originates from an expense claim, the cash transaction date in the system equals the expense claim date. There can be a significant delay between the date of the bank statement transaction and the date of the cash transaction in the system, which should be considered in the filter of dates in the Transaction Match Settings dialog box on the Process Bank Transactions screen (CA306000).

Enhancements and Changes to UI

In this release, a number of changes have been made to improve the UI and usability of several processes, project accounting screens, and screens of related functional areas.

New Names for Project Transactions Screens

The Project Accounting workspace has three screen links with the same name: Project Transactions. This duplication may confuse users when they are searching for a particular screen by its name. Thus, the screen names have been changed as follows:

- The data entry screen retains the name Project Transactions (PM304000).
- The inquiry has been renamed to Project Transaction Details (PM401000).
- The report has been renamed to Project Transaction Register (PM633000).

Changes to Project Transaction Details Screen

Multiple changes have been made to the Project Transaction Details screen (PM401000).

The Selection area has been improved as follows:

- The following elements, which a user can fill in to select transactions for display in the table, have been added:
  - **Account**: The system lists the project transactions with the selected account in the Debit Account or Credit Account column.
  - **AR Doc. Type**: The system lists the project transactions associated with the AR document of the selected type and number. The document number is selected in the **AR Doc. Nbr.** field.
  - **AR Doc. Nbr.**: The system lists the project transactions associated with the AR document of the selected number and type. The document type is selected in the **AR Doc. Type** field.
  - **Tran. ID**: The system lists the project transaction with this identifier.
- Each of the following selection criteria define the list of transactions shown in the table even if other selection criteria are not specified: Project, Account Group, Account, AR Doc. Type and AR Doc. Nbr., and Tran. ID.
- Selection criteria work with the AND logical operator. That is, transactions are listed in the table only if they meet all selected criteria.

The following columns have been added to the table:

- **Project**: The identifier of the project associated with the transaction.
- **Pro Forma Ref. Nbr.**: The reference number of the pro forma invoice generated when the transaction was used in billing.

The following columns have been added to the table but are hidden by default:

- **Tran. ID**: The identifier of the transaction.
- **Old Orig. Doc. Nbr.**: The column that was previously called **Orig. Doc. Nbr.**. The system fills in the column as it did in earlier versions.
- **Excluded From Allocation**: A check box that indicates (if selected) that the transaction should not be allocated.
- **Excluded From Balance**: A check box that indicates (if selected) that the transaction does not affect the project balance.
- **Excluded From Billing**: A check box that indicates (if selected) that the transaction should not be billed.

- **Excluded From Billing Reason**: The reason the project transaction has been excluded from billing, which can be one of the following options:
  - **Written-Off with Credit Memo <Nbr>**: The transaction is offset by a credit memo.
  - **Reversal of Tran. ID <Nbr>**: The transaction is a reversal of another transaction.
  - **Result of Credit Memo <Nbr>**: The transaction is a result of the release of a credit memo.
  - **Result of AR Invoice <Nbr>**: The transaction is a result of the release of an AR invoice.
  - **Reversed**: The transaction has been reversed.
  - **Billable with Case <Nbr>**: The transaction can be billed or has been already billed through the case billing procedure.
  - **WIP Reversed**: The transaction is a WIP reversal transaction.

The following columns in the table have been altered:

- **Amount**: The amount of the transaction. This was previously called the Amount (Reversed) column and has been renamed. The column also shows the values of the Amount (Normal) column, which has been removed.
- **GL Batch Nbr.**: The reference number of the corresponding GL batch of transactions. This was previously called the Batch Nbr. column and has been renamed.
- **Orig. Doc. Nbr.**: The number of the document that spawned the transaction. That is, the transaction in this row has been generated during the release of a document with the number specified in this column.

  Unlike the previous **Orig. Doc. Nbr.** column, the values of the **Orig. Doc. Nbr.** column are now links that users can click to open the original document on the corresponding data entry screen. The system also supports for this column more document types than it did with the previous **Orig. Doc. Nbr.** column.

- **Allocated**: A check box that indicates (if selected) that the transaction has been allocated.

  In earlier versions of MYOB Advanced, the **Allocated** check box was used for two different scenarios. The system selected the check box for both transactions that should not be allocated and transactions that had been already allocated. Now for these different scenarios, the system uses the Allocated and Excluded From Allocation check boxes as the table below shows.

	Allocated	Excluded From Allocation
The transaction was allocated	Selected	Cleared
The transaction should not be allocated	Cleared	Selected

- **Billed**: A check box that indicates (if selected) that billing transactions have been already generated for this transaction.

  In earlier versions of MYOLB Advanced, the **Billed** check box was used for two different scenarios. The system selected the check box for both transactions that should not be billed and transactions that had been already billed. Now for these different scenarios, the system uses the **Billed** and **Excluded From Billing** check boxes as the table below shows.

	Billed	Excluded From BIlling
The transaction was billed	Selected	Cleared
The transaction should not be billed	Cleared	Selected

Navigation to Project Transaction Details Screen from Other Screens

To make it possible for users to easily find the project transactions that are related to an AR invoice, a I**nquiries > View Project Transactions** command has been added to the screen toolbar of the Invoices and Memos screen (AR301000). When a user clicks this command, the system navigates to the Project Transaction Details screen (PM401000) and shows all the project transactions related to the invoice.

To make it possible for users to easily match GL and project transactions, the Project Tran. ID column, which shows the project transaction identifier, has been added to the tables of the Account Details (GL404000) and Journal Transactions (GL301000) screens. The column is hidden by default. When a user clicks the link in the column, the system navigates to the Project Transaction Details screen with the project transaction selected.

Changes to Projects Screen

The following changes have been made to the boxes showing totals in the Summary area of the Projects (PM301000) screen:

- The **Assets** field has been removed. Users can review project assets on the Balances tab.
- The **Liability** field has been removed. Users can review project liabilities on the Balances tab.
- The **Income** field has been renamed to **Actual Income**.
- The **Expenses** field has been renamed to **Actual Expenses**.
- A **Margin** field has been added to the screen; this value is calculated as the difference of the Actual Income and Actual Expenses.

  The margin % is calculated with the following formula:

  - 100 × (Actual Income - Actual Expenses)/Actual Income)
  - If the Actual Income is zero, the margin % is also zero.
  - If the Actual Expenses is greater than the Actual Income, the margin % is calculated with the same formula and becomes negative.

New Description for Allocation Transactions

To make it easy for users to identify a batch of allocation transactions, the system assigns the following description to such a batch: Allocation for <Project ID>.

Changes to Project Transactions

In some cases, the inconsistent logic of the creation of project transactions caused balance discrepancies. The following changes have been made to solve this issue:

- If a pro forma invoice has a line with the Hold Remainder status on the Time and Material tab of the Pro Forma Invoices screen (PM307000), on the release of the corresponding AR invoice, the system creates an unbilled remainder transaction for such a line. The system also creates an unbilled remainder reversal transaction to eliminate the impact of the unbilled remainder transaction to the project balance.

  The unbilled remainder transactions created before the upgrade do not affect the project balance. That is, these transactions have the Excluded From Balance check box selected on the Project Transaction Details screen (PM401000).

- On the Allocation Rules screen (PM207500), the following options, which can be selected in the **Reverse Allocation** field on the Allocation Settings tab, have been renamed to make them less ambiguous:
  - The **On Project Billing** option has been renamed to On AR Invoice Generation.
  - The **On Invoice Release** option has been renamed to On AR Invoice Release.
- Allocation transactions are always reversed in the full amount.

  The allocation transactions created with the On AR Invoice Generation reversal option are now reversed as follows:

  - If the corresponding AR document is created with the Balanced status, the allocation reversal transaction is also created with the Balanced status.
  - The allocation reversal transaction is automatically released when the corresponding AR document is released.
  - The allocation reversal transaction is automatically deleted when the corresponding AR document is deleted.
- The inconsistent logic of the creation of reversal transactions has been corrected. In some cases, a reversal transaction copied the original transaction and reversed the sign of the amount. In other cases, the amount of a reversal transaction remained the same but the account groups in debit and credit sides were inverted (the flip logic). This difference resulted in inconsistency and made it hard to calculate and reconcile the project balance. Thus, the flip logic has been removed for reversal transactions.
- To give users the ability to easily identify WIP reversal transactions, the system now creates a separate batch of project transactions with the WIP Reversal option selected as the **Orig. Doc. Type** on the Project Transaction Details screen.

Upgrade Notes

Before the upgrade to MYOB Advanced 2020.3, the administrator managing the upgrade should make sure that each active project satisfies the following conditions:

- The project has no unbilled reminders.
- The project has no related unreleased AR documents.

After the upgrade, the administrator should do the following:

- On the Validate Project Balances screen (PM504000), perform the validation for a random project.
- On the Project Transaction Details screen (PM401000), make sure that unbilled remainders created before the upgrade have the Excluded from Balance check box selected.

Enhancements to the Calculation of Retainage

If the Retainage Support feature is enabled on the Enable/Disable Features (CS100000) screen, retainage can now be calculated in one of the following ways:

- As standard retainage: The standard processing of retainage that was used in previous versions
- As standard retainage with steps: The standard processing of retainage that also allows users to specify a list of retainage percent values for the entire project to be applied in accordance with the project completion percent

If the Payment Application by Line feature is also enabled on the Enable/Disable Features screen, retainage can be calculated as follows:

- As project cap retainage: The retainage percent and cap are specified at the project level. The retainage amount is allocated across the billed lines until the maximum value is reached.
- As project cap retainage with steps: This retainage works as project cap retainage does, but a list of retainage percent values can be specified for the entire project to be applied in accordance with the project completion percent.
- As project item cap retainage: The retainage percent and cap are specified at the line level, and the retainage amount and maximum cap are calculated individually for each line.

The sections below describe the corresponding retainage settings, their effect on the billing process, and any known limitations.

Changes to the Project Templates Screen

If the *Retainage Support* feature is enabled on the Enable/Disable Features screen, the Retainage section is available on the Summary tab of the Project Templates screen (PM208000) (shown in the following screenshot), and retainage settings can be specified for each project template.

The following settings are included in this section:

- **Include CO**: A check box that indicates (if selected) that change order amounts are to be included in the calculation of the contract total for projects of the template.
- **Retainage (%)**: The retainage percent to be used by default at the project level.
- **Use Steps**: A check box that indicates (if selected) that the stepped processing of retainage is enabled. If this check box is selected, the Stepped Retainage table

becomes available at the bottom of the Retainage section of settings (shown in the screenshot below)

The Stepped Retainage table includes the following columns:

- **Threshold (%)**: The percent of project completion at which the value of the default retainage percent specified in the Retainage (%) box (see above) will automatically change to the value specified in the Retainage (%) column of this row.
- **Retainage (%)**: The new retainage percent to be applied to the project revenue budget lines at the threshold of project completion specified in this row.

If the *Payment Application by Line* feature is also enabled on the Enable/Disable Features screen, the following fields appear in the Retainage section (shown in the screenshot below):

- **Retainage Mode**: The mode that defines how retainage should be processed for the projects created based on the project template. (If needed, this setting can be later modified individually for a project.) The following options are available in this box:
  - **Standard**: Retainage is processed as standard retainage.
  - **Contract Cap**: Retainage is processed as contract cap retainage, with the retainage percent and cap specified at the project level. When the cap amount is reached, the total retained amount held for each project is reallocated across the invoice lines based on their weight and retainage capacity. If this mode is selected, the **Cap (%)** box appears in the section.
  - **Contract Item Cap**: Retainage is processed as contract item cap retainage, with the retainage percent and cap specified at the project line level. This mode is used if a certain retainage amount for each revenue budget line shouldn't be exceeded. If this mode is selected, the **Use Steps** check box becomes unavailable.
- **Cap (%)**: The cap of the project completion percent, which defines the maximum retainage amount held for each project. This value is used by default at the project level. This box appears in the section if the Contract Cap mode is selected in the **Retainage Mode** box.

Changes to the Projects Screen

If the *Retainage Support* feature is enabled on the Enable/Disable Features screen (CS100000), the following settings appear in the Retainage section of the Summary tab of the Projects screen (PM301000) (shown in the screenshot below):

- **Include CO**: A check box that indicates (if selected) that change order amounts are to be included in the calculation of the contract total for the project. The default value is inherited from the project template.
- **Contract Total**: The sum of the original budgeted amounts of all project revenue budget lines if the Include CO check box is cleared, or the sum of the revised budgeted amounts
- **Completed (%)**: The percent of project completion, which is calculated as follows: Completed (%) = (Draft Invoice Amount total + Actual Amount total + Pending Invoice Amount) total / Contract Total

  The total amounts in this formula represent the sum of the values in the respective columns (**Draft Invoice Amount**, **Actual Amount**, and **Pending Invoice Amount**) on the Revenue Budget tab.

- **Total Retained Amount**: The total of the Total Retained Amount column on the Revenue Budget tab.
- **Retainage (%)**: The retainage percent to be used by default for the project revenue budget lines. This setting can be modified, if needed.
- **Use Steps**: A check box that indicates (if selected) that the stepped processing of retainage is enabled. If this check box is selected, the Stepped Retainage table becomes available at the bottom of the Retainage section of settings.

If the *Payment Application by Line* feature is also enabled on the Enable/Disable Features screen, the following elements appear in the Retainage section (shown in the following screenshot):

- **Retainage Mode**: The mode that defines how retainage is processed for the project. The default value is inherited from the project template, but the user can modify it if needed. The following options are available in this box:
  - **Standard**: Retainage is processed as standard retainage.
  - **Contract Cap**: Retainage is processed as contract cap retainage, with the retainage percent and cap specified at the project level. When the cap amount is reached, the total retained amount held for each project is reallocated across the invoice lines based on their weight and retainage capacity. If this mode is selected, the Cap (%) box appears in the section.

- o **Contract Item Cap**: Retainage is processed as contract item cap retainage, with the retainage percent and cap specified at the project line level. This mode is used if a certain retainage amount for each revenue budget line shouldn't be exceeded. If this mode is selected, the Use Steps check box becomes unavailable.
- **Cap (%)**: The cap of the project completion percent, which defines the maximum retainage amount held for each project. This box appears in the section only if the Contract Cap option is selected in the Retainage Mode box.

  The cap amount is calculated as follows:

  Cap Amount = Contract Total * Cap (%) * Retainage (%)

  Once the **Total Retainage Amount** reaches the cap amount, no new retainage amount is calculated during the progress billing unless the cap amount is increased.

The following columns appear in the table on the Revenue Budget tab of the Projects screen (as shown in the screenshot below) if the *Retainage Support* feature is enabled on the Enable/Disable Features screen:

- **Retainage (%)**: The retainage percent specified in the **Retainage (%)** field on the Summary tab of the current screen. This column is available only if the **Standard** or **Contract Item Cap** retainage mode is selected for the project and the **Use Steps** check box (in the Retainage section of the Summary tab of the Projects screen) is cleared. This setting can be modified for each line, if needed.
- **Draft Retained Amount**: The total of retainage amounts for the lines of all pro forma invoices related to the revenue budget line that are on hold or open, plus the total of unreleased retainage for the lines of the unreleased AR invoices. This column is available if the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen.
- **Retained Amount**: The total of unreleased retainage for the lines of released AR invoices related to the revenue budget line. This column is available if the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen.
- **Total Retained Amount**: The sum of the **Draft Retained Amount** and **Retained Amount** values of the current row. This column is available if the *Payment Application by Line* feature is enabled on the Enable/Disable Features screen.

Also, the following columns appear in the table on the Revenue Budget tab of the Projects screen if the *Retainage Support* feature is enabled on the Enable/Disable Features screen and the **Contract Item Cap** retainage mode is selected in the Retainage Mode box in the Retainage section on the Summary tab of Projects screen:

- **Cap (%)**: The cap of the revenue budget line completion percent, which defines the maximum retainage amount held for each revenue budget line. By default is populated with the value of the **Cap (%)** box in the Retainage section of the Summary tab of the Projects screen. The value can be overridden.
- **Retainage Cap Amount**: The cap amount of the revenue budget line, which is calculated as follows:

  Retainage Cap Amount = Budgeted Amount * Cap (%) * Retainage (%)

  The Budgeted Amount is the original budgeted amount of the revenue budget line if the Include CO check box is cleared in the Retainage section on the Summary tab of this screen, or the revised budgeted amount of the revenue budget line if the Include CO check box is selected.

  Once the Total Retainage Amount of the line reaches the Retainage Cap Amount, no new retainage amount is calculated during the progress billing for the revenue budget line unless the Retainage Cap Amount is increased.

On the Progress Billing tab of the Pro Forma Invoices screen (PM307000), the following columns appear in the table if the *Retainage Support* and *Payment Application by Line* features are enabled on the Enable/Disable Features screen (CS100000):

- **Retainage (%)**: The retainage percent of the invoice line used for the calculation of the retainage amount held per line within the current invoice. This column is displayed on the screen only if the **Standard** or **Contract Item Cap** retainage mode is selected for the project in the Retainage section of the Summary tab. (In the following screenshot, the column is not displayed because the Contract Cap retainage mode is selected in the example.)

  If the stepped processing of retainage is configured for the project, the retainage percent is calculated based on the retainage steps used for the calculation of the retainage amount as follows: Retainage Total / Invoice Total * 100%.

- **Retainage Amount**: The retainage amount calculated for the progress billing invoice line.
- **Allocated Retained Amount**: The amount that indicates how the retained amount is allocated across the billed lines. This column is used for informational purposes and is displayed on the screen only if the Contract Cap retainage mode is selected for the project in the Retainage section of the Summary tab.

The **Retainage Total** in the Summary area of the screen is the total of the **Retainage Amount** column on the Progress Billing tab.

Progress Billing

How retainage is processed during the progress billing depends on settings selected in the Retainage section of the Summary tab of the Projects screen (PM301000): what retainage mode is selected for the project and whether the **Use Steps** check box is selected or cleared.

For the Standard retainage mode with the **Use Steps** check box cleared for the project, the retainage percent specified on the Projects screen (also in the Retainage section of the Summary tab) is used by default for revenue budget lines and for the lines of AR invoices related to the project, which originate from the Invoices and Memos (AR301000) screen. The user can update the retainage percent at any time.

This scenario is applicable if the *Retainage Support* feature is enabled on the Enable/Disable Features screen (CS100000).

For the Standard retainage mode with the **Use Steps** check box selected for the project, the user specifies a retainage percent for a particular project completion threshold in the Stepped Retainage table in the Retainage section of the Summary tab of the Projects screen. During the billing, the retainage percent that corresponds to the current project completion percent is used for revenue budget lines and for the lines of AR invoices related to the project, which originate from the Invoices and Memos screen.

For the Contract Cap retainage mode with the **Use Steps** check box cleared for the project, the functionality works as follows:

1. On the Summary tab of the Projects screen, the user specifies values in the **Retainage (%)** and **Cap (%)** boxes and selects or clears the **Include CO** check box depending on whether the contract total and project completion percent should be calculated based on the original revenue budget values or the revised ones.
2. The system calculates the cap amount, which is the maximum retainage amount that can be held for the project.
3. Progress billing with a pro forma invoice is performed for the project, the total retained amount held per project is validated for each pro forma invoice, and the retainage amount is calculated.
4. Once the cap is reached and the total retained amount held per project is at its maximum, no new retainage amount is calculated, and reallocation of the allocated retained amount is performed based on the weight of the invoice lines.

On the Release AR Retainage screen (AR510000), invoice lines can be filtered by various criteria, such as project, project task, account group, inventory ID, and cost code. On this screen, the user can gradually release the retainage held to clear the unreleased retainage balance held on the AR invoice lines, thus decreasing the total retained amount held per project. Several retainage invoices may be generated during the processing because the lines are grouped by the parent AR invoice, and each retainage invoice can relate to only one AR invoice. In this case, the progress billing procedure follows the same rules so that the total retained amount would tend toward the cap amount once again.

The scenario of releasing retainage by AR invoice lines and using the Contract Cap retainage mode is applicable if the *Retainage Support* and *Payment Application by Line* features are enabled on the Enable/Disable Features screen, the **Create Pro Forma on Billing** check box is selected for the project on the Summary tab of the Projects screen, and the **Pay by Line** check box is selected for the AR invoice on the Financial Details tab of the Invoices and Memos screen.

For the Contract Cap retainage mode with the **Use Steps** check box selected for the project, the scenario is similar to the previous one, but instead of a single retainage percent, the user can specify multiple retainage percent values that correspond to particular thresholds of project completion. If the project completion reaches a threshold and the retainage percent is changed, the system recalculates the cap amount, and the current and further billing iterations will be validated against the newly calculated cap figures.

This scenario is applicable if the Retainage Support and Payment Application by Line features are enabled on the Enable/Disable Features screen and the **Create Pro Forma on Billing** check box is selected for the project on the Summary tab of the Projects screen.

For the Contract Item Cap retainage mode, the scenario is similar to that for the Contract Cap retainage mode with the **Use Steps** check box cleared for the project, but it is performed for each line individually.

This scenario is applicable if the *Retainage Support* and *Payment Application by Line* features are enabled on the Enable/Disable Features screen and the **Create Pro Forma on Billing** check box is selected for the project on the Summary tab of the Projects screen.

> **Note:** For the Contract Cap and Contract Item Cap retainage modes, the **Pay by Line** check box is automatically selected and unavailable for editing on the Financial Details tab of the Invoices and Memos screen for AR invoices that originate from pro forma invoices.

Time and Material Billing

The time and material billing works only for the Standard retainage mode, as it worked in previous versions of MYOB Advanced, and the system always uses the retainage percent specified in the project settings. The time and material billing also supports the Standard retainage mode with the **Use Steps** check box selected in the retainage settings of the project on the Projects screen (PM301000).

Limitations of the Retainage Processing

The following limitations apply to the retainage processing:

- The Contract Cap and Contract Item Cap retainage modes are available for selection only if the *Retainage Support* and *Payment Application by Line* features are enabled on the Enable/ Disable Features screen (CS100000). For these modes, the **Pay by Line** check box on the Financial Details tab of the Invoices and Memos screen (AR301000) is selected and unavailable for editing for all AR invoices generated during the project billing.
- The Contract Cap retainage mode can be selected only if the **Create Pro Forma on Billing** check box is selected for the project on the Summary tab of the Projects screen (PM301000).
- Retainage with foreign currency documents is not supported. As a result, the base currency should be used as the billing currency. If a foreign currency is used as the project currency, the system will not be able to generate a pro forma invoice for the project.

Customer Management

Restriction of Access to Business Accounts

In MYOB Advanced, a user can convert a business account to a customer account, a vendor account, or both by using the Business Accounts screen (CR303000). After this conversion, the business account continues to exist and is used in marketing processes.

As of this release, if any rules based on restriction groups have been configured for the customer or vendor accounts that were created from this business account, the system applies these rules to the business account as well.

That is, if access to a customer or vendor account has been restricted to deny access to a group of employees, these employees will not be able to view the related business account on the Business Accounts screen. Also, the access will be denied to any related entity, such as contact, case, opportunity, marketing list, and marketing campaign. However, if a customer and a vendor account were created from the same business account and then different restriction rules were configured for the customer account than those configured for the vendor accounts, the system does not apply either set of rules to the business account and its related entities.

For details on configuring restriction groups to control access to the system entities, see "Managing Visibility with Restriction Groups" in the User Guide.

There are limitations to the implemented functionality. If a contact of a business account has been added to a marketing list and then access to the business account was restricted (through restriction groups) to a group of employees, these employees will see the contact in the marketing list but will not be able to review its details on the Contacts screen (CR302000).

Improvements to the UI

The following improvements to the user interface and usability have been introduced for multiple screens related to the CRM functionality of MYOB Advanced.

Modification of the Order of Inventory Items in Opportunities and Quotes

Users can now modify the order of inventory items included in an opportunity or quote by dragging lines on the Document Details tab of the Opportunities (CR304000) or Sales Quotes (CR304500) screen.

A user can modify the order of the document details for an opportunity only if it has the "Open" status and no submitted quotes (that is, any associated quotes should have the "Draft" status).

A user can modify the order of the document details for a quote only if it has the "Draft" status and associated opportunity is open.

When a user modifies the order of the lines of an opportunity and saves these changes, the system applies the changes to any associated quotes. Similarly, when a user changes the order of the lines for a quote, the system applies the changes to the associated opportunity.

When a user converts an opportunity to a sales order, an invoice, or a service order, the system orders the document lines in the same way as they have been ordered in the opportunity.

Other UI Improvements

On the Opportunities screen (CR304000), the **Class ID** field has been moved up before the **Stage** field in the Summary area to streamline opportunity creation.

Also, **Class ID** and **Class Description** columns have been added to the Opportunities tab of the following screens:

- Business Accounts (CR303000)
- Contacts (CR302000)
- Leads (CR301000)
- Marketing Campaigns (CR202000)

By default, these columns are hidden. A user can add the hidden columns by clicking the Edit Columns icon (🖹) and using the Column Configuration dialog box.

New Workflow in Opportunities and Cases

The processing of opportunities and cases has been redesigned in this release to use a new workflow engine.

Processing Opportunities

The system now automatically assigns an opportunity the applicable status based on user actions, rather than the user needing to manually change the status repeatedly.

The **Status** field has become unavailable for editing on the Opportunities screen (CR403000). To change the status of an opportunity, a user should click the corresponding action on the screen toolbar; the system opens the new Details dialog box so the user can provide the details to be used for the change. Namely, the user selects the reason for the change and the next stage to move the opportunity to, as shown in the following screenshot. (In this example, the user has clicked the **Open** button for the new opportunity.)
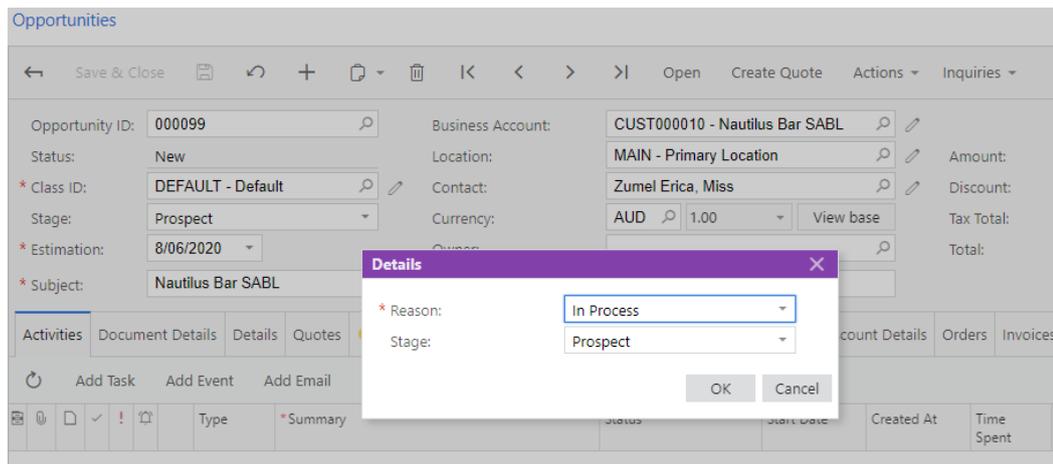
The actions that are most relevant to the current status of an opportunity are displayed directly on the screen toolbar, and other actions are grouped under the Actions menu. For example, for an opportunity with the "New" status, the **Open** and **Create Quote** actions are displayed on the screen toolbar, as shown in the following screenshot.
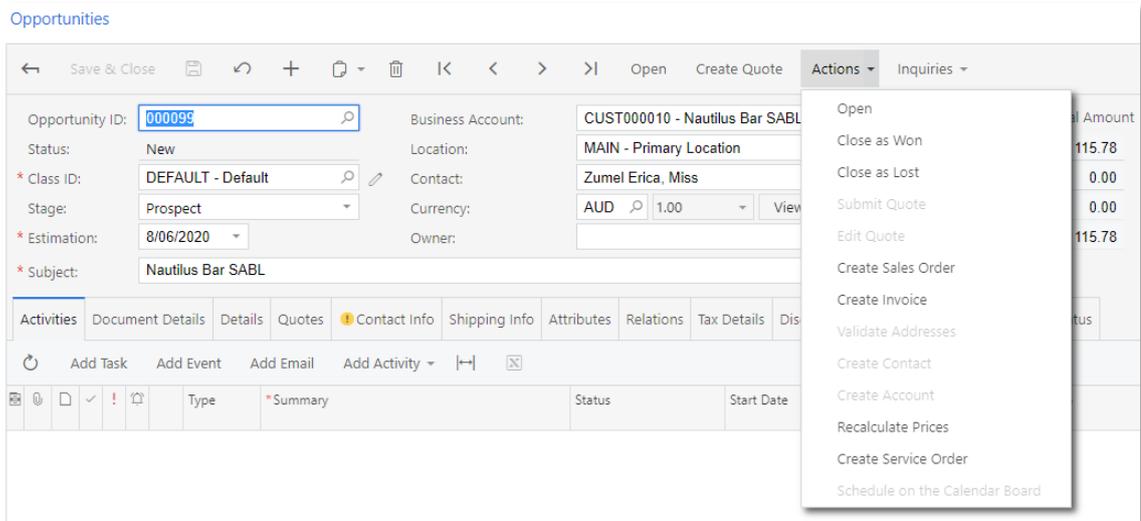
The following fields, which support the new workflow, have been added to the Selection area of the Update Opportunities screen (CR503120), which is designed for mass processing:

- **Operation**: Offers the following options: Update Settings (performs a mass update of the processed opportunity records; this is the operation that was performed on the screen in previous versions) and Execute Action (makes the Action box available, which includes actions for changing the status of each processed opportunity).
- **Action**: Includes the following options: Open, Close as Won, and Close as Lost.

The following screenshot demonstrates the changes to this screen. When a user invokes processing, for the selected opportunities or all opportunities, the system performs the selected operation (and action, if the selected operation is Execute Action).
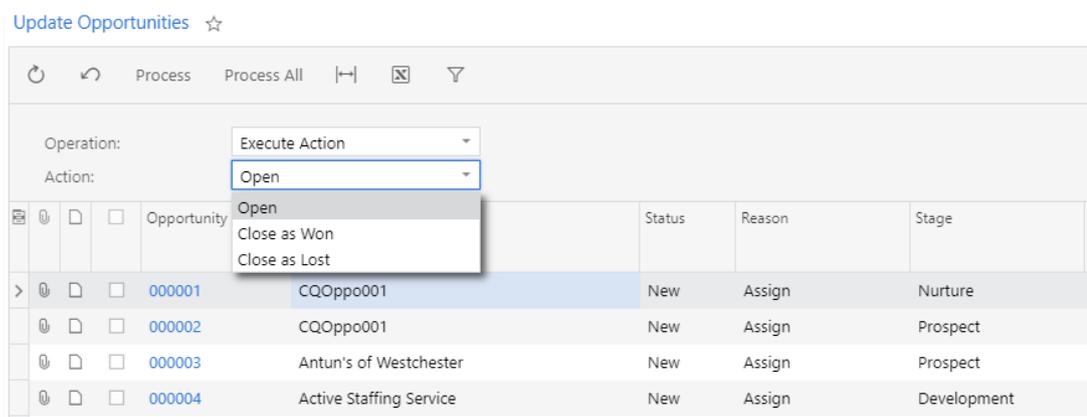
Processing Cases

As with opportunities, the system now automatically assigns a case the applicable status based on user actions, rather than the user needing to manually change the status repeatedly. That is, the **Status** field has become unavailable for editing on the Cases screen (CR306000).

To change the status of a case, a user should click the corresponding action button on the screen toolbar. The system opens the new Details dialog box so the user can provide the details to be used for the change, as shown in the following screenshot. (In this example, the user has clicked the **Close** button for the case.)
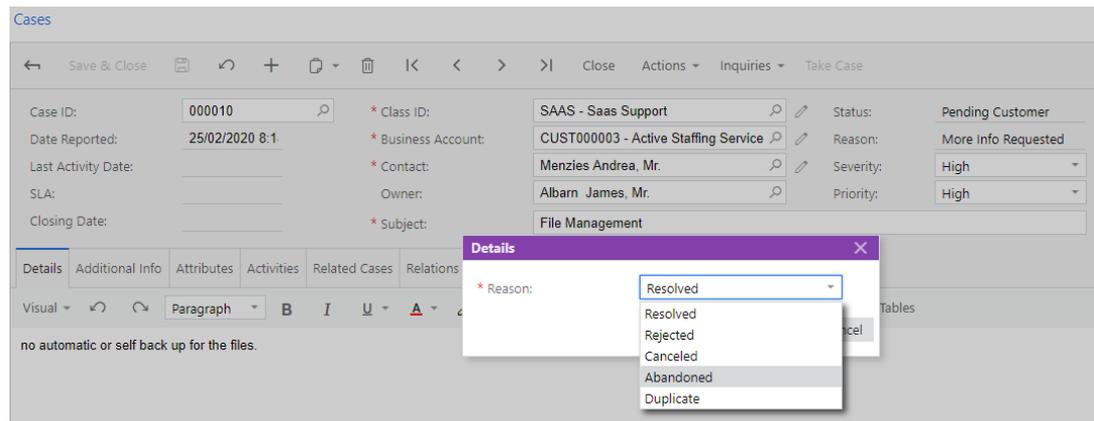
The actions that are most relevant to the current status of a case are displayed directly on the screen toolbar, while other actions are grouped under the Actions menu. For example, for a case with the New status, the **Open** and **Take Case** actions are displayed on the screen toolbar, and other actions are grouped under the Actions menu.

The following fields, which support the new workflow, have been added to the Selection area of the Update Cases screen (CR503220), which is designed for mass processing:

- **Operation**: Offers the following options: Update Settings (performs a mass update of the case records that are included in processing; this is the operation that was performed on the screen in previous versions) and Execute Action (makes available the Action box, which includes actions for changing the status of each processed case).
- **Action**: Includes the following options Open, Pending Customer, Close.

When a user invokes processing, for the selected cases or all cases listed on the screen, the system performs the selected operation (and action, if the selected operation is Execute Action).

New Lead Qualification Workflow

In previous releases, each contact could be associated with only one lead. After a lead had been converted to a contact, a sales team could not convert a contact back to a lead so that the marketing team could nurture it.

As of the 2020.3 release, the lead workflow has been redesigned and a new workflow engine has been implemented.

As part of redesigning this workflow, a new Lead Classes screen (CR2070PL) has been introduced. Also, the Leads screen (CR301000) has been redesigned to improve its usability: New tabs and boxes have been added, and the existing tabs have been regrouped.

New Screens for Classes

In previous releases, there was only one screen for both lead classes and contact classes—the Contact & Lead Classes (CR207000) screen. The following screens based on the Contact & Lead Classes screen have been developed:

- Lead Classes (CR207000)
- Contact Classes (CR205000)

The new Lead Classes screen is shown in the following screenshot.

The new Contact Classes screen is shown in the following screenshot.

On the Details tabs of these screens, the following enhancements have been made over the Contact & Lead Classes screen:

- In the Data Entry Settings section, users can select or create assignment maps.
- In the Conversion Settings section, users can specify default classes for records that can be created from the Leads (CR301000) or Contacts (CR302000) screens.

Improved Layout for the Leads Screen

On the Leads screen (CR301000), the following changes have been made to improve the usability of the screen:

- The Details tab has been renamed to the Contact Info, as shown in the following screenshot. The boxes on the tab are grouped into the Contact, Address and Personal Data Privacy sections. On this tab, a new **Override** check box has been added. Also on this tab, in the Summary area, a **Description** box has been added.

- CRM Info and Opportunities tabs have been added:

With the new layout of the Leads screens, users can update contact information by using the Leads, Contacts (CR302000), and Business Accounts (CR303000) screens. If the **Override** check box on the Contact Info tab is cleared, the contact information for a lead on the Contacts (CR302000), Leads, and Business Accounts screens is synchronized. If the check box is ticked, the contact information for the selected lead on the Leads screen can differ from the contact information of the lead (on the related Contacts, Leads, and Business Accounts screens) and from the contact information of the leads related to this lead. The synchronization or overriding of settings applies to all the settings on the Contact Info tab.

On the Leads screen, users can create a contact, a business account, and an opportunity by using the respective dialog boxes which are shown in the following screenshots.

A user can open the New Contact dialog box by selecting the **Create Contact** action from the Actions menu of the Leads screen toolbar.

A user can open the New Account dialog box by clicking the **Create Account** button on the Actions menu of the Leads screen toolbar.

A user can open the New Opportunity dialog box by selecting the **Convert to Opportunity** action from the Actions menu of the Leads screen toolbar or by clicking the **Convert to Opportunity** button on the Opportunities tab of this screen.

Improved Layout of the Business Accounts Screen

A Leads tab has been added to the Business Accounts screen (CR303000), as shown in the following screenshot. With this tab, users can easily navigate to the Leads screen.

Enhanced Lead Qualification Workflow

With the new workflow, users can link multiple leads to a contact. Also, a sales team can change the state of a lead, to return a lead that has been converted to a contact back to

the marketing team for nurturing if the contact is not ready to purchase company products now but may have interest in future offers.

On the new Leads tabs of the Business Accounts (CR303000) and the Contacts (CR302000) screens, users can see all the leads linked to a business account or a contact respectively. Users can create a lead by using the Contacts (CR302000) or the Business Accounts (CR303000) screen. A user can open the Leads screen (CR301000), select a lead, specify the information about the business account and contact account (if needed), and create an opportunity by clicking **Actions > Create Opportunity** on the screen toolbar. On the Opportunities screen that opens (CR304000), the user can specify the necessary settings for the opportunity; then the user can go back to the Leads screen to continue working with the lead, which now has the Converted state, and change the state of the lead to "Open", if needed, for the lead to be further nurtured by the marketing team.

Updated Lead States

As required in the new workflow, transitions between lead states have been implemented as actions on the Leads screen (CR301000). Customers or partners can customize the lead workflow to define what states correspond to the "Active" (nurtured) state of the lead. A system administrator can configure notifications related to lead states. The lead state is displayed in the **Status** field of the Leads screen. The updated lead states are shown in the following table.

Name of the State	Description
Active	A lead is in this state is active and can be nurtured. A lead in the Active state can also be in other states (New, Open, Sales-Ready, Sales-Accepted). This state is represented by the lead **Active** check box.
New	A lead is in this state after it has been created. This state can be implemented as the initial state. The businesses differentiate new leads from processed leads by this state.
Open	A lead is in this state if it is nurtured by the marketing team, but neither team has confidence that the lead is more ready for purchase than the other leads.
Sales-Ready	A lead is in this state if the marketing team believes that the lead showed more interest in the organization's products than the others, and it is worth to let the sales team look at it.
Sales-Accepted	A lead is this state after it has been initially reviewed or qualified by the lead qualification team and it is ready to meet with the sales team for further qualification.
Converted	A lead is in this state after it has been converted to an opportunity and no further nurturing for it is needed. Businesses that do not use opportunities can use this state to stop lead nurturing after an account or contact has been created or assigned for a lead.
Disqualified	A lead is in this state if it is known that there's no interest in the organization's products, or the lead is not reachable (for example, the contact information is not valid). Some organizations may also use this state for deduplicated leads. On upgrade to 2020.3, lead records with the old automation Closed status are migrated to the Disqualified status.

Suspended	The state is added to support upgrade from the previous versions of MYOB Advanced. If customers have leads with the Suspended status, they should end up in this state after the upgrade to 2020R1. There are no transitions leading to this state.

The transitions of lead states are shown in the following table.

From State	To State	Name of the Action
Not applicable	New	Not Applicable
All statuses	Open	Open
New or Open	Sales-Ready	Qualify
New, Open, or Sales-Ready	Sales-Accepted	Accept
New, Open, Sales-Ready, or Sales-Accepted	Converted	Convert to Opportunity
New, Open, Sales-Ready, or Sales-Accepted	Disqualified	Disqualify

New Layout of the Contacts Screen

In this release, a new layout of the Contacts screen (CR302000), which is similar to the layout of the Leads screen (CR301000), has been introduced. The screen has been optimized for quick data entry. With the new layout, users can more easily link the data on the Contacts and Leads screens.

New and Updated Tabs

The Details tab of the Contacts screen contains general information about the contact— such as contact information, address, and settings related to personal data privacy—as shown in the following screenshot.

The CRM Info tab of the Contacts screen contains the CRM information, activity statistics data, contact preference information, personal data, and the photo of the contact, as shown in the following screenshot.
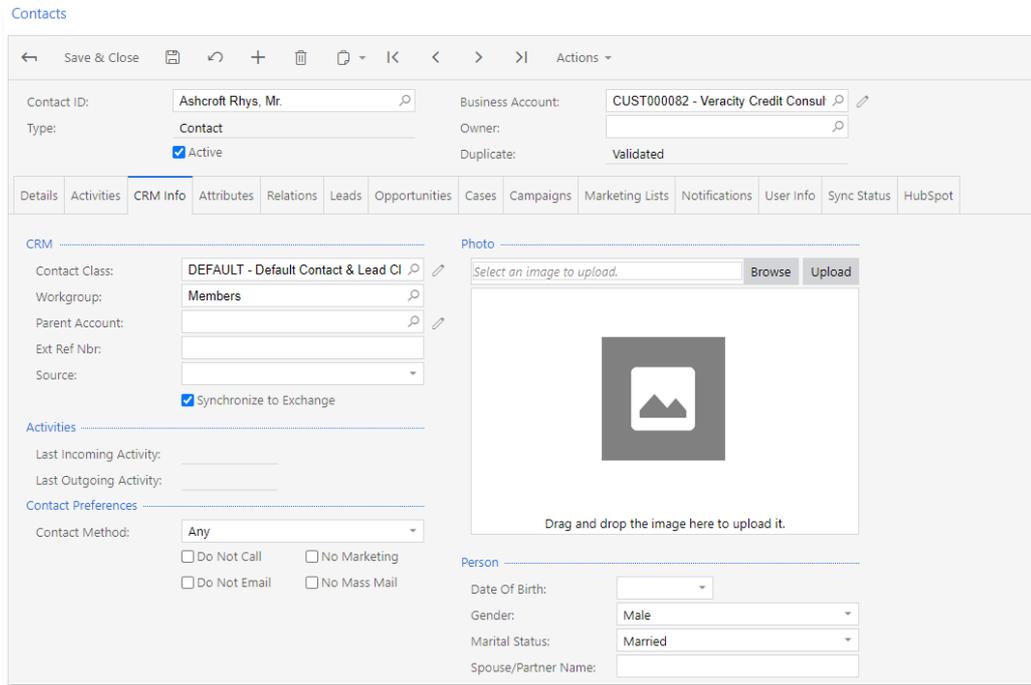
The Leads tab of the Contacts screen contains the information about leads, linked to the contact, as shown in the following screenshot.
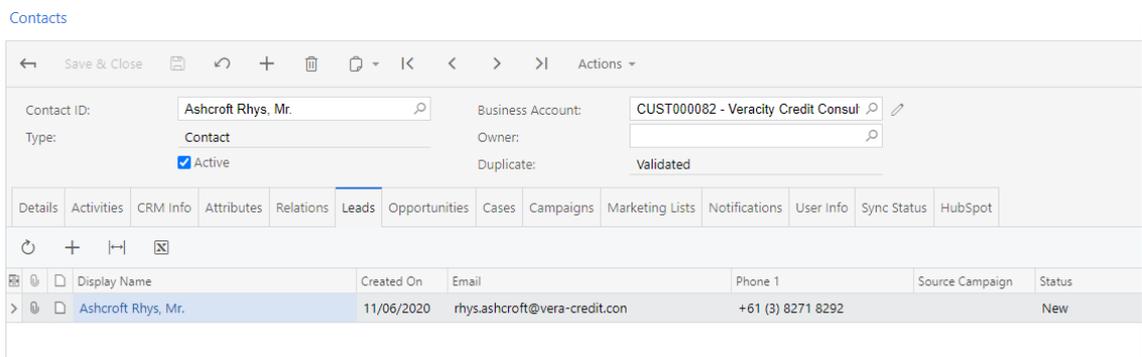
New Reports

A new set of reports for marketing and support has been introduced to improve transparency, productivity, and decision making for employees who use the MYOB Advanced functionality related to providing marketing and support services.

The inquiry screens and the data on the tabs of the screens are implemented through built-in MYOB Advanced capabilities, namely generic inquires and pivot tables. The data used for the reports can be exposed to an external system easily through the OData protocol.

The following inquiry screens have been added to the system, and users can access them in the Inquiries category of the Marketing workspace, as shown in the following screenshot:

- Leads BI (CR3010BI)
- Lead Conversion BI (CR3011BI)
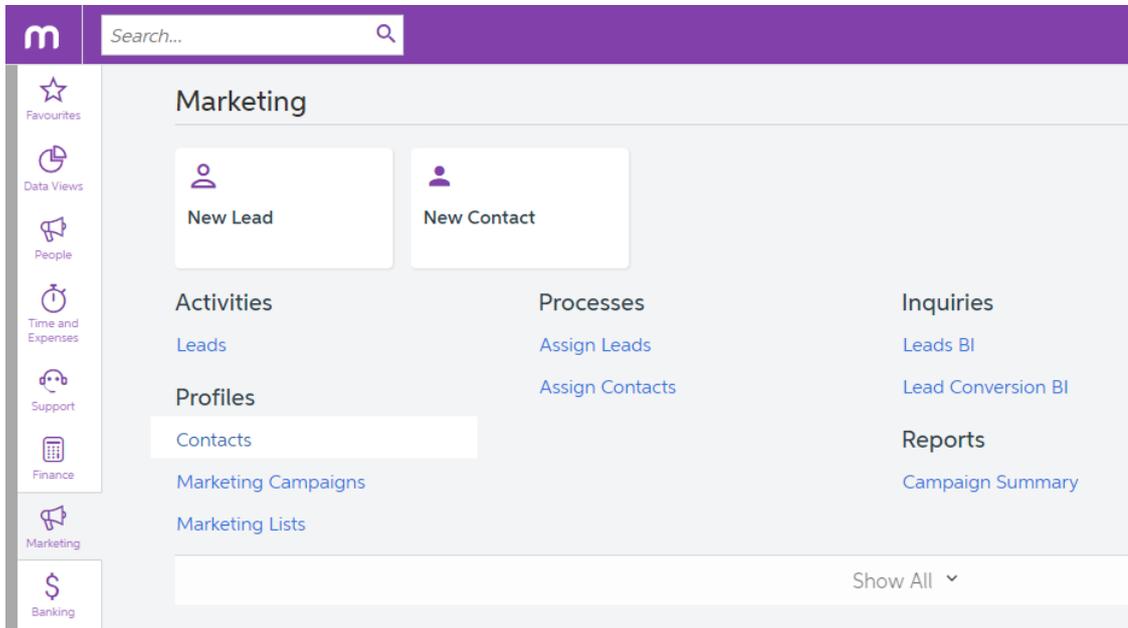
Most of the tabs of these inquiry screens display marketing data in pivot tables and contain lead qualification metrics.

Inquiry Screen Showing Lead Metrics

The Leads BI inquiry screen (CR3010BI) is based on the Leads BI generic inquiry, which was created and can be modified on the Generic Inquiry screen (SM208000). Most of the predefined tabs on the screen (shown in the following screenshot) contain pivot tables that display lead generation analysis and lead processing metrics, which can provide valuable information for marketing personnel.

The predefined tabs of the screen are described in the following table.

Tab	Description
All Records	Shows all the leads that have been added to the system.
Lead Analysis	Provides an overview of the lead pipeline, including the following details: • The number of leads that have been acquired over a period of time • The sources of the leads • The number of leads in the pipeline • The statuses of the leads • The owners of the leads A user can add other dimensions and filters based on custom attributes and user-defined fields.

Lead Activity Analysis	Shows lead activity in general and within a number of specified periods of time. Sales managers can use this information to decrease the possibility that lead will be lost because of a late reply from a sales representative.
Lead Response Time	Shows how much time it takes a sales representative to respond to a lead. In most cases, the sooner a sales representative contacts a lead, the higher the chance that this lead will be converted into an opportunity.
Lead Qualification Analysis	Shows the number of leads that have been converted to opportunities. This information can help sales managers to determine the quality of leads.
Lead Qualification Time	Displays how much time it takes to convert a lead to a contact. The information can be treated as an indicator of the quality of the marketing-supplied leads.
Lead Disqualification Reasons	Shows the main reasons leads get disqualified for each lead source.

Inquiry Screen Showing Lead Conversion Metrics

The Lead Conversion BI inquiry screen (CR3011BI) is based on the Lead Conversion BI generic inquiry, which was created and can be modified on the Generic Inquiry screen (SM208000). Most of the predefined tabs on the screen (shown in the following screenshot) contain pivot tables that display lead conversion and lead revenue metrics, which can yield valuable information for marketing personnel.

The predefined tabs of the screen are described in the following table.

Tab	Description
All Records	Shows all the leads that have been added to the system.
Lead Conversion Analysis	Provides an overview of the lead-to-opportunity conversion.
Lead Revenue Analysis	Displays data that sales managers can use to identify the channels and sources that generate the most revenue, both prospective revenue for open opportunities and actual revenue for won opportunities.

Calculated Fields in Marketing Pivot Tables

The system calculates the following fields in some of the pivot tables showing lead response time metrics:

- Last Activity Aging
- Last Response Time
- Lead Qualification Time

For the **Last Activity Aging** field, the following values are available:

- Empty: No outgoing activity was logged into the system.
- Last 30 days: The last outgoing activity was performed within the last 30 days.
- 30—60 days: The last outgoing activity was performed more than 30 days ago, but less than or equal to 60 days ago.
- 60—90 days: The last outgoing activity was performed more than 60 days ago, but less than or equal to 90 days ago.
- Over 90 days: The last outgoing activity was performed more than 90 days ago.

For the **Lead Response Time** field, the value shows the amount of time it takes for a sales representative to follow up (for example, by calling or emailing) with a lead after self-identifying as a lead. Response time is displayed as days, hours, or minutes.

For the **Lead Qualification Time** field, the value shows the number of days it takes for a sales manager to convert a lead.

Support Inquiry Screen

The Cases BI screen (CR3060BI) is based on the Cases BI generic inquiry, which was created and can be modified on the Generic Inquiry screen (SM208000).

The generic inquiry, which has been designed based on the Customer Operations Performance Centre Customer Experience (COPC CX) standard, collects different data related to case management. Multiple pivot tables based on the collected data have been added as tabs to the generic inquiry, as shown in the following screenshot.

Most of the predefined tabs of the screen contain pivot tables that display case-related metrics, which can yield valuable information for support personnel. The predefined tabs of the screen are described in the following table.

Name of the Tab	Description
All Records	Shows all the cases that have been added to the system.
Escalations	Shows the number of escalations to a different tier that were made in a certain period of time.
Efficiency Analysis	Provides data, including the following, that support managers can use to understand the amount of work done by a support team over a certain period of time: • The number of created activities (support transactions) • The types of created activities • The name of the team or support representative that • created the activity
Volume Analysis	Provides an overview of incoming cases over a period of time, including the following data: • The number of cases received for a certain period of time • The statuses of the cases • The priorities of the cases • The owners of the cases

Backlog Analysis	Provides an overview of cases in backlog, including the following data: • The number of the cases • The priorities of the cases • The owners of the cases • The number of cases to be resolved in the given period according to the case SLA
Closed On Time	Shows the number of cases that are compliant with the case SLA in a certain period of time.

A user can build other pivot tables based on the generic inquiry, filter data by any column, or use the inquiry as a source for multiple dashboard widgets. Also, a user with sufficient access rights can modify the generic inquiry by using the Generic Inquiry screen (SM208000).

Calculated Fields in Support Pivot Tables

The system calculates the following fields in some of the pivot tables related to support:

• Case On-Time
• External Activity

A case is on time (that is, meets the SLA) if it was closed within the SLA, or if it is not yet closed, but the target SLA for closing it is still in the future.

```
Case On Time = IIF(
    [SLA Target Date] <= (IIF(
        [Status] = "Closed",
        [Closed On],
        NOW()),
    "No",
    "Yes")
```

An activity is external if it involves communication with a customer.

Configurable Email Routing

In previous releases, email routing was always enabled for all system email accounts.

Routing Emails

As of this release, a user can configure whether the incoming mail received by a particular system email account should be routed to particular employees.

On the System Email Accounts screen (SM204002), a **Route Employee Emails** check box has been added in the Main Processing section of the Incoming Mail Processing tab. The check box is cleared by default; the user can select it when the Incoming Mail Processing check box is selected on the tab, as shown in the following screenshot.
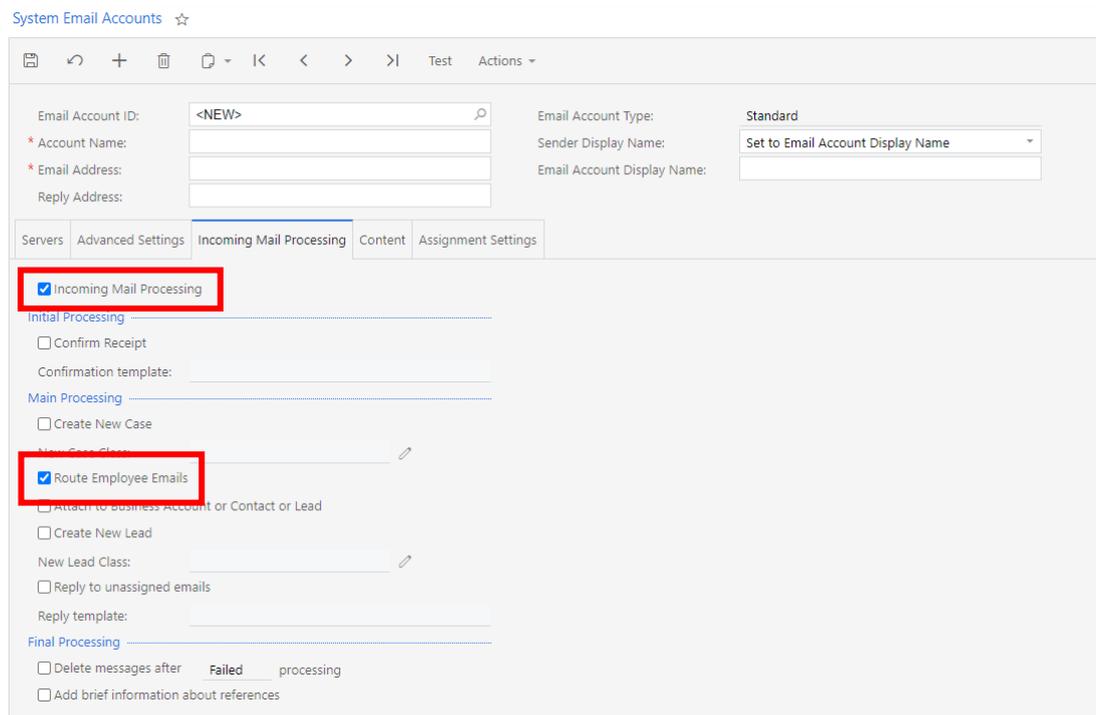
Incoming mail is routed to the email accounts specified for the employees on the Employees screen (EP203000) as follows:

1. The system creates an incoming duplicate email without recipients.
2. The system adds to the duplicate email the following recipients: the parent activity owner (the owner of the outgoing email to which the sender of the incoming email has replied), the related entity owner (such as the owner of the opportunity, contact, or case), and business account owner.

Users can view the incoming mail on the Incoming screen (CO409000), and any employee who works with specific entities—such as contacts, opportunities, and cases—and engages in email communication can receive emails from interested parties that they work with if the following settings are specified:

- The **Route Employee Emails** check box is selected on the System Email Accounts screen, as described above.
- The **Route Emails** check box is selected on the Employees screen (EP203000) for the specific employee, as shown in the following screenshot. The check box is selected by default when a new employee record is created on the screen, and can be cleared at any time, if needed.

Removal of the Purge Leads and Contacts Screen

In previous releases, users could purge unconverted or closed contacts and leads, or contacts and leads with no related activities from the contacts list by using the Purge Leads and Contacts screen (CR508000).

As of this release, users can mass-purge contacts only by using such inquiry screens as the Contacts (CR3020PL) and Leads (CR3010PL) screens, and they can mass-purge opportunities only by using the Opportunities screen (CR3040PL). These capabilities are available if a system administrator has enabled the mass deletion of records for the corresponding inquiry screens, as described in the following section. The Purge Leads and Contacts screen has been removed from the system.

Enabling the Contact Deletion Operation

A system administrator can enable record deletion for any generic inquiry by ticking the **Enable Mass Record Deletion** check box in the Operations with Records section on the Entry Point tab of the Generic Inquiry screen (SM208000), as shown in the following screenshot.
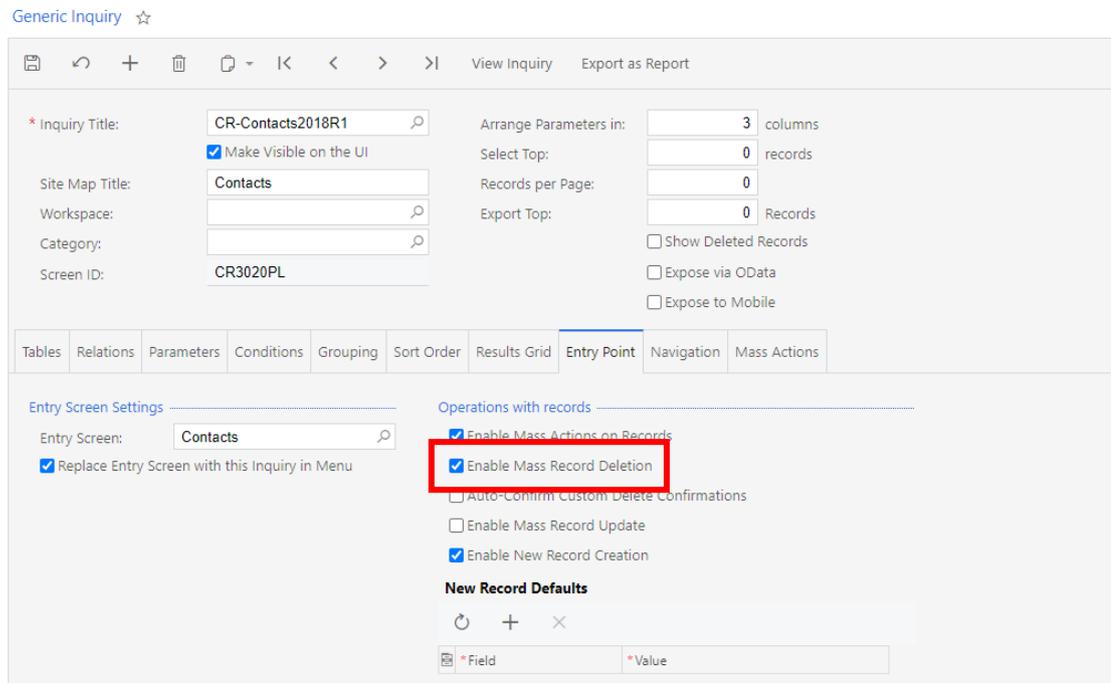
If an administrator has ticked this check box for the Contacts screen (CR3020PL), a **Delete** button becomes available on the Contacts screen. Users can delete contacts from this screen by filtering contacts (if needed), selecting the unlabelled check boxes in the rows of the contacts to be deleted, and clicking the **Delete** button on the screen toolbar, as shown in the following screenshot.
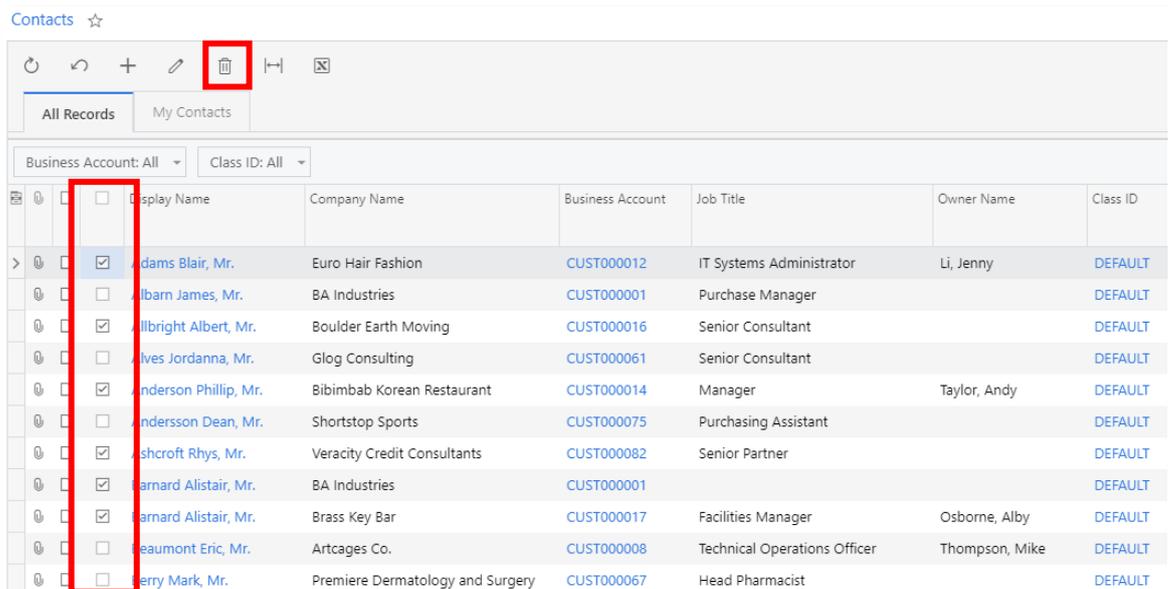
Inventory Management

Advanced Picking Workflows

Companies with large warehouses can significantly increase the efficiency of their warehouse operations by using advanced methods of picking items for shipping, such as wave picking and batch picking workflows. This release introduces the ability to process shipments in a wave and in a batch. Using advanced workflows reduces the time needed for picking items for shipments and optimizes each picker's path through the warehouse.

When the *Advanced Picking* feature is enabled on the Enable/Disable Features screen (CS100000), users can prepare picking worksheets that include multiple shipments to be processed in waves or in batches.

User Interface Changes

The following new screens and UI elements have been introduced to support this functionality:

- A new **Path** column has been added on the Locations tab of the Warehouses screen (IN204000). The value of this column indicates the position of each location in the warehouse. By specifying the location path for all locations in the warehouse, a user creates a linear map of the warehouse and defines the optimal path through the warehouse. The system uses this map to calculate the best path for each picker to use when picking items.
- On the same screen, a new Totes tab has been added. This tab lists the totes that are available in the warehouse; totes are used for wave picking of shipments.
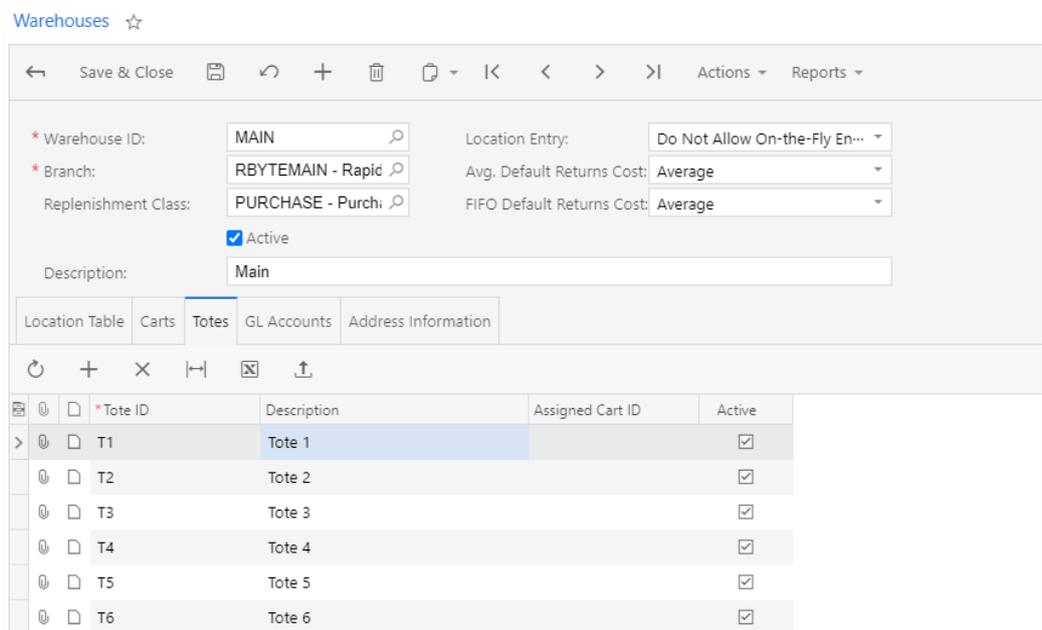
- A Create and Print Pick Lists screen (SO503050) has been added. On this screen, a user can select the shipments to be processed in a batch or in a wave, and prepare a picking worksheet (see the following screenshot). When creating a worksheet, the user specifies the maximum number of pickers who are currently available to work with the wave or batch. Depending on the specified number of pickers, the system will automatically group shipments and items, calculate the best path for each picker, and split the wave or batch worksheet into separate pick lists for the included pickers.

- On the new Picking Worksheets screen (SO302050), a user can review the details of the prepared picking worksheet (see the screenshot below), which was created on the Create and Print Pick Lists screen (SO503050). A picking worksheet for wave picking has the Wave type; a picking worksheet for batch picking has the Batch type.

- By using the new Worksheet Pick List (SO644006), Packing Slip (Batch) (SO644005), and Packing Slip (Wave) (SO644007) report screens, a user can create and print worksheet pick lists and packing slips.

  Each wave or batch pick list is split for multiple pickers, so the number of the pick list for each picker (**Pick List Nbr.** on the reports) is specified in the Worksheet Nbr./Picker Nbr. format. For example, on the Worksheet Pick List report, the pick list numbers of 000001/1 and 000001/2 mean that the wave or batch will be picked by two pickers; the warehouse manager gives a part of the printed pick list to each picker.

Wave Picking of Shipments

Wave picking is a workflow in which the system aggregates multiple shipments to a wave worksheet document, calculates the best path of picking for each picker, and split the shipments between multiple pickers accordingly. A picker receives a part of a wave pick list and starts picking the items in Pick mode on the Pick, Pack, and Ship screen (SO302020), as shown in the following screenshot. To start picking items from a wave, the picker scans the pick list barcode and assigns an individual tote to each shipment included in the pick list.
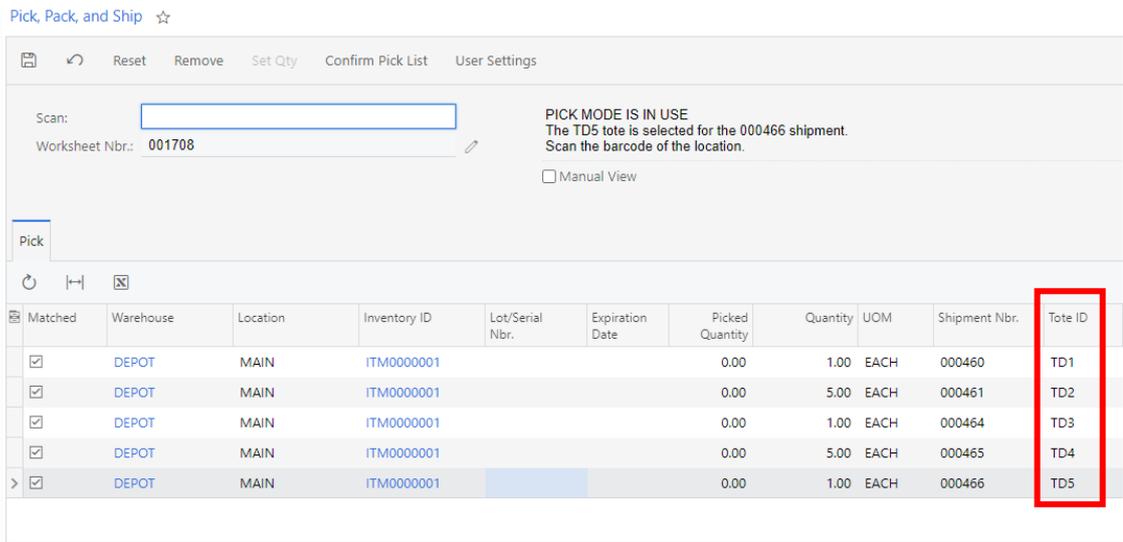
When a picker picks an item from the warehouse location, the system guides the picker to put the item in the particular tote that is assigned to the shipment for which this item is being picked. The system then reflects which item has been added to which tote, as shown in the following screenshot. As a result, the picker simultaneously fulfils multiple shipments in one pass through the warehouse.

When the picker finishes picking the items for a pick list, he or she confirms the picking of the shipments. After the shipment is confirmed as picked, it can be processed further by a packer in Pack mode on the Pick, Pack, and Ship screen. The packer scans the tote or the packing slip barcode, packs the items from the tote to the box, and makes sure that all items for the shipments are packed as specified in the packing slip. After the items are packed, the packer confirms each shipment.

Batch Picking of Shipments

Batch picking is a workflow in which items of multiple shipments aggregated to a batch are split among multiple pickers to provide the optimal path for each picker. A picker receives a part of a batch pick list that includes items from different orders, goes through the warehouse, and picks the goods from the pick list in Pick mode on the Pick, Pack, and Ship screen (SO302020).

To start picking items from a batch, the picker scans the pick list barcode and then picks the items using the standard picking workflow. When the picker finishes with picking items, he or she scans the sort location to which these items will be transferred, and confirms the picking of the pick list. The system automatically creates an inventory transfer to record the movement of goods to the sort location, and changes the original location in the shipment lines included in the batch to the sort location.

A packer receives a packing slip for the shipments, picks goods from the sort location, sorts the picked items by shipments, and packs them into boxes. When the packer finishes the packaging of a particular shipment, he or she confirms it.

Carts in Wave Picking

If the *Cart Tracking* feature is enabled on the Enable/Disable Features screen (CS100000), a user can assign totes to carts on the Warehouses screen (IN204000) (see the following screenshot, which shows some of the totes of the DEPOT warehouse assigned to the CART02 cart).

With these settings specified, when a picker starts to pick a wave in the warehouse, instead of scanning totes one by one, the picker can scan the barcode of the CART02 cart, so that the system will automatically assign the totes of this cart to the shipments being picked.

Default Warehouse Operations for a User

To provide a user with the ability to specify the default mode in which this user typically performs automated warehouse operations, on the General Info tab of the User Profile screen (SM203010), the following UI elements have been added:

- **Pick, Pack, and Ship** field: In this field, the user can specify the mode to be opened by default on the Pick, Pack, and Ship screen (SO302020).
- **Receive and Put Away** field: In this field, the user can specify the mode to be opened by default on the Receive and Put Away screen (PO302020): Receive, Put Away, or None.

Units of Measure that are Not Divisible

Users can now configure units of measure (UOMs) for items that can be measured only in integer quantities. This functionality helps to reduce the number of errors in inventory, sales, and purchase documents. To support this functionality, the **Divisible Unit** check box has been added to the General Settings tab of the Stock Items (IN202500), Item Classes (IN201000), and Non-Stock Items (IN202000) screens.

If the *Multiple Units of Measure* feature is enabled on the Enable/Disable Features (CS100000) screen, users can specify the value of this check box for base, sales, and purchase UOMs of an item separately. In the following screenshot, you can see these check boxes on the Stock Items screen.

When the **Divisible Unit** check box is selected (which is the default value) for all three UOMs (if the *Multiple Units of Measure* feature is enabled) or for the base UOM (if the *Multiple Units of Measure* feature is disabled), users can add decimal quantities of the item to inventory, sales, and purchase documents. (This is how the system worked in previous versions.)

When the check box is cleared, the system validates the quantities of items in inventory, sales, and purchase documents, making sure that they are integers, as described in the following sections.

For more information about UOMs that are not divisible for stock items, see "Stock Items: Units of Measure That Are Not Divisible" in the User Guide. For details about UOMs that are not divisible for non-stock items, see "Non-Stock Items in Sales and Purchases".

Base UOMs That Are Not Divisible

For stock items, when the **Divisible Unit** check box is cleared for the base UOM on the General Settings tab of the Stock Items screen (IN202500), only integer quantities of the item in the base UOM can be specified in inventory documents (issues, receipts, transfers, and adjustments), shipments, SO invoices, and purchase receipts.

When a user attempts to create a shipment from a sales order in which stock item quantities are specified in non-base UOMs and the base UOM is not divisible, the system converts these UOMs to the base UOM and checks whether each quantity is an integer. If a quantity is not an integer, an error message is displayed, and the shipment is not created or is created on hold, depending on the state of the **Hold Shipments on Entry** check box specified on the Sales Orders Preferences screen (SO101000).

When a user attempts to create a receipt for a purchase order that includes stock items with the base UOMs that are not divisible, the system checks whether each quantity in the base UOM is an integer (in the same way as it does for shipments). If a quantity is not an integer, an error message is displayed, and the receipt is created with the "On Hold" or "Balanced" status, depending on the state of the **Hold Receipts On Entry** check box specified on the Purchase Orders Preferences screen (PO101000).

For non-stock items, when the **Divisible Unit** check box is cleared for the base UOM on the General Settings tab of Non-Stock Items screen (IN202000), the system validates the quantities of items, making sure they are integers, on shipments (if the **Require Shipment** box is selected on the same tab of this screen), SO invoices, and purchase receipts (if the **Require Receipt** box is selected on the same tab of this screen).

The system performs validation of quantities in base UOMs on the following screens:

- Adjustments (IN303000)
- Issues (IN302000)
- Receipts (IN301000)
- Transfers (IN304000)
- Kit Assembly (IN307000)
- Kit Specifications (IN209500)
- Shipments (SO302000)
- Purchase Receipts (PO302000)

Sales UOMs That Are Not Divisible

For a stock or non-stock item, when the **Divisible Unit** check box is cleared for the sales UOM on the General Settings tab of the Stock Items (IN202500) or Non-Stock Items (IN202000) screens, only integer quantities of the item in the sales UOM can be specified in sales documents (sales orders, shipments, and invoices). If the item can be sold in other UOMs, the system validates the quantity of each item converted to the sales UOM, making sure that it is an integer.

For drop-ship sales, the system does not validate each item quantity to be sure that it is an integer if the **Divisible Unit** check box is cleared for any of the UOMs.

The system performs validation of quantities in sales UOMs on the following screens:

- Invoices (SO303000)
- Sales Orders (SO301000)
- Shipments (SO302000)

As an example of the use of a sales UOM that is not divisible, suppose that an organization sells lemonade wholesale by boxes of 10 bottles. Sales managers cannot sell less than a box of lemonade (even if they specify the quantity in bottles when entering a sales order). Further suppose that the inventory item, units of measure, and conversion rules have already been configured and that the *Multiple Units of Measure* feature is enabled. To configure the system so that it validates the quantity of lemonade (to be sure that it is an integer) when users enter sales orders, the following should be done on the Stock Items screen (as shown in the screenshot below):

1. In the **Inventory ID** field, select "LEMONADE".
2. On the General Settings tab, in the **Base Unit** field of the Unit of Measure section, select "BOTTLE".
3. Make sure that the **Divisible Unit** check box to the right of the box is selected.
4. In the Unit Conversion table, do the following:
   a. Add a new row.
   b. In the **From Unit** column, select "BOX10".
   c. In the **Multiply/Divide** column, make sure that Multiply is selected.
   d. In the **Conversion Factor** column, enter 10.
5. In the **Sales Unit** box, select "BOX10".
6. Clear the **Divisible Unit** check box to the right of the **Sales Unit** field.
7. Save your changes.

Further suppose that a sales manager has received an order from a customer for 15 bottles of lemonade. The manager creates a sales order on the Sales Orders screen and adds 1.5 boxes of lemonade to the document. The system displays an error message, and the sales manager cannot save this sales order unless he or she specifies a quantity that is an integer.

Purchase UOMs That Are Not Divisible

When the **Divisible Unit** check box is cleared for the purchase UOM on the General Settings tab of the Stock Items (IN202500) or Non-Stock Items (IN202000) screen for a particular item, only integer quantities of the item in the purchase UOM can be specified in purchase documents (purchase orders and receipts). If the item can be purchased in other UOMs, the system does not validate the quantity of the item converted to the purchase UOM to be sure that it is an integer.

The system performs validation of quantities in purchase UOMs on the following screens:

- Purchase Orders (PO301000)
- Purchase Receipts (PO302000)

Inventory Kits and UOMs That Are Not Divisible

If the *Kit Assembly* feature is enabled on the Enable/Disable Features screen, the system works as follows:

- When a user includes stock components with base UOMs that are not divisible in a kit specification, the system validates the quantities of the components included in the kit, making sure they are integers, when the user types the quantity in the **Component Qty.** field on the Stock Components tab of the Kit Specifications

(IN209500) screen. If they are not integers, an error message is displayed, and the user cannot save the specification until he or she types an integer quantity.

- On the Kit Assembly screen (IN307000), when a user assembles or disassembles a kit for which the **Divisible Unit** check box is cleared for the base UOMs on the Stock Items screen (IN202500), the system validates the quantity of the kit: It checks to be sure that the quantity is an integer and displays an error message if it is not.
  If a kit that the user assembles or disassembles includes stock components for which the Divisible Unit check box is cleared for the base UOMs on the Stock Items screen, the system also validates the quantities of the stock components in the document. It makes sure that the quantities are integers and displays an error message if they are not.
- For stock kits, users can manage the values of the **Divisible Unit** check box for base, sales, and purchase UOMs on the Stock Items screen. The system validates quantities in documents for stock kits in the same way as it does for stock items.
- For a non-stock kit that includes stock components for which the **Divisible Unit** check box is cleared for base UOMs on the Stock Items screen, when a user creates and saves a shipment for a sales order with at least one such kit, the system validates the quantity of each component included in the specified quantity of the kit, making sure that it is an integer. If the quantity of any component is not an integer, the system displays an error message. The shipment is not created or it is created but placed on hold, depending on the state of the **Hold Shipments on Entry** check box on the Sales Orders Preferences (SO101000) screen.
  When a user creates and saves a receipt for a purchase order that includes at least one non-stock kit with similar stock components, the system checks whether the quantity of each component is an integer (in the same way as it does for shipments). If a quantity is not an integer, an error message is displayed, and the receipt is created with the On "Hold" or "Balanced" status, depending on the state of the **Hold Receipts On Entry** check box on the Purchase Orders Preferences screen (PO101000).

Matrix Items

In this release, a new type of items called *matrix items* has been implemented. These items represent variants of high-level items (template items), such as T-shirts, that have multiple attributes, such as material, colour, and size. Template items exist solely to provide default settings for matrix items and cannot be added to AP, AR, inventory, sales, or purchase documents. A matrix item is a stock or non-stock item that corresponds to a physical good or service with particular set of attributes. For example, a matrix item can be a stock item that represents a black cotton T-shirt in size XL. With matrix items, users can quickly create a wide variety of stock or non-stock items. For more information, see "Matrix Items: General Information" in the User Guide.

The functionality of matrix items is available if the *Matrix Items* feature is enabled on the Enable/Disable Features (CS100000) screen.

Creation of Matrix Items

When initially defining a particular group of related matrix items, the user should perform the following steps:

1. On the Attributes screen (CS205000), creating all attributes that will be used for these matrix items. The attributes must have the Combo control type.
2. On the Item Classes screen (IN201000), creating an item class that will provide default settings for the template item. On the Attributes tab, the user then adds the attributes that characterize the matrix items. For each of these attributes, in the new **Category** column (see the following screenshot), the user selects "Variant" to indicate that this attribute will be used for creating matrix items that are variants of the template item.
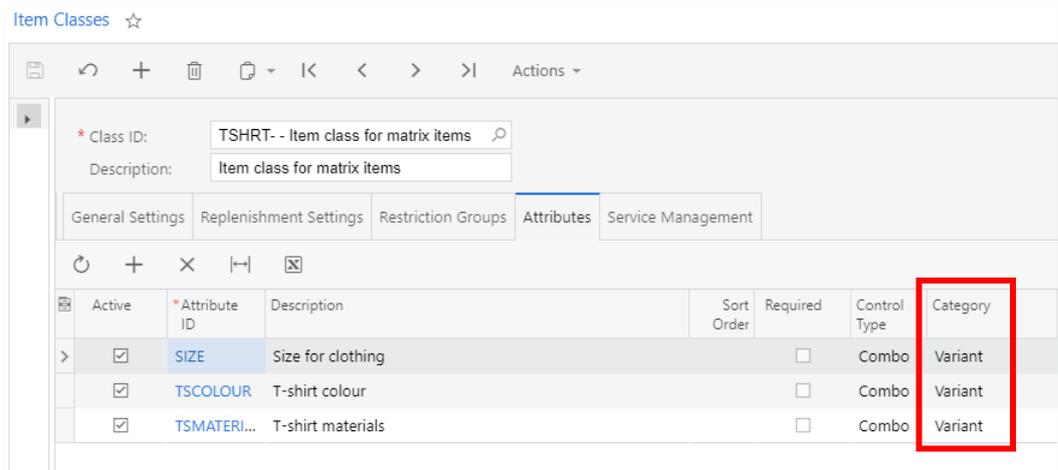
3. On the new Template Items screen (IN203000), creating the template item that will provide the basic settings for the matrix items. On the Attribute Configuration tab, the user adds attributes and specifies the settings to be used for the segments of the inventory IDs and descriptions of the matrix items (see the following screenshot).
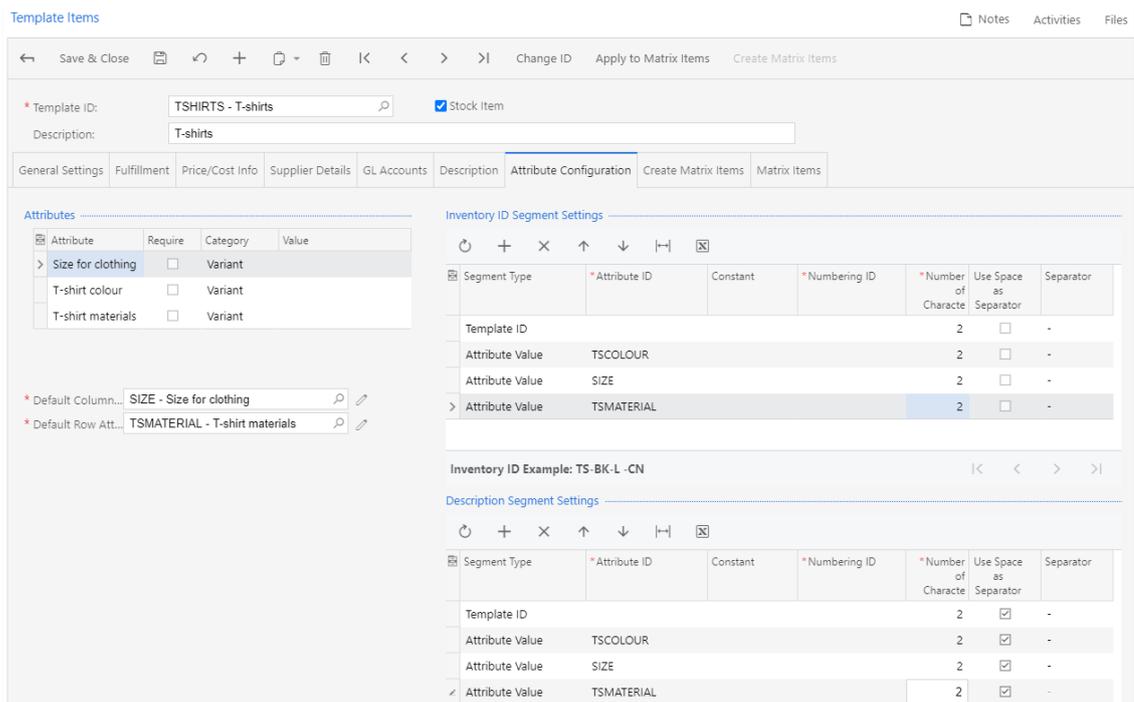
4. On the new Create Matrix Items (IN203500) screen, creating the needed matrix items based on the created template item as follows:
    a. In the **Template ID** field, the user selects the ID of the template item for which matrix items should be generated.
    b. In the **Column Attribute ID** field, the user selects the attribute to be displayed in matrix columns.
    c. In the **Row Attribute ID** field, the user selects the attribute to be displayed in matrix rows.
    d. In the table with other attributes below the Selection area, the user selects the values of other attributes configured for the template item.
    e. In the table at the bottom of the screen, the user selects check boxes that represent the attributes of the items to be generated, as shown in the following screenshot. To select the check box for each column in the row, the user selects the check box in the Select Row column. To select the check box for each row in the column, the user selects the check box in the Select Column row.
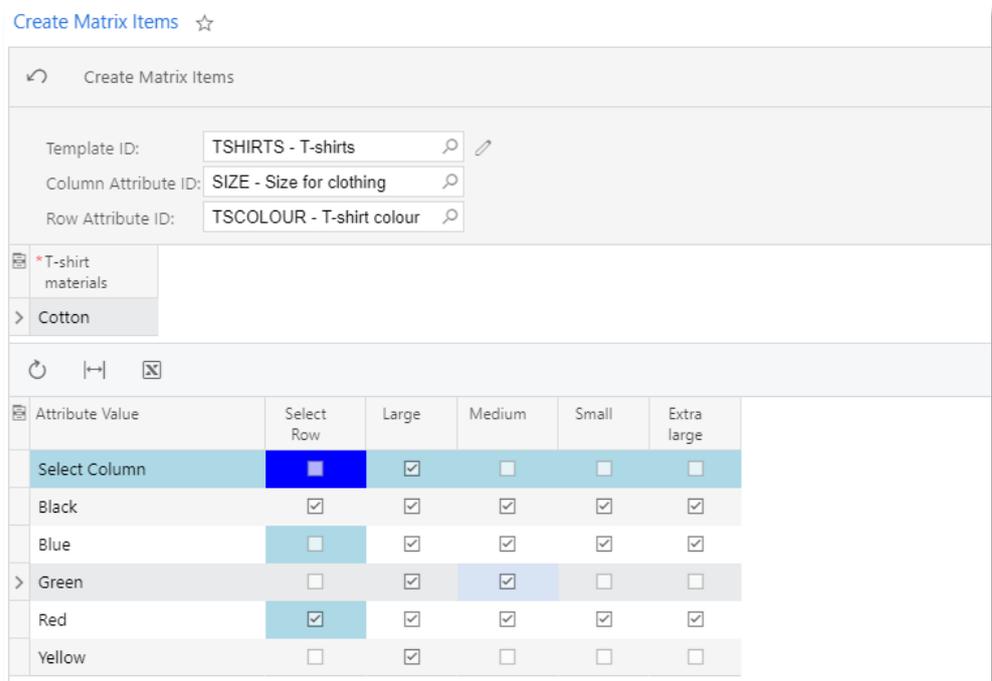
    f. On the screen toolbar, the user clicks **Create Matrix Items**.

g. In the Create Matrix Items dialog box, which opens (as shown in the following screenshot), the user reviews the list of items to be generated, and clicks **Confirmation** in the lower right corner. The system generates the items listed in the dialog box and closes the dialog box.
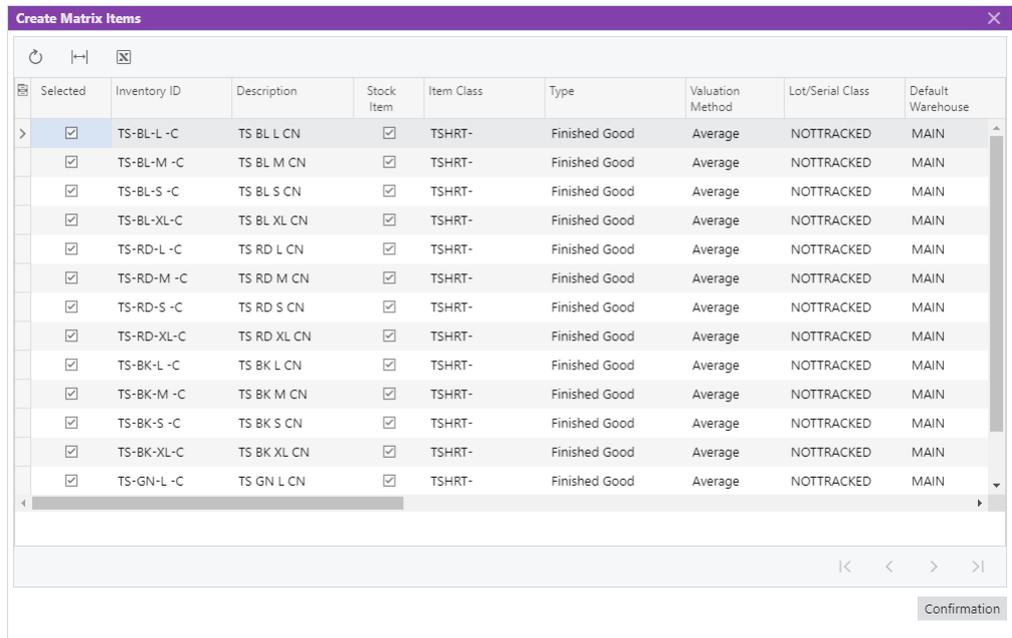
> **Note:** Matrix items can also be created on the Create Matrix Items tab of the Template Items screen.

A user can view the list of matrix items related to a particular template item on the Matrix Items tab of the Template Items screen (see the following screenshot).
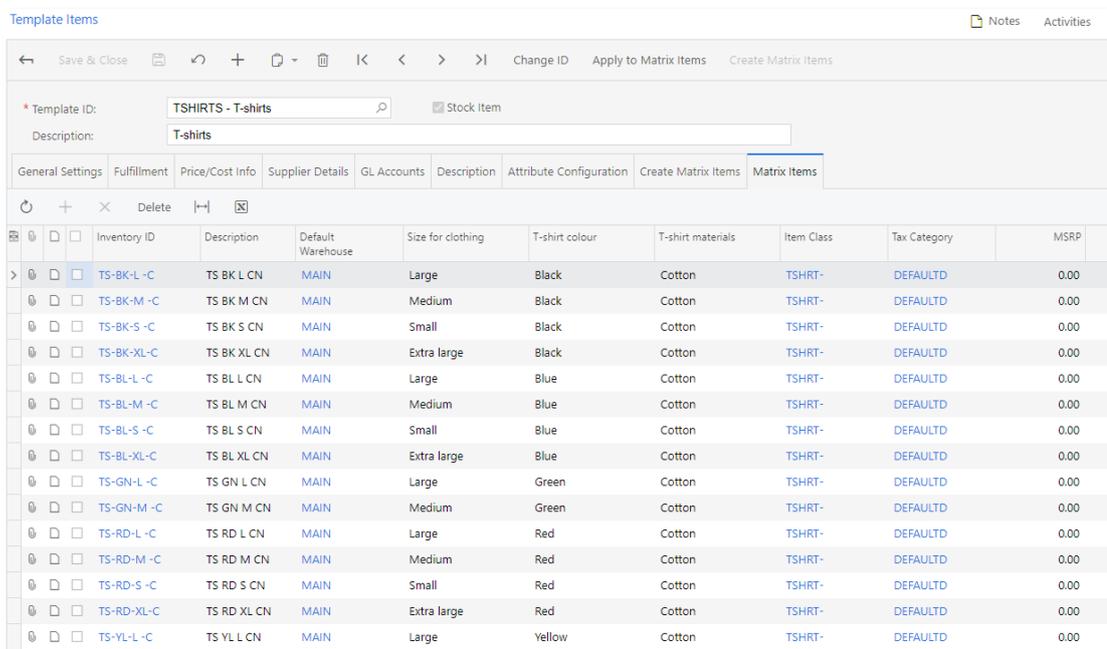
To check whether a particular item is a matrix item, a user can open the Stock Items screen (IN202500) for a stock item or the Non-Stock Items screen (IN202000) for a non-stock item and view the value of the **Template ID** field on the General Settings tab. If the field is empty, the item is not a matrix item. If the ID of a template item is specified in this field, the item is a matrix item (as is the case in the following screenshot).
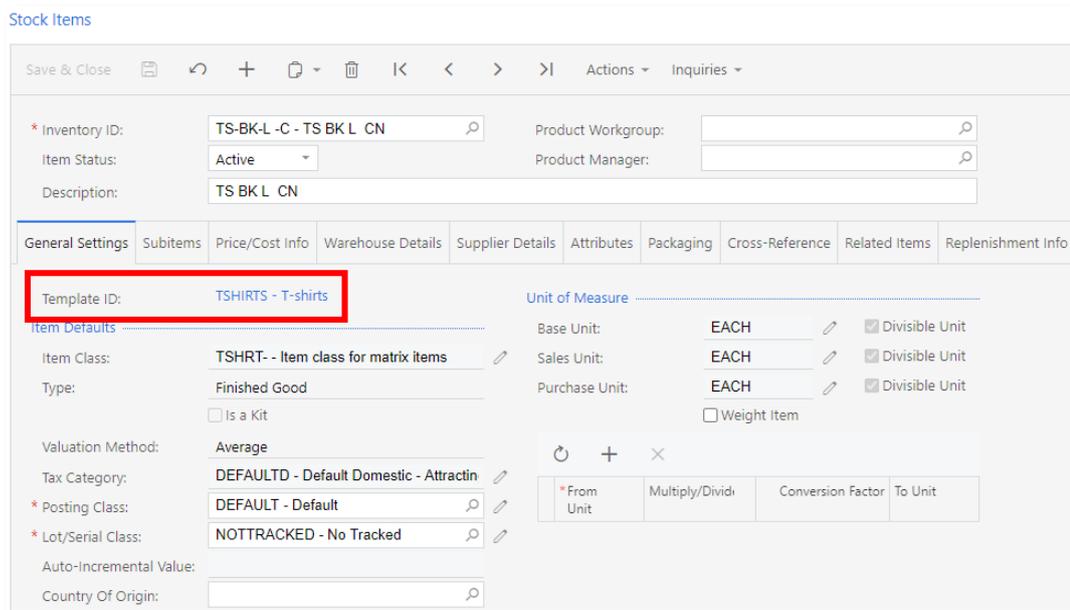
Maintenance of Template and Matrix Items

The settings of individual matrix items can be changed by using the Stock Items or Non-Stock Items screen (depending on whether the item is a stock or non-stock item, respectively). If it is necessary to change a particular setting for all matrix items of a template item, the user should make these changes for the template item on the Template Items screen and then apply the changes to all related matrix items by clicking the **Apply to Matrix Items** button on the toolbar.

If it is necessary to completely remove matrix items from the system, on the Template Items screen, a user should open the Matrix Items tab, select the unlabelled check boxes for the items to be removed, and click **Delete** on the table toolbar.

Document Processing with Matrix Items

Sales, marketing, and purchasing managers can specify prices and discounts for a template item on the Sales Prices (AR202000), Sales Price Worksheets (AR202010), Discounts(AR209500), Vendor Prices (AP202000), Vendor Price Worksheets (AP202010), and Vendor Discounts (AP205000) screens. These prices and discounts will be applied to the matrix items related to this template item if specific prices and discounts have not been not specified for individual matrix items of the template item.

Matrix items can be added to sales or purchase orders one by one, as non-matrix items, or users can add multiple items at a time. On the Sales Orders (SO301000) and Purchase Orders (PO301000) screens, an **Add Matrix Item** button has been added to the table toolbar on the Document Details tab (see the following screenshot).
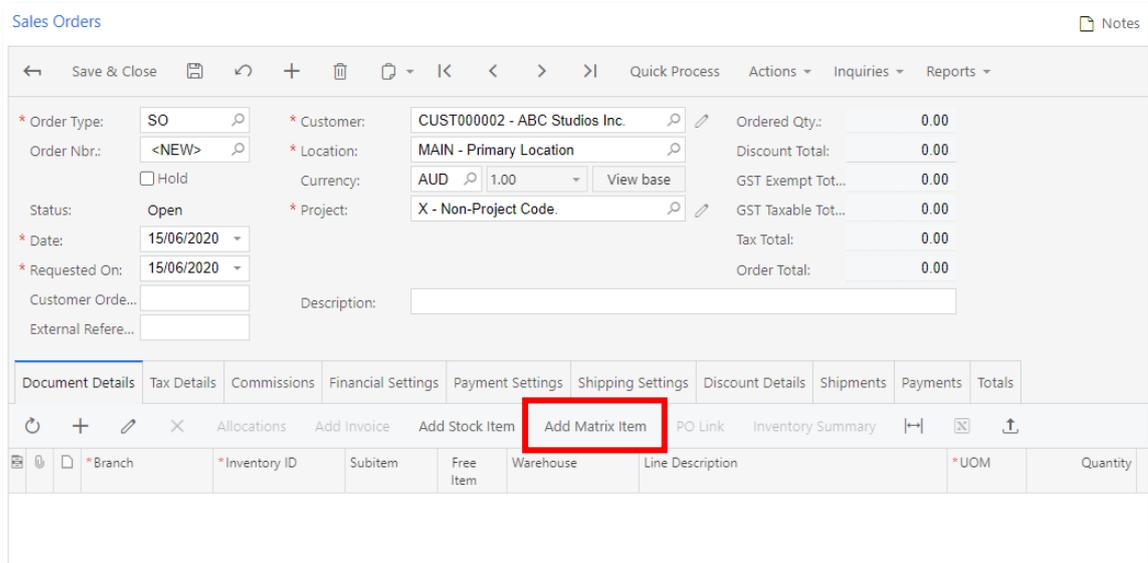
To add matrix items to a document, either a table view or a matrix view can be used. In the table view, the user should select a template item and specify the attribute values of the matrix items that they need to add to the document. In this view, the user can select any set of available attribute values, even if a matrix item with this set does not exist in the system (for example, a purchasing manager knows that the vendor sells items with particular attributes and the manager does not need to create these items in the system specifically). In the table of the Add Matrix Item: Table View dialog box (shown in the following screenshot), the **New** check box becomes selected for each new item. The system generates the new items on the fly when the items are being added to the document.
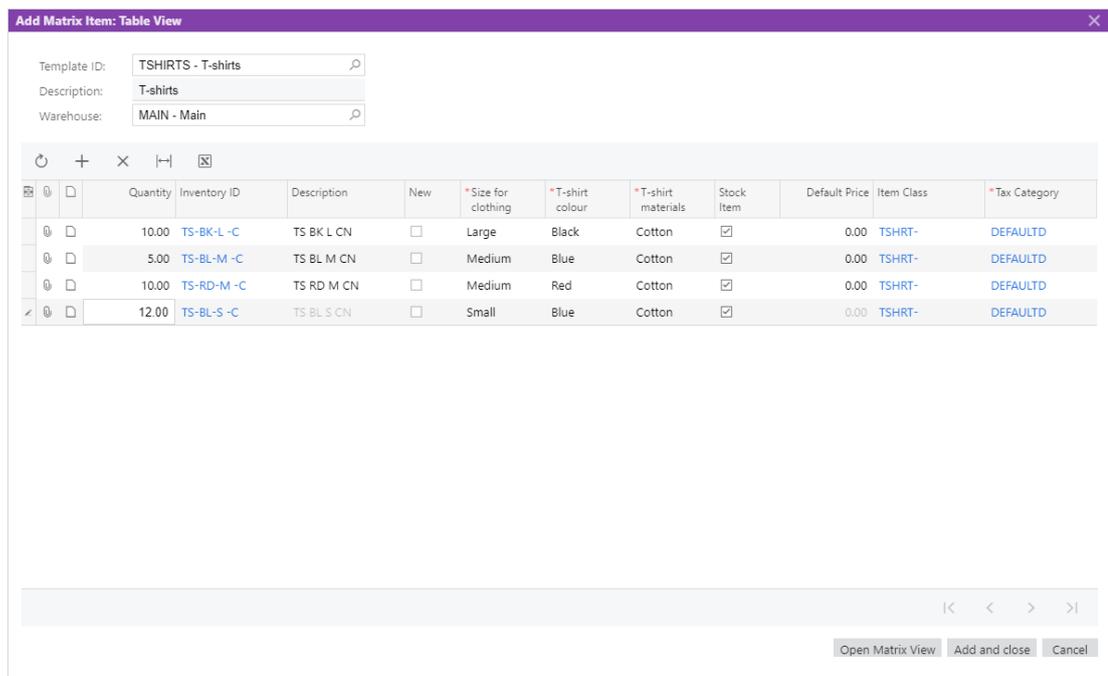
In the matrix view (shown in the following screenshot), which is opened when a user clicks the **Open Matrix View** button in the Add Matrix Item: Table View dialog box, the user can select existing matrix items by entering the required quantities in the matrix. If the **Display Availability Details** check box is selected and the user clicks the matrix cell, the availability information about the matrix item is displayed in the table footer.

> **Note:** For adding matrix items to documents, either the table view or matrix view (but not both views) must be used. If the user selects items in the table view and switches to the matrix view, the selected items are discarded.
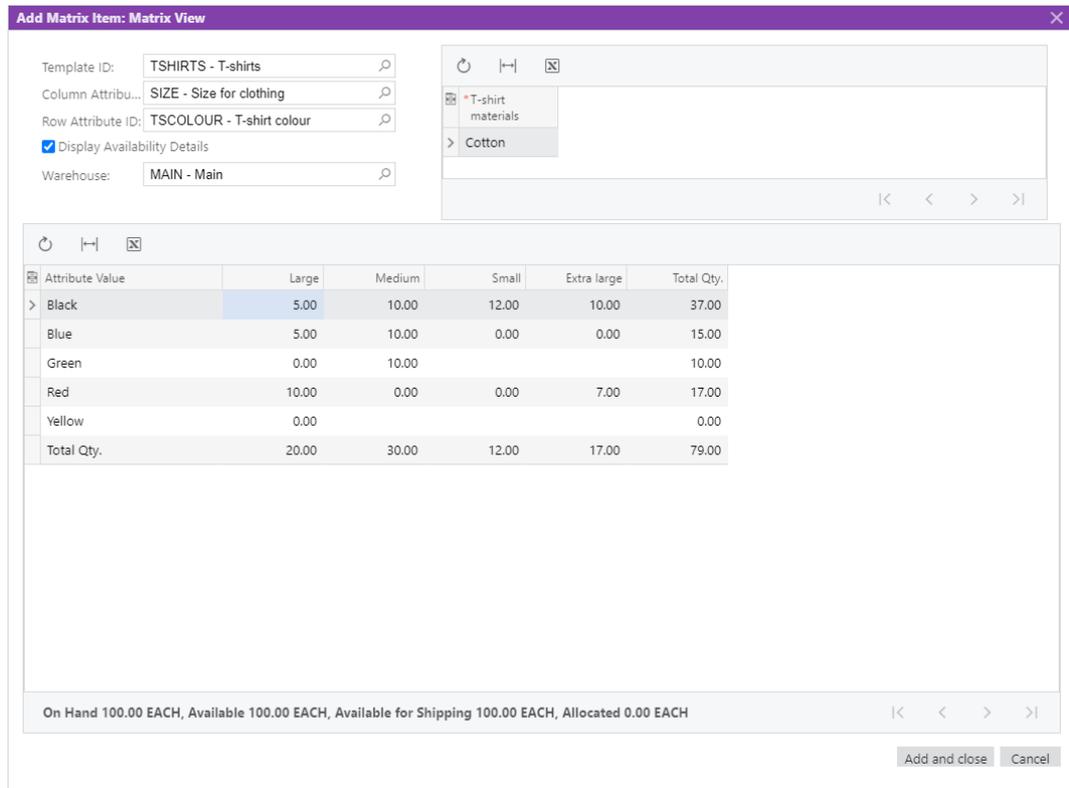
The user can then review the list of matrix items added to the sales or purchase order on the Document Details tab of the Sales Orders (SO301000) or Purchase Orders (PO301000) screen,

Reports and Inquiries for Matrix Items

To give users the ability to print invoices or memos, sales orders, and purchase orders that contain matrix items, the following reports have been implemented:

- Matrix Invoice / Memo (SO643010)
- Matrix Sales Order (SO641020)
- Matrix Purchase Order (PO641010)

The Matrix Inventory Summary screen (IN401500) has also been introduced (shown in the following screenshot) to give users the ability to view detailed information about the matrix items available at the warehouse selected on the screen.

Including Tax Amounts in the Cost of Purchased Items

Some companies may need to include tax amounts in the cost of stock items. As of this release, a user can now configure taxes so that the applicable tax amounts will be posted to the inventory accounts of the stock or non-stock items being purchased.

Configuration of a Tax for Inclusion in the Items' Cost

To include tax amounts in the costs of items in purchase orders, the following actions must be completed in the system:

- A tax reason code of the "Adjustment" type must be defined on the Reason Codes screen (CS211000), and specified as the **Tax Reason Code** on the Purchase Orders Preferences screen (PO101000).
- In the tax settings, the Use Tax Expense Account check box must be cleared on the GL Accounts tab on the Taxes screen (TX205000).

Inclusion of Tax Amounts in Costs for Stock Items

For a stock item with the Average, Specific, or FIFO valuation method, on release of an AP bill prepared for a purchase order that includes the item, an inventory adjustment transaction is automatically generated to post tax amounts to the item's inventory account.

The system shows the link to the generated inventory adjustment transaction in the **Adjustment Nbr.** box on the Financial Details tab on the Bills and Adjustments screen (AP301000) for the AP bill.

For stock items with the Standard valuation method, in the GL transaction generated on AP bill release, the tax amount is posted directly to the account defined by the **Tax Reason Code**.

If an accounts payable bill is processed for a purchase order before the purchase receipt is created, the tax amounts are posted to the inventory account on release of the purchase receipt.

When the tax amount is posted to item's inventory account, the system generates the following GL transactions:

- Inventory Account, Dr, Tax Amount
- PO Accrual account, Cr, Tax Amount

For partially deductible VAT taxes, only the expense part is posted on the item's inventory account.

Taxes in Purchase Returns and on Bill Reversal

On the reversal of an AP bill for which the inventory adjustment with included taxes has been processed, the system generates a debit adjustment. On release of this debit adjustment, the system also generates a reversing inventory adjustment transaction (that is, an inventory adjustment for which the opposite GL batch is generated).

When a purchase return for taxable stock items with taxes included in items' cost is released, the system automatically generates a debit adjustment with the appropriate tax amounts to be posted to the account specified in the tax reason code. The system calculates the tax amounts to be subtracted from items' cost on return depending on the state of the **Process Return with Original Cost** check box in the purchase return on the Purchase Receipts screen (PO302000).

Inclusion of Tax Amounts in Costs for Non-Stock Items

For non-stock item with the Require Receipt check box selected on the Non-Stock Items screen (IN202000), the system calculates the taxes and accrues them in the COGS/Expense Account specified in the purchase receipt line on the Purchase Receipts screen (PO302000).

The following GL transactions are generated and posted:

- COGS/Expense Account account, Dr, Tax Amount
- PO Accrual account, Cr, Tax Amount

Known Limitations

The following limitations are currently applicable to the inclusion of tax amounts in items' costs:

- The inclusion of taxes in items' costs is applicable to use taxes, sales taxes of the Input tax group, and GST with the **Partially Deductible GST** check box selected on the Taxes screen (TX205000).
- The accrual of tax amounts to inventory accounts is currently not possible for landed cost documents.

Correcting SO Invoices

Previous versions of MYOB Advanced provided no ability to make changes to SO invoices that had already been released. SO invoices also could not be cancelled. This release introduces new actions that provide the ability to cancel and to correct existing SO invoices with the "Open" or "Closed" status.

Cancelling Invoices

A **Cancel Invoice** action has been added to the Invoices screen (SO303000):
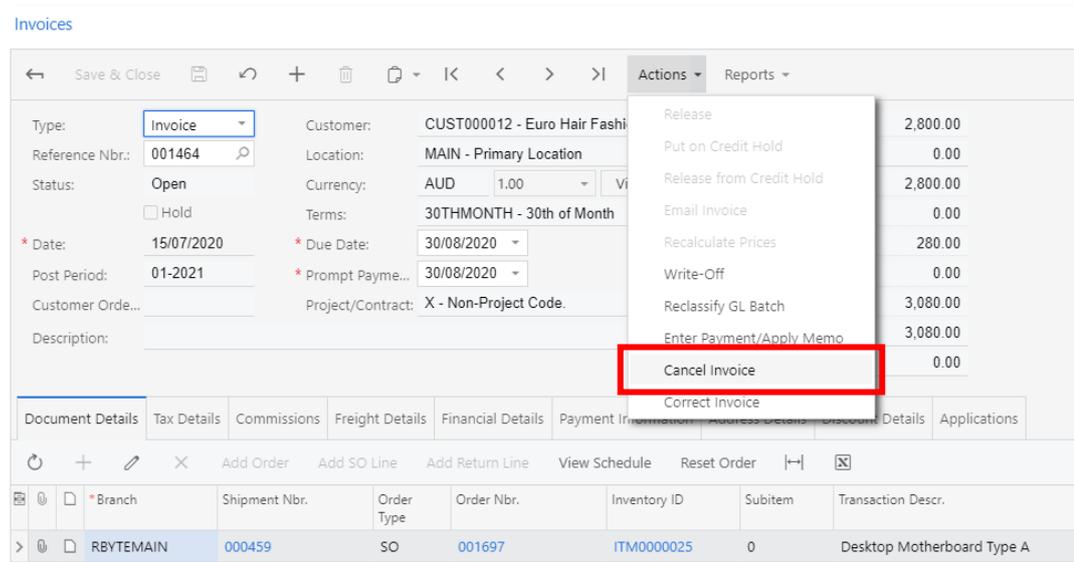
When a user clicks this action, the system creates an SO credit memo on the same screen in the full amount of the invoice being cancelled. In the created credit memo, the user can change the date, posting period, and description, all of which are copied from the original SO invoice.

In the cancelled invoice, on the Financial Details tab of the Invoices screen (SO303000), the **Correction Document** field shows the reference number of the cancellation credit memo that was prepared for this invoice but have not yet been released. This reference number is a link a user can click to view the cancellation credit memo.

On release of the cancellation credit memo, it is applied to the original invoice automatically; a user cannot apply this credit memo to any other invoice. The cancelled SO invoice is assigned the Cancelled status, and the cancellation credit memo is assigned the Closed status. The system removes the links between the lines of the cancelled invoice and the related sales orders and shipments. The related shipments are assigned the Confirmed status; the user has to create a new invoice for these sales orders and

shipments. The inventory issue transactions related to the cancelled invoice are not affected by the invoice cancellation; they are still linked to the shipments.

The application of the cancellation credit memo to the SO invoice cannot be reversed on the Application History tab of the Payments and Applications screen (AP302000). If the cancellation credit memo is deleted before it is released, the original invoice is not cancelled; it is retained with its previous status (Open or Closed).

Correcting Invoices

A **Correct Invoice** action has been added to the Invoices screen (SO303000), as shown in the following screenshot.
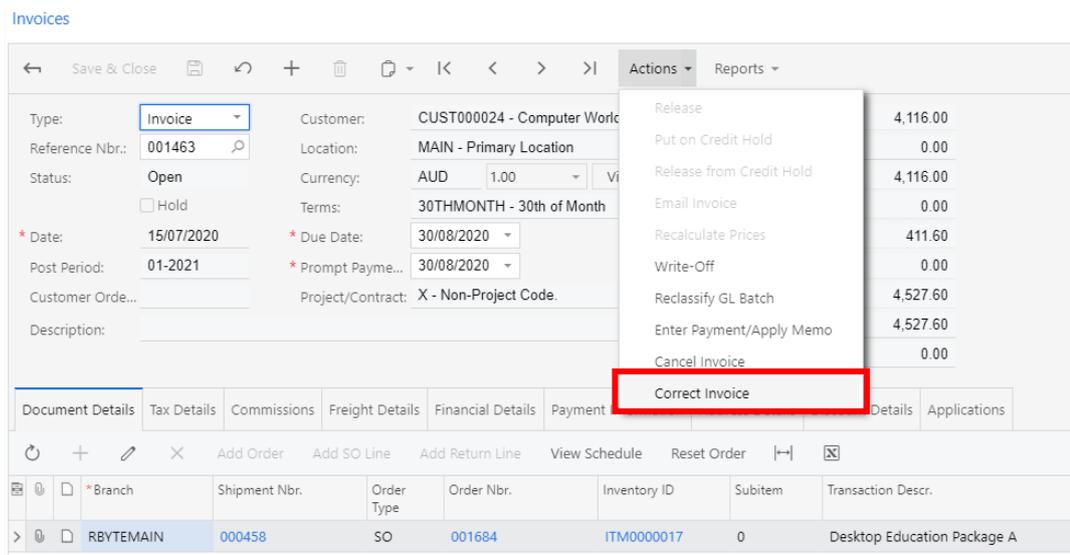
If a user clicks this action, the system creates a correction invoice on the same screen and copies all information from the original invoice to the correction invoice. (See the following screenshot.) In the created correction invoice, the user can correct information in the settings, but cannot add new lines or remove existing lines.
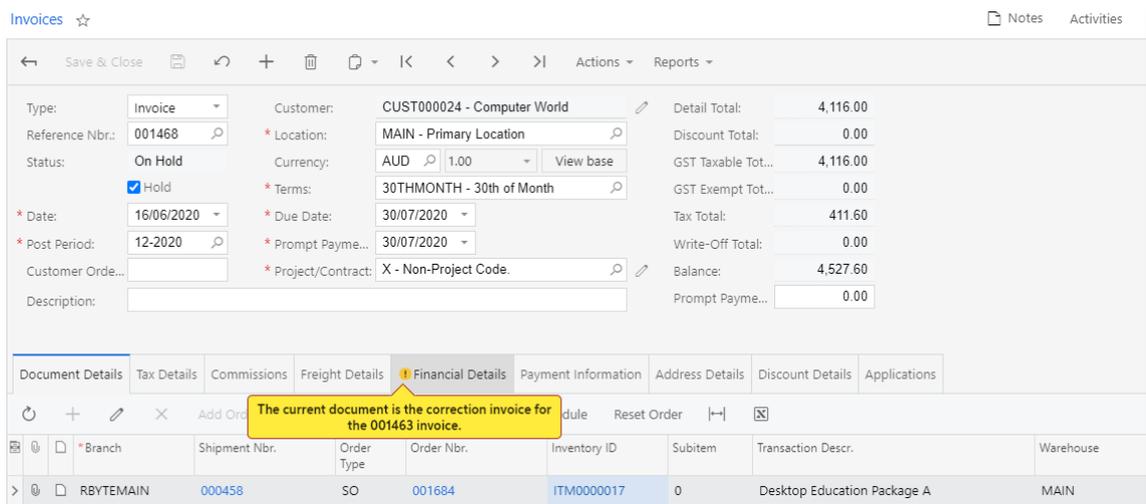
In the correction invoice, on the Financial Details tab of the Invoices screen (SO303000), the **Original Document** field shows the reference number of the invoice being corrected. This reference number is a link a user can click to view the original invoice.

On release of the correction invoice, the system automatically generates and releases a credit memo and applies it to the original invoice. The original invoice is assigned the Cancelled status; the credit memo is assigned the Closed status. The correction invoice is assigned the Open status; in the related sales orders and shipments, the system replaces links to the original invoice with links to the correction invoice.

In the original invoice, on the Financial Details tab of the Invoices screen (SO303000), the **Correction Document** field shows the reference number of the correction invoice that was created for this invoice (see the following screenshot).This reference number is a link a user can click to view the correction invoice.

Known Limitations

Currently, the processes of correcting and cancelling SO invoices have the following limitations:

- If a payment or credit memo has been applied to an SO invoice, the user must reverse the application before cancelling or correcting the invoice.
- It is not possible to cancel or correct SO invoices with multiple-instalment credit terms.
- It is not possible to cancel or correct SO invoices related to direct sales (that is, the invoices to which the stock items have been added directly without links to related shipments and sales orders).
- It is not possible to cancel or correct SO invoices that have been prepared for sales orders of the IN type.

Other Enhancements

This release introduces multiple enhancements to inventory and order management functionality.

Credit Hold Functionality Improvements

The following changes has been made to enhance the functionality related to putting sales documents on credit hold:

- On the Sales Orders (SO301000) and Invoices screens, the **Credit Hold** check box has been removed from the Summary area. Instead, the **Credit Hold** option has been added to the Status box in this area.
- On the Invoices screen (SO303000), the **Put on Credit Hold** menu command has been added to the Actions menu. This action is available for the documents that have the On Hold, Balanced, or Pending Print status. When the system places the document on credit hold, it changes the status of the document to Credit Hold.

For a description of putting AR invoices on hold and releasing them from credit hold, see "Release from Credit Hold for AR Invoices" on page 24.

Shipping to a Specific Warehouse in Purchase Requests and Purchase Requisitions

Users can now select the "Warehouse" option in the **Shipping Destination Type** field on the Shipping Instructions tab (Ship To section) of the Requests (RQ301000) and Requisitions (RQ302000) screens if the items of the particular purchase request or requisition must be shipped to a specific warehouse. If this option is selected as the shipping destination type for a purchase request on the Requests screen (as is shown in the following screenshot), the warehouse specified in the same section of the screen is copied to the **Ship To** section of the Shipping Instructions tab of the Requisitions screen when a user creates a requisition with items from this purchase request.

If the "Warehouse" option is selected as the shipping destination type for a purchase requisition on the Requisitions screen (as shown in the following screenshot), the

warehouse specified in the **Ship To** section of the Shipping Instructions tab is automatically copied to the **Warehouse** column on the Document Details tab of the same screen for each new row. When a user creates a purchase order based on this requisition, the warehouse is copied to the **Ship To** section of the Shipping Instructions tab on the Purchase Orders screen (PO301000).

Enhanced Specification of UOMs

Multiple changes have been made on the Companies (CS101500) and Boxes (CS207600) screens to enhance the specification of units of measure (UOMs).

On the Companies screen, a **Linear UOM** field has been added (as shown in the following screenshot). In this field, an administrator can specify the UOM to be used to calculate the linear dimensions of packages that will be used in shipments of the company.

On the Boxes screen, the **Linear UOM** column has been added (as shown in the following screenshot). In all rows of this column, the system inserts the UOM used for the linear dimensions, which it has copied from the **Linear UOM** field on the Companies screen. The UOM is unavailable for editing. This UOM applies to the values specified in the **Length**, **Width**, and **Height** field.

Simplification of the Feature Structure on the Enable/Disable Features screen

On the Enable/Disable Features screen (CS100000), the structure of features under the Inventory and Order Management feature group has been changed: The *Standard Inventory* and *Advanced Inventory* subgroups have been removed, thus simplifying the structure of these features.

Changes to UI Elements

The following UI elements have been renamed on the inventory and order management screens:

- On the Location Table tab of the Warehouses screen (IN204000), the **Pick by Locations Pick Priority** check box has been renamed to **Use Item Default Location for Picking**. The logic of the check box has been changed according to the name. When the check box is selected, the system gives the highest priority to the location specified in the Default Issue From box on the General Settings tab of the Stock Items screen (IN202500), if this location is specified. If the check box is cleared, the system does not consider the location specified for the item in the **Default Issue From** box.

  This check box is displayed only if the Multiple Warehouse Locations feature is enabled on the Enable/Disable Features screen (CS100000). For details, see "Warehouse Locations and Single-Step Transfers: General Information" in the User Guide.

- On the Warehouse Management tab of the Inventory Preferences (IN101000) screen, the following changes have been made:
  - The **Use Default Auto-Generated Lot/Serial Nbr.** and **Use Default Expiration Date** check boxes have been removed. These settings were not applied to the processing of items tracked by lot or serial number on the Scan and Issue (IN302020), Scan and Receive (IN301020), and Scan and Transfer (IN304020) screens.
  - Most of the settings have been grouped by the transaction or document type, as shown in the following screenshot.

- On the Storage tab of the Storage Lookup screen (IN409020), a **Description** column, which contains information about the inventory item displayed in the **Inventory ID** column of the row, has been added to the table for users' convenience. A **Description** field is also now displayed now on the corresponding screen in the mobile app.
- On the Purchase Orders Preferences screen (PO101000), the **Change Currency Rate on Receipt** check box has been renamed to **Allow Changing Currency Rate on Receipt**.
- On the Purchase Orders Preferences and Purchase Receipts screen (PO302000), the **Return by Original Receipt Cost** check box has been renamed to **Process Return with Original Cost**.
- On the Invoices (SO303000), Invoices and Memos (AR301000), Payments and Applications (AR302000) and Release AR Documents (AR501000) screens, the **Customer Order** box has been renamed to **Customer Order Nbr.**

Also, the following elements have been added to the order management screens:

- If the *Multi-Currency Accounting* feature is enabled on the Enable/Disable Features screen (CS100000), a new **Use Currency Rate from Sales Order** check box is now available on the General Settings tab of the Order Types (SO201000) screen. If this check box is selected, the system copies the currency rate from sales orders of this type to the invoice created for this sales order. If the check box is cleared, in invoices prepared for the sales orders of this type, the system inserts the currency rate of the rate type that is specified in the sales order and is effective on the invoice date.
- On the Countries/States screen (CS204000), a new **Override Address Automatically** check box has been added. If this check box is selected for a particular country, when a user validates addresses of this country on any MYOB Advanced screen via the Avalara address validation functionality, the system will automatically replace the incorrect address or postal code (or both) with the correct address data returned by Avalara and mark the address as validated.

  If the check box is cleared on this screen for a particular country and a user validates addresses of this country on an applicable screen, the system will not replace the incorrect values; it will, however, show a warning with the correct address and postal code.

- An **Entity Usage Type** column has been added on the Document Details tab of the Invoices and Memos, Sales Orders (SO301000), and Invoices screens. In each line, the value in this column specifies the entity usage type of the customer location if sales to this location are tax-exempt. By default, in a newly added line, the system copies the document-level entity usage type that is specified on the Financial Settings tab of the respective screen.

UI Enhancements

This release introduces multiple UI enhancements to inventory and order management screens.

Renamed Features Related to Warehouse Management

The names of the following check boxes have been changed under *Advanced Inventory* on the Enable/Disable Features (CS100000) screen:

- Automated Warehouse Operations to Warehouse Management
- Base Inventory to Inventory Operations

The features corresponding to these check boxes will be referred to by the new names.

Movement of Settings Related to Warehouse Management

On the Inventory Preferences (IN101000), Sales Orders Preferences (SO101000), and Purchase Orders Preferences (PO101000) screens, the sections with settings for warehouse management have been moved to a separate Warehouse Management tab (see the screenshots below). This tab is displayed only if the corresponding feature has been enabled on the Enable/Disable Features screen (CS100000) in the Warehouse Management group of features as follows:

- When the *Inventory Operations* feature is enabled, the Warehouse Management tab is displayed on the Inventory Preferences screen.
- When the *Fulfilment* feature is enabled, the Warehouse Management tab is displayed on the Sales Orders Preferences screen.

- When the *Receiving* feature is enabled, the Warehouse Management tab is displayed on the Purchase Orders Preferences screen.

Addition of the Standard Table Toolbar to the Allocations Dialog Box

A table toolbar with the standard buttons has been added to the Allocations dialog box (which a user opens by clicking the **Allocations** button on the table toolbar of the tab with document details) on the following screens:

- Issues (IN302000)
- Kit Assembly (IN307000)
- Receipts (IN301000)
- Transfers (IN304000)
- Sales Orders (SO301000)
- Shipments (SO302000)
- Purchase Receipts (PO302000)

Previously, users could add and remove lines in this dialog box only by using a context menu. By selecting rows and using the toolbar buttons, users can add and remove lines in a more convenient way.

The following screenshots show the Allocations dialog box that is opened from the Sales Orders and Transfers screens.
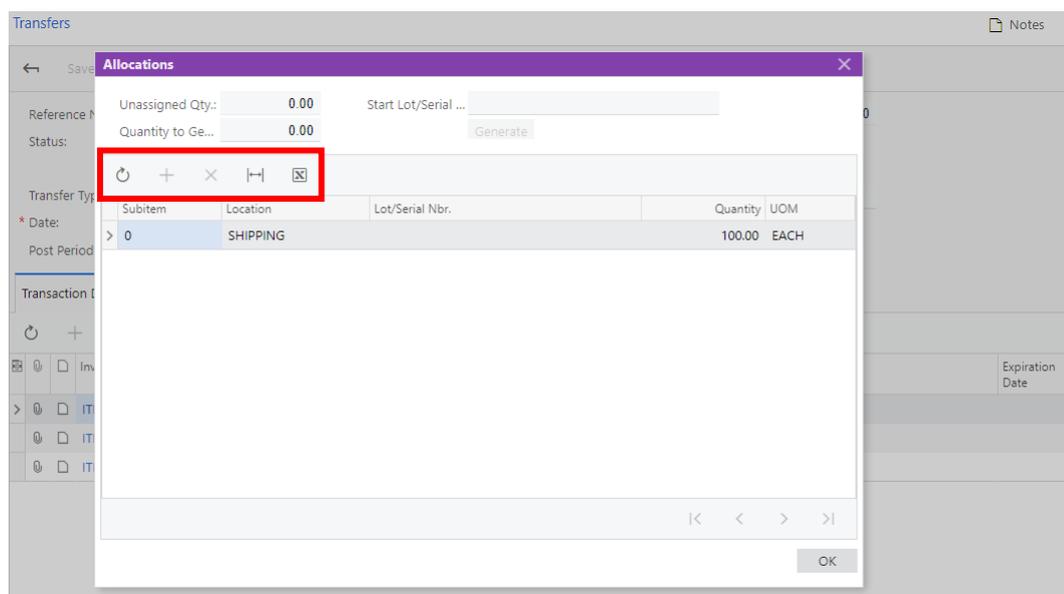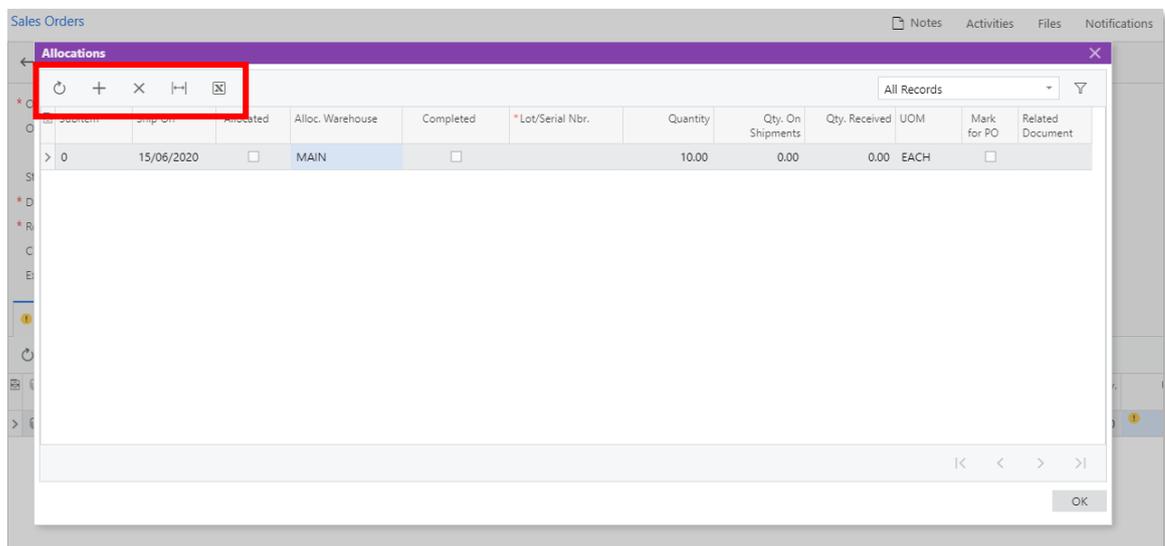
Movement of the Default Printer and Default Scales boxes on the User Profile Screen

On the User Profile screen (SM203010), the **Default Printer** and **Default Scales** fields have been moved from the General Info tab to the Printing Settings tab. In addition, on the Printing Settings tab, the **Default Printers** table has been renamed to **Printers by Report**. The table shows the list of default printers to be used with the highest priority for printing the reports for the current user.

Renamed Tab on the Prepare Physical Count Screen

On the Prepare Physical Count screen (IN504000), the Inventory Selection tab has been renamed to Item Selection.

Order Management

Accrual of the Costs of Non-Stock Items

Manufacturing companies may need to post expenses and sales revenue when non-stock items or service items are sold in order to be able to count approximate net income. In this release, the user can now configure a non-stock item so that on release of an SO invoice that contains the non- stock item, the system will post the cost of the non-stock item to the expense account.

This functionality works for non-stock items regardless of whether the *Inventory* feature is enabled on the Enable/Disable Features screen (CS100000).

UI Changes to the Screens

On the Item Classes screen (IN201000), an **Accrue Cost** check box has been added to the General Settings tab. This check box can be selected only for classes defined for non-stock items, and defines the default state of the **Accrue Cost** check box for the newly created non-stock items of this class.

A Cost Accrual section has been added to the Price/Cost Information tab on the Non-Stock Items (IN202000) screen; see the following screenshot.

If the **Accrue Cost** check box is selected for a non-stock item, on release of an SO invoice that contains this item, the system calculates the costs of the included non-stock items and posts these costs, which depend on the cost settings specified in the **Cost Based On** box of the Non-Stock Items screen, to the Expense account. The following options are available in this box:

- **Standard Cost**: The system will calculate the cost accrual amount as the SO invoice line quantity multiplied by the item's standard cost.
- **Markup %**: The system will calculate the cost accrual amount by subtracting the markup percentage (which is specified in the **Markup %** box) from the line amount of the SO invoice.

- **Percentage of Sales Price**: The system will calculate the cost accrual amount as a percent of the sales price, which is specified in the Percent of Sales Price box on the Non-Stock Items screen (IN202000).

Cost Accrual Transactions

If the Accrue Cost check box is selected for a non-stock item on the Non-Stock Items screen (IN202000), the system does the following:

- When the non-stock item is added to a purchase receipt or to an AP bill, the Expense Accrual account is debited in a GL transaction.
- When an SO invoice that includes the non-stock item is released, the Expense account is debited and the Expense Accrual account is credited in a GL transaction.

> **Note:** If a purchase return or sales return with a non-stock item is processed, the system generates a batch of the transactions opposite to those mentioned in the list above.

If a transaction generated on release of an SO invoice or AR invoice is related to a particular project, then the project, project task, and cost code of the project specified in the related SO line is specified in the transaction line posted to the Expense account.

Limitations

The selection of the Accrue Cost check box for a component of a non-stock kit does not affect the processing of non-stock kits. (That is, the cost of a component with the Accrue Cost check box selected is not posted to the Expense Accrual account when a user releases sales and purchasing documents with a non-stock kit with this component.)

Changing the Supplier in Purchase Orders

This release introduces the ability to change the supplier in an existing purchase order. This capability simplifies the comparison of item prices provided by different suppliers for the same purchased items, and gives users the ability to quickly update a purchase order linked to a sales order. On the Purchase Orders screen (PO301000), the user can change the **Supplier** even if the lines on the Document Details tab have already been populated for the existing order.

For information on which purchase order information is changed and which information is preserved when a supplier is changed in a purchase order, see "Changing the Supplier in a Purchase Order" in the User Guide.

Limitations on Changing the Vendor

Changing of the vendor is allowed only if a purchase order has the "On Hold" status, and only if the order has no related prepayment bills, AP bills, and purchase receipts. Also, if the purchase order is of the Blanket type, the vendor cannot be changed if any related purchase orders of the Normal type exist.

Enhanced Linking of Direct SO Invoices

With the *Advanced SO Invoices* feature enabled on the Enable/Disable Features screen (CS100000), an organization can process direct sales through integration with an external point-of-sale (POS) system. To simplify this processing, this releases introduces the ability to add lines to direct SO invoices with links to the related sales orders.

UI Changes on the Invoices Screen

If the *Advanced SO Invoices* feature is enabled on the Enable/Disable Features screen (CS100000), the following buttons are now displayed on the Invoices screen (SO303000) (see the screenshot below):

- **Add SO Line**: By clicking this button, a user brings up the Add SO Line dialog box, which displays the lines from the selected customer's open sales orders that have not been billed. In the dialog box, the user can select a line or multiple lines and click **Add** to add the selected line or lines to the SO invoice and close the dialog box. Each line added in this way contains a link to the related sales order.
- **Add Return Line**: By clicking this button, a user brings up the Add Return Line dialog box, which displays the lines from the selected customer's released SO invoices. In the dialog box, the user can select a line or multiple lines of the item or items to be returned and click **Add** to add the selected line or lines to the SO invoice and close the dialog box. The system specifies a negative quantity in the added lines, thus indicating that these lines are being returned; the user can override this quantity in each particular line, if a partial return of items is needed. Each line added in this way contains a link to the related SO invoice.

Prepayment Enhancements

In MYOB Advanced 2020.3, the prepayment functionality has been significantly enhanced.

Now a user can add purchase orders directly to prepayment documents on the Cheques and Payments (AP302000) screen. Also, on the Purchase Orders (PO301000) screen, a user can create multiple prepayment requests for a purchase order of the Normal or Drop Ship type with the Open or Completed status. Subsequent prepayment requests can be created even if the previous one has not been released, as shown in the following screenshot. (Notice that the listed prepayment request has the On Hold status, and the **Actions > Create Prepayment Request** menu command is available.)
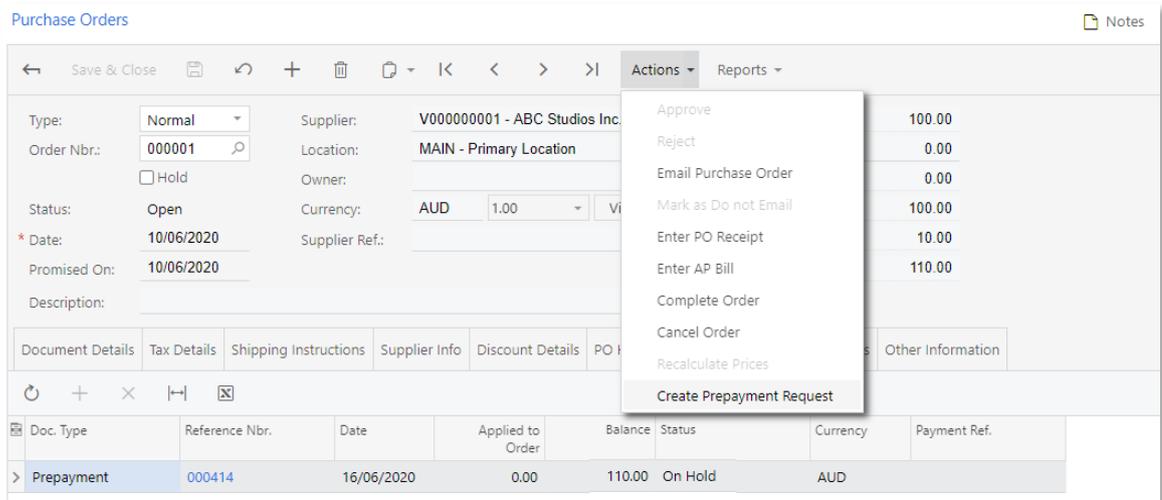
Purchase order lines now show the quantities and amounts of the listed items that have been prepaid through prepayment requests in the **Prepaid Qty** and **Prepaid Amount** columns on the Document Details tab. Taxes applicable to purchase orders are transferred to prepayment requests and are automatically recalculated proportionally to prepayment request quantities and amounts. If a purchase order has applicable group or document discounts, the prepaid amount cannot exceed the purchase order total amount minus the total of calculated discounts.

A prepayment document can be applied to purchase orders, prepayment requests, and AP bills simultaneously. A prepayment document can be printed as a check (see the following screenshot); the check remittance printing screen shows the outstanding balance of the prepayment and any related purchase orders.

Default Prepayment Percentage

To simplify the creation of prepayment requests for purchase orders, users can define percentages of the prepayment amount to be used as default settings. A default prepayment percentage can be specified for any of the following in the **Prepayment Percent** box of the mentioned screen:

- A particular purchase order: On the Vendor Info tab of the Purchase Orders screen (PO301000), as shown in the screenshot below
- A particular stock or non-stock item purchased by a specific vendor: On the Vendor Details tab of the Stock Items (IN202500) or Non-Stock Items (IN202000) screen
- A particular vendor: On the Payment Settings tab of the Vendors screen (AP303000)

These default percentages will be used in the appropriate situations for calculating the prepayment amount in lines of a prepayment request that is prepared for a purchase order.

For each line of the prepayment request on the Document Details tab of the Bills and Adjustments screen (AP301000), the system calculates the **Prepayment Amount** by using the **Prepayment Percent** value of the line. To find the applicable prepayment percent that it inserts as the default setting, the system checks the related system settings in the following order and uses the first source value it finds:

1. If a default prepayment percentage is specified in the settings of the purchase order for which the prepayment request is prepared, the system inserts this percent for the line (regardless of the applicable vendor and item settings).
2. If a default prepayment percent is specified in the settings of the stock item or non-stock item selected in the line, the system inserts this percent for this line (regardless of the applicable vendor settings).
3. If a default prepayment percent is specified for the vendor selected for this prepayment, the system inserts this percent for this line.

If the system does not find a default prepayment percent that has been specified for any of these system settings, the system inserts 100 as the default value of the line of the prepayment request, which indicates that the full amount of the purchase order line should be inserted in the related line of the prepayment request.

UI Changes

The following changes have been introduced to the Purchase Orders screen (PO301000):

- On the screen toolbar, the **Actions > Create Prepayment** action has been renamed to **Actions > Create Prepayment Request**.
- On the Document Details tab, the **Prepaid Qty.** and **Prepaid Amount** fields have been added.
- The Prepayments tab, which displays information about prepayment requests related to the current purchase order, has been added.
- On the Other Information tab, **Unbilled Prepayment Total** (which is the total of prepayment requests and prepayments prepared for the order) and **Unpaid**

Amount (which is the Unbilled Amount value minus the Unbilled Prepayment Total value) fields have been added.
- On the Vendor Info tab, a **Prepayment Percent** field has been added.

On the Payment Settings tab of the Vendors screen (AP303000), a **Prepayment Percent** box has been added. Also, the **Prepayment Percent** column has been added to the Vendor Details tab of the Stock Items (IN202500) and Non-Stock Items (IN202000) screens.

On the Cheques and Payments screen (AP302000), for documents of the Prepayment type, an Orders to Apply tab has been added. On this tab, a user can now add a purchase order or multiple purchase orders directly to a prepayment document by clicking the **Load Orders** button on the table toolbar and selecting the needed orders. For each added purchase order, a user can specify the amount to be prepaid in the **Applied to Order** column (see the following screenshot).

Cancellation of Prepayments

If a prepayment has been applied to a wrong prepayment request, a user can reverse the application or void the prepayment. If a check has not yet been printed for a prepayment document that is applied to at least one purchase order, a user can delete a purchase order from the Orders to Apply tab of the Cheques and Payments screen (AP302000) to remove the prepayment application from the purchase order. If a check has been printed, it is not possible to delete any purchase orders from the Orders to Apply tab of the Cheques and Payments screen; to cancel application of a prepayment document to a purchase order, a user must void the prepayment document.

Tracking of Supplier Relations

If the *Supplier Relations* feature is enabled on the Enable/Disable Features (CS100000) screen, if a prepayment request is created from a purchase order to a vendor for which vendor relations are configured, the prepayment request is always created to the pay-to vendor.

Limitations

Creating and processing the prepayments described in this topic have the following limitations:

- A prepayment request must be created in the same currency as the purchase order for which it is prepared.
- A user cannot manually add lines to a prepayment request if the request has been created from a purchase order.
- It is not possible to print a check after prepayment document is released.
- It is not possible to edit the **Applied to Order** amount for purchase orders in a prepayment document with the Open status.

Validation of Customer Order Numbers on Sales Orders

In MYOB Advanced 2020.3, the system can validate customer order numbers specified by users when they enter orders on the Sales Orders screen (SO301000).

The settings that control the validation of customer order numbers are specified at the order type level on the Order Types screen (SO201000) and affect all orders of the type; see the following screenshot.

The following new elements have been added to this screen:

- A **Require Customer Order Nbr.** check box: Indicates (if selected) that for orders of the type, the **Customer Order Nbr.** field on the Sales Orders screen must be filled in.
- A **Customer Order Nbr. Validation** field: Determines whether the system must check the uniqueness of a customer order number specified for a sales order of the type and, if it does, how a duplicate number should be handled. The system validates the number upon entry. The following options are available:
  - **Allow Duplicates**: If the user enters a customer order number for the order, the system does not check whether this customer order number has been specified in any other orders created on the screen.
  - **Warn About Duplicates**: If the user enters a customer order number for the order, the system checks whether this customer order number has been

specified in any other orders created on the screen and displays a warning if it has. In this case, the user can continue processing the order with the duplicate customer order number.

- o **Forbid Duplicates**: If the user enters a customer order number for the order, the system checks whether this customer order number has been specified in any other orders created on the screen and displays an error if it has. In this case, the user cannot continue processing the order with the duplicate customer order until he or she specifies a unique customer order number.

To configure an order type so that the system checks if the **Customer Order Nbr.** box on the Sales Orders screen has a value and this value is unique within all orders in the system, the administrative user performs the following actions on the Order Types screen:

1. Select the order type for which the system will perform checks for duplication of customer order numbers.
2. On the General Settings tab, in the Order Settings section, tick the **Require Customer Order Nbr.** check box. The **Customer Order Validation Nbr.** field becomes available.
3. In the **Customer Order Validation Nbr.** field, select the "Forbid Duplicates" option.
4. Save the changes to the order type.

Other UI Changes

On the Sales Orders screen, the **Customer Order** field has been renamed to **Customer Order Nbr**.

Field Service Management

Calendar Board Improvements

The following improvements related to calendar boards have been made:

- The ability to view the schedule of a particular staff member for a year
- The change to an Outlook-type appearance for the Month view of a particular staff member
- The ability to view the agenda of a particular staff member
- The ability to create an appointment by right-clicking a time slot for a particular staff member
- The addition of the option to delete an appointment on the action menu of the calendar boards

These changes are described in this topic. For more information on calendar interface, see the "Calendar Boards and Maps" section of the Interface Guide.

Ability to Specify the Year View on the Staff Calendar Board

On the Staff Calendar Board screen (FS300400), previously it was possible to view a schedule for only a day, week, or month. A user can now change the time range to view schedules for a year. To do so, the user selects the Year option in the new box in the upper right corner of the dashboard (see the following screenshot). The Date box shows the year (for example, 2019 in the screenshot). By clicking the arrow buttons right and left of the Date box, the user can change the year displayed on the dashboard. If the user selects a date by using the Calendar dialog box, the Date box shows the year that contains the selected date.
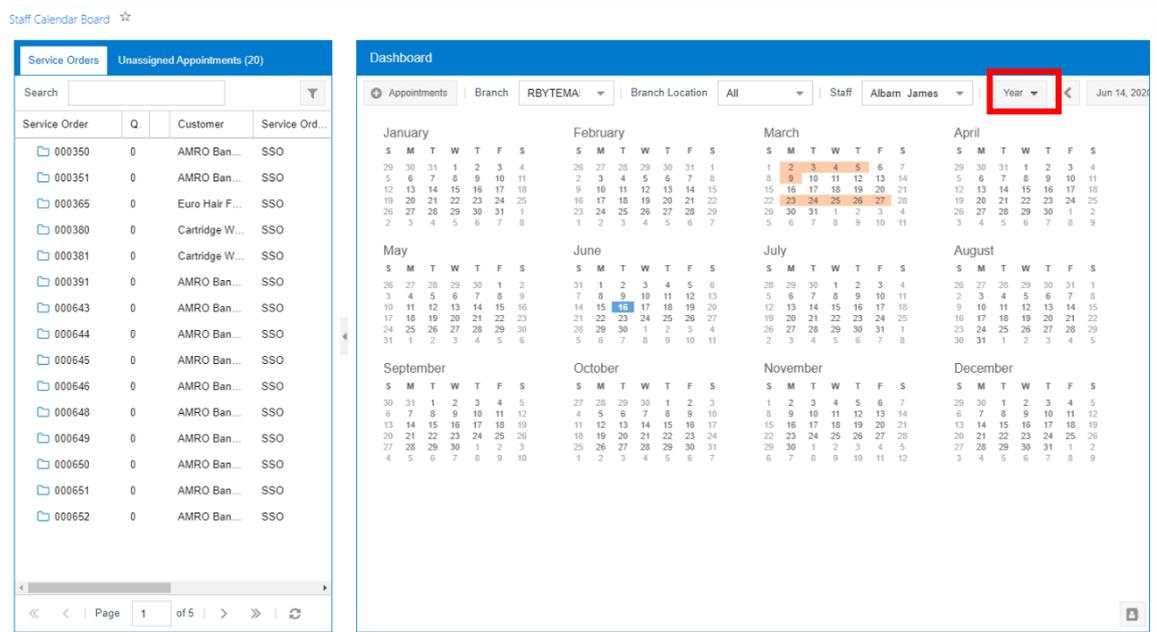

This functionality gives the user the ability to perform such actions as reassigning an appointment for a staff member to a different date of the year and viewing the schedule of a staff member on a particular year.

In the Year view, a user can double-click an appointment to see its details and right-click the appointment to open the action menu.

## Microsoft Outlook-Like Appearance on the Staff Calendar Board

The Month dashboard view of the Staff Calendar Board screen (FS300400) now has a Microsoft Outlook-like appearance, as the following screenshot shows.
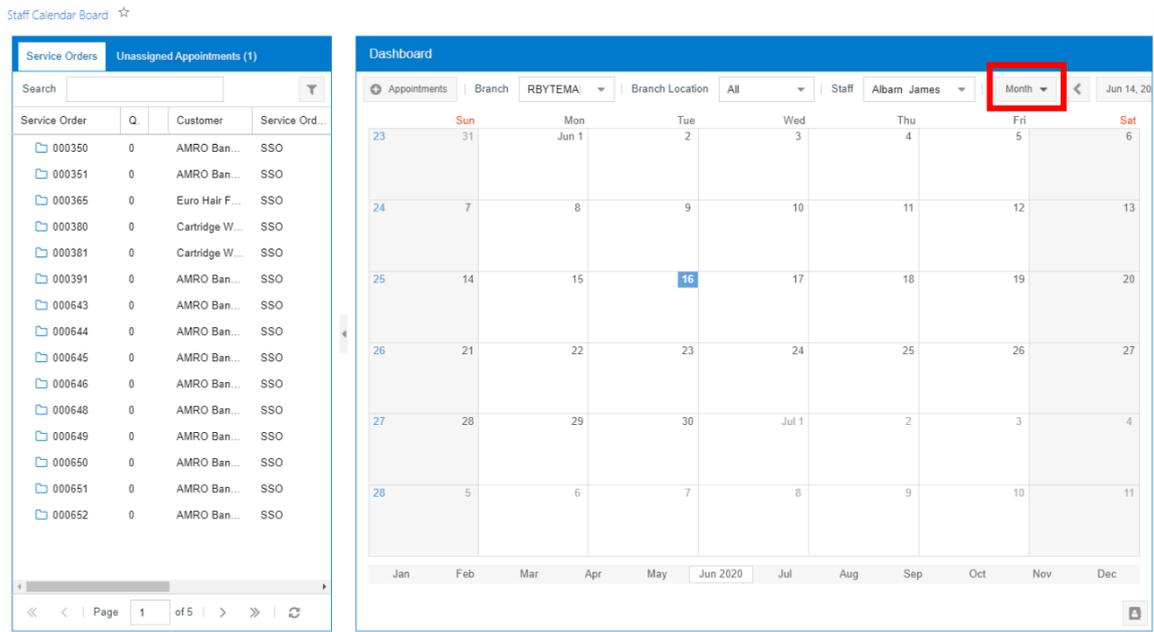
With this revised Month view, all the actions for appointments of the Day and Week views are available, such as double-clicking an appointment to see its details and right-clicking to open the action menu.

Agenda Mode on the Staff Calendar Board

Agenda mode has been implemented on the Staff Calendar Board screen (FS300400). In this new mode, users can view the list of appointments sorted by date and time for the date range in the **Date** field (see the following screenshot).
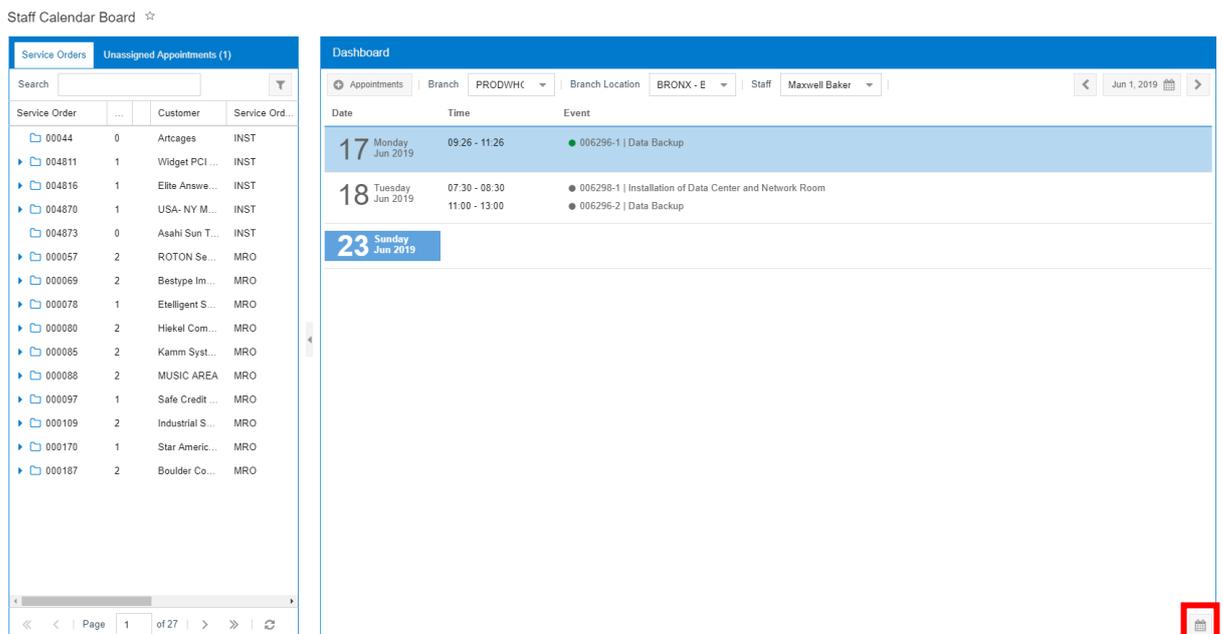

To give users the ability to switch to this mode, an **Agenda** button has been added to the right lower corner of the dashboard.

In Agenda mode, users can double-click an appointment to see its details and right-click the appointment to open the action menu.

To give users the ability to switch back to Calendar mode, a **Calendar** button has been added to the lower right corner of the dashboard.

Appointment Creation from a Dashboard

On the Staff Calendar Board screen (FS300400), a user can now create an appointment by right-clicking the time and date of the appointment on the calendar dashboard, and clicking the Appointments button, which appears (see the following screenshot). The user then specifies the details of the appointment on the Appointments screen (FS300200), which the system opens.
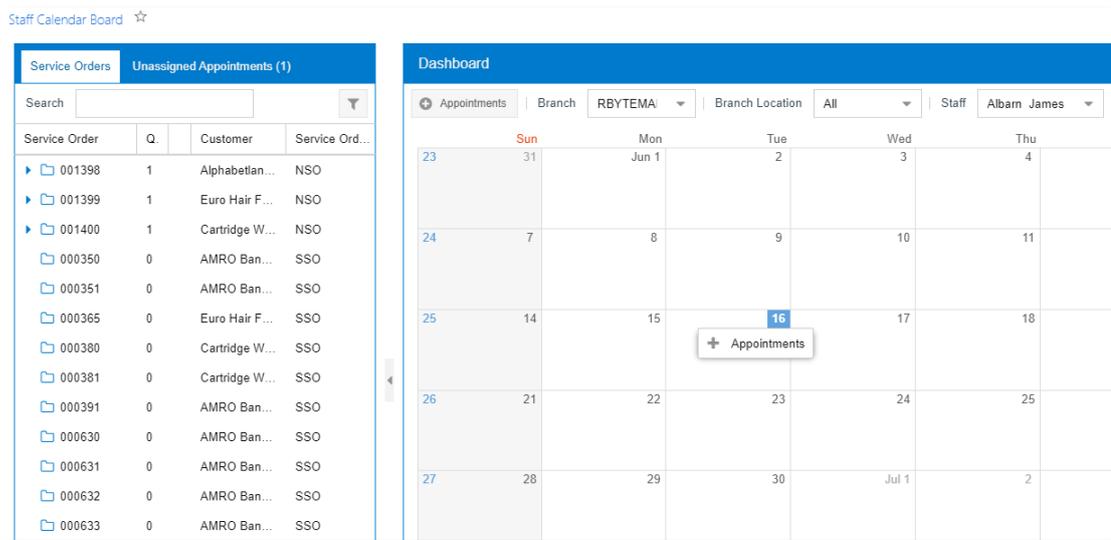
The Delete Menu Command

On the calendar boards, a **Delete** menu command has been added to the action menu, which opens when a user right-clicks an appointment (see the following screenshot). By selecting this menu command, a user can delete the appointment.
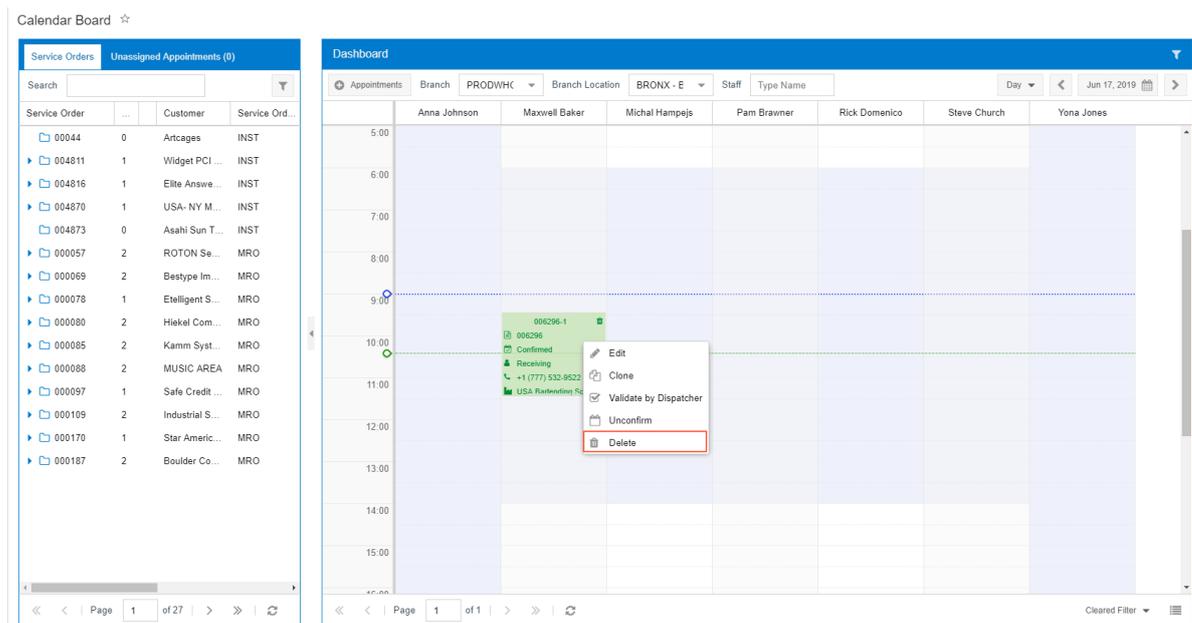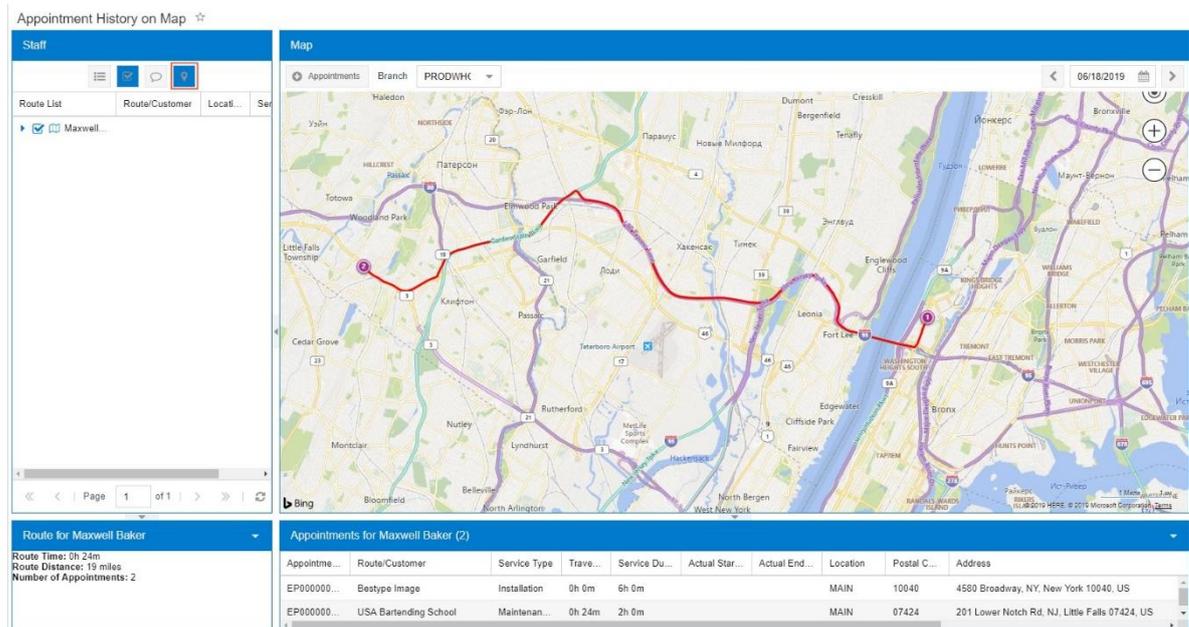
Improvements to Location Tracking on the Map

This release includes various improvements to location tracking, which provide staff members with greater visibility and additional information. For more information on map interface, see the Calendar Boards and Maps section of the Interface Guide.

Displaying the Suggested Routes

A **Show Suggested Route on Map** toggle button has been added to the Staff pane of the Appointment History on Map screen (FS301200). When a user clicks this button, the system displays the routes suggested by Bing Maps for all staff members and appointments selected in the pane. If the user clicks the button again, the display of suggested routes is turned off. By default, when the user opens the screen, the suggested routes are not displayed on the map.


Managing the Accuracy of Time and Distance Tracking

On the Service Management Preferences screen (FS100100), several boxes have been added to hold settings that determine driver movement, location, and idle time as they are used on the Appointment History on Map screen (FS301200). The following fields, also shown in the screenshot below, provide this functionality:

- **History Time Accuracy**: In this box, the user selects the time range between tracking driver locations. This time range is also used by the system to determine driver movement, along with the distance in the **History Distance Accuracy** field.
- **History Distance Accuracy**: In this box, the user specifies the accuracy (in kilometres) with which the system verifies the following information:
  - o Whether a staff member is within the specified distance from the appointment location
  - o Whether a staff member has stayed too long (that is, longer than the duration specified in the **History Time Accuracy** field) within the specified distance
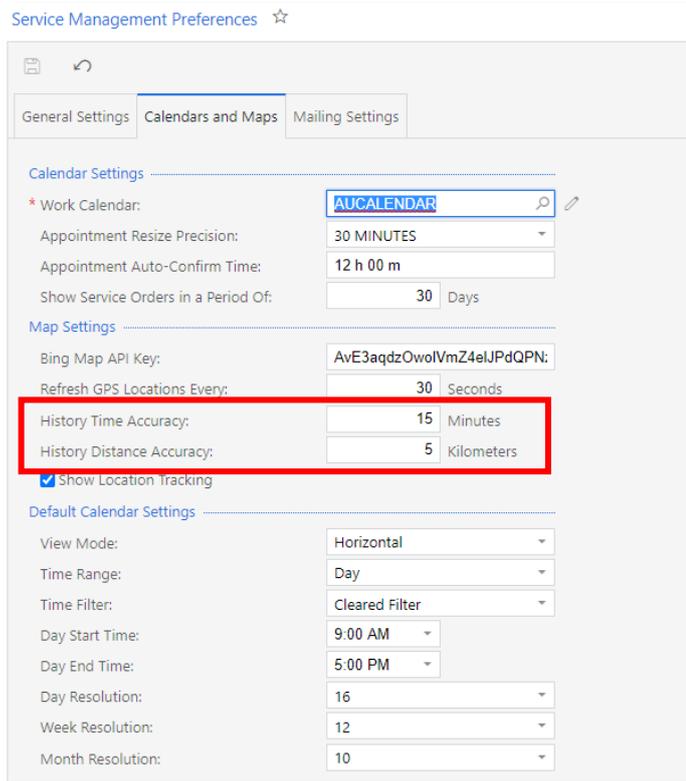
Other Improvements on Maps

To give users the ability to view the actual times of appointments on maps, **Actual Start Time** and **Actual End Time** columns have been added to the Appointment Information tab of the map screens (see the screenshot below)—that is, of the Appointment History on Map (FS301200), Staff Appointments on Map (FS301100), Staff Routes on Map (FS301000), and Routes on Map (FS300900) screens. On the map, when a user clicks an appointment icon, the user can now see the actual start and end times of the appointment (also shown in the screenshot below).

Also, an **Appointments** button has been added to the Map toolbar to give users the ability to create appointments from maps. The **Branch** and **Date** fields have been moved to the Map toolbar of the map screens (see the following screenshot).

On the Staff Routes on Map and Routes on Map screens, if the user specifies a branch in the Branch box, the system displays routes for which this branch is selected in the Branch box of the Route Document Details screen (FS304000).

On the Appointment History on Map (FS301200) and Staff Appointments on Map (FS301100) screens, if the user specifies a branch in the **Branch** field, the system displays the staff members for which this branch is selected in the **Branch** field of the Employees screen (EP203000).

Improvements on the Clone Appointments Screeen

To improve the UI and standardize the field services functionality with that of other parts of MYOB Advanced, the following changes have been made on the Clone Appointments (FS500201) screen (as shown in the screenshot below):

- The **Clone Appointment** button has been renamed to **Process**.
- In the Summary area, a **Location** field has been added to display the customer location related to the cloned appointment. The following elements have been removed: **Room**, **Status**, and **Confirmed**.
- The New Date and Time section has been divided into two sections: Cloning Type and Cloning Details. The Cloning Type section contains the **Single** and **Multiple** option buttons, which users use to select whether one appointment or multiple appointments will be created from the original appointment. The Cloning Details contains elements that users use to specify dates and time of new appointments.
- The following columns have been removed from the table: **Room** and **Confirmed**.

For instructions on how to clone an appointment, see "To Clone an Appointment" in the User Guide.

Usability Improvements

To improve the UI, simplify screens, standardize the field services functionality with that of other parts of MYOB Advanced, the changes described below have been made on the Employees (EP203000), Customers (AR303000), Vendors (AP303000), and Non-Stock Items (IN202000) screens.

Removed Check Box

The **Allow Appointment Notifications** check box has been removed from the Employees (EP203000), Customers (AR303000), and Vendors (AP303000) screens. The system now always allows sending email notifications to customers.

Improvements on the Employees Screen

On the Employees screen, the **Staff Member in Service Management** check box has been moved from the Service Management section to the Employee Settings section. The Service Management section has been removed, as have the **Driver** check box and the **Schedule** action.

Improvements on the Suppliers Screen

On the Suppliers screen, the **Staff Member in Service Management** check box has been moved from the Service Management section to the Supplier Properties section, and the Service Management section has been removed.

Improvements on the Non-Stock Items Screen

On the Non-Stock Items screen (IN202000), the settings from the Service Management tab have been moved to the General Settings and Price/Cost Information tabs, and the Service Management tab has been deleted. On the General Settings tab, the following changes have been made:

- The **Estimated Duration** field has been moved to this tab.
- The **Route Service check** field has been moved to this tab; it appears on the tab only if the *Route Management* feature is enabled on the Enable/Disable Features screen (CS100000).

On the Price/Cost Information tab, the following changes have been made:

- The Service Management section has been renamed to Field Service Defaults.
- The **Default Earning Type** field has been renamed to **Earning Type**.
- The **Default Billing Rule** field has been moved to this tab and renamed to **Billing Rule**.

Improvements to License-Related Screens

To adhere to the standards followed on other MYOB Advanced screens and to simplify data entry, a variety of changes have been made to the License Types (FS200900) and Licenses (FS201000) screens, and corresponding changes have been made to related screens.

> **Note:** The system must be prepared before it is upgraded if the company has been using the removed functionality described below. Users should contact the MYOB Advanced support team for help with the upgrade process.

Improvements on the License Types Screen

The License Types screen (FS200900) now has a list view and the data entry view has been removed, so that now users can add license types directly to the table. The related License Types (FS2009PL) inquiry has been removed.

Also, the **Owner Type** and **Validation Settings** columns have been removed from the screen. For instructions on how to create a license type, see "To Add a License Type" in the User Guide.

Improvements on the Licences Screen

On the Licences screen (FS201000), the following elements have been removed:

- Issuing Vendor ID
- Issuing Agency Name
- Require Certificate
- Initial Price
- Initial Term
- Renewal Price
- Renewal Term

The License Settings section has been removed, and its remaining elements have been moved to the Summary area, as the screenshot below shows. The **Staff Member ID** field has been renamed to **Staff Member**, and it is now a required field.

A **Never Expires** check box has been added to the screen to give users the ability to specify that the license does not have an expiration date. If a user selects this check box, the **Expiration Date** box is not available for editing.

The columns related to the elements removed from the Licenses screen and the **Owner** field have been removed from the Licenses (FS4020PL) inquiry.

For instructions on how to create a license, see "To Create Licenses" in the User Guide.

Improvements on the Employees Screen

On the Employees screen (EP203000), the columns related to the elements removed from the Licenses screen (FS201000) have been removed from the Licenses tab. A **Never Expires** column has been added, as the following screenshot shows.
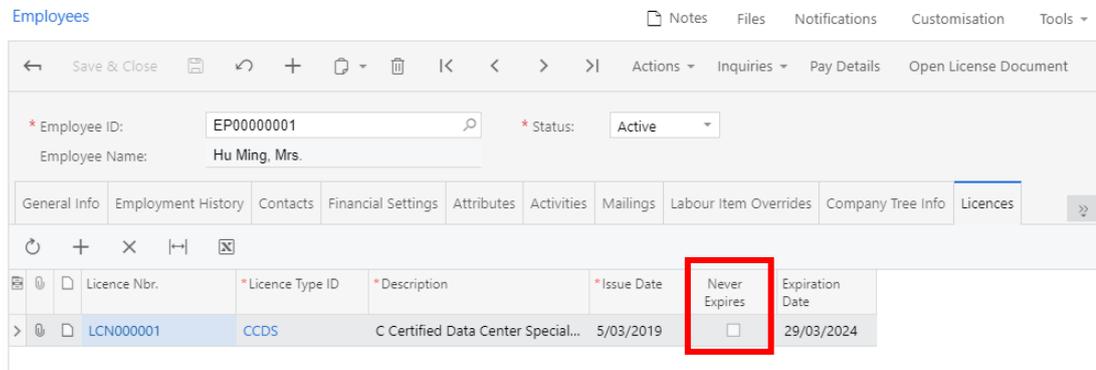
Improvements in the Selection of Service Order Types

It is now possible to specify a user-specific default service order type for any user in the system. Also, a user can now select a service order type while creating an appointment from a calendar board. This topic describes these improvements.

Ability to Define a Default Service Order Type for a User

A **Default Service Order Type** field has been added to the User Profile screen (SM203010) (see the following screenshot) so that the default service order type can be specified for any user.
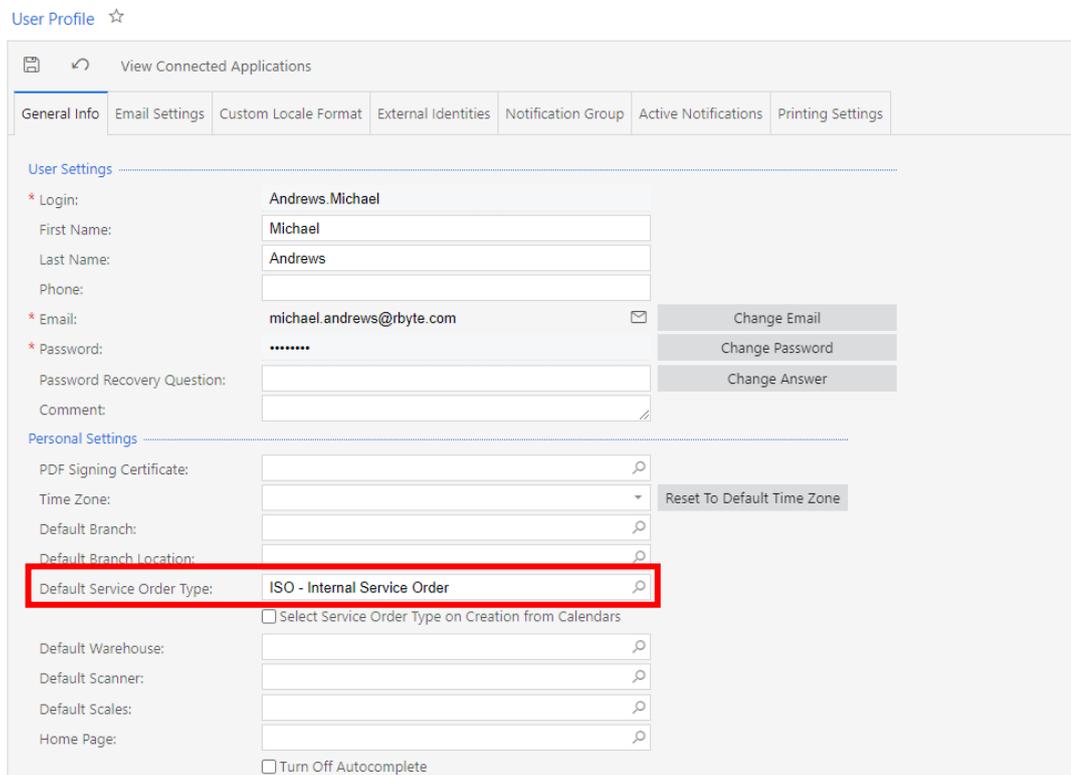
If the default service order type is selected in this field for a user, when the user creates a service order or an appointment, this service order type is inserted by default. If this field is empty, the default service order type specified in the Default Settings section of the Service Management Preferences screen (FS100100) is inserted.

Ability to Select the Service Order Type for Appointments Created from Calendars

When users create appointments from calendar boards, they can now select the service order type for appointments, depending on their personal user settings. The new **Select Service Order Type on Creation from Calendars** field has to be selected on the User Profile screen (SM203010) for a particular user (see the screenshot above) for this capability to be used.

When the user creates an appointment by clicking the **Appointments** button on the dashboard toolbar or by clicking and dragging the shaded box area in the time slot, the Create Appointment dialog box opens, in which the user can select the service order type for the appointment. The system inserts the default service order type that has been specified for the user on the User Profile screen (if applicable) or the default service order type that has been specified for the system on the Service Management Preferences screen (FS100100). Regardless of its source, the default service order type can be overridden.

If the **Select Service Order Type on Creation from Calendars** check box is cleared on the User Profile screen, when the user creates an appointment from a calendar board, the system creates the appointment with either the default service order type for the individual user, if applicable, or the default service order type for the system.

Improvements to Integration with Projects

Users can now create service contracts and schedules associated with a particular project. Additionally, default cost codes can be specified for service order types. These changes are described in this topic.

Ability to Create Service Contracts and Schedules for Projects

To give users the ability to associate service contracts and route service contracts with a project, **Project** and **Default Project Task** fields have been added to the Summary area of the Service Contracts (FS305700) and Route Service Contracts (FS300800) screens (see the screenshot below).

For service contracts with standardized billing, the **Project Task** and **Cost Codes** columns have been added to the Services per Period tab of these screens (also see the screenshot below). In the **Project Task** column, the default project task is specified, and users can override it. In the **Cost Codes** column, users can specify the cost code for each item.
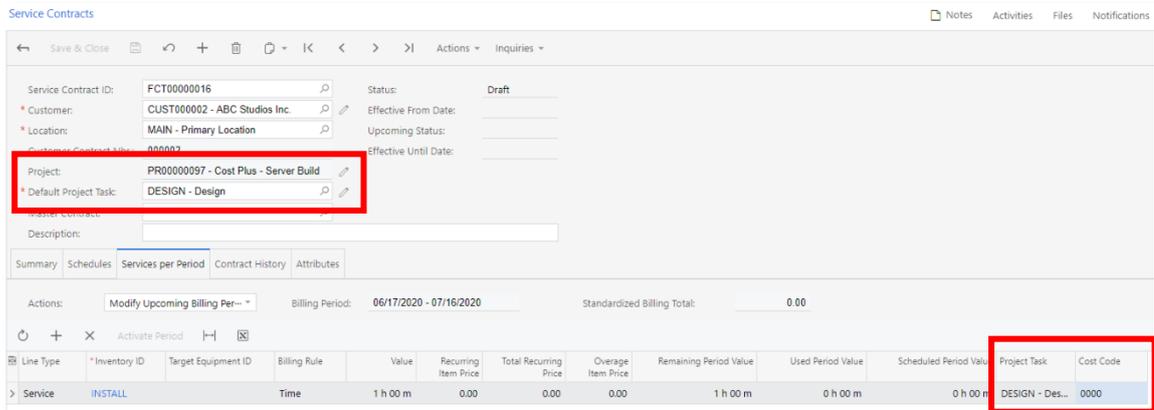
Similarly, on the Service Contract Schedules (FS305100) and Route Service Contract Schedules (FS305600) screens, **Project** and **Default Project Task** fields have been added to the Summary area, and **Project Task** and **Cost Codes** columns have been added to the Services and Inventory Items tabs. The **Project** and **Default Project Task** fields are filled in with the values specified in the related service contract (see the following screenshot). The **Project** box is read-only; the value of the **Default Project Task** box can be overridden for each particular schedule.
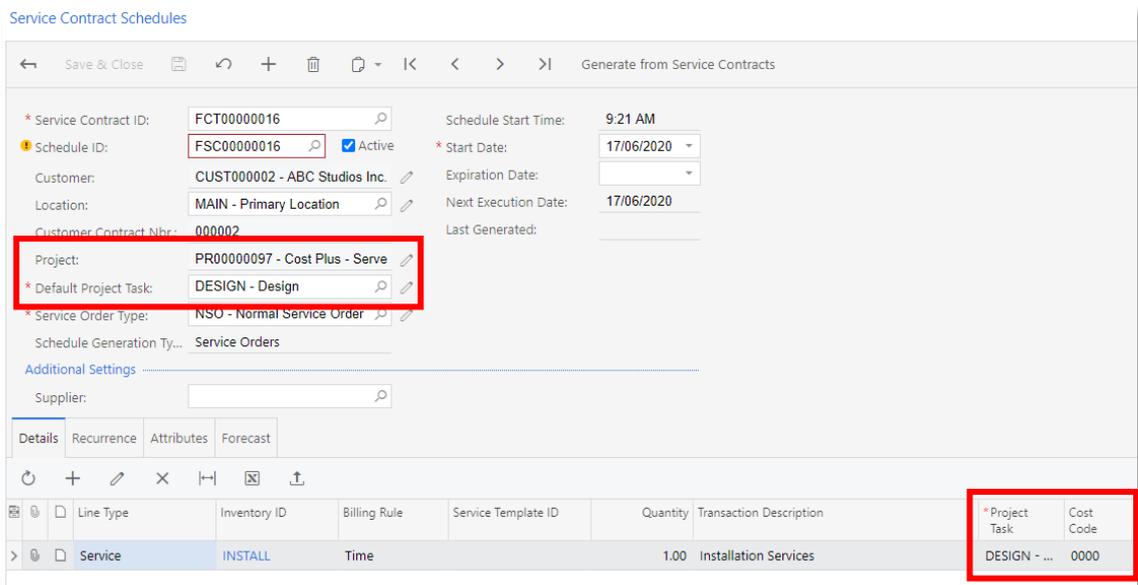
For service orders and appointments created for service contracts with standardized billing, the **Project** and **Default Project Task** fields of the Service Orders (FS300100) and Appointments (FS300200) screens are now filled in with the project and default project task of the related contract. On the Services tab, if the item is a service contract item, the project task and cost code are filled in with the project task and cost code specified on the Services per Period tab of the Service Contracts or Route Service Contracts screen for this item.

Default Cost Code for a Service Order Type

To give users the ability to specify the default cost code for items in service orders and appointments of a particular service order type, the **Default Cost Code** field has been added to the Default Settings section of the Service Order Types screen (FS202300), as the following screenshot shows.

This default cost code is populated in the **Cost Codes** column of the Service Orders (FS300100), Appointments (FS300200), Service Contract Schedules (FS305100), and Route Service Contract Schedules (FS305600) screens when a user adds a line for a new item if the document is associated with a project.

Default Project Task for Service Orders, Appointments, and Service Contracts

If a project is associated with a service order, appointment, or service contract, the system will insert the project task specified as the default on the Task tab of the Projects (PM301000) screen for the project in the Default Project Task box on the Service Orders (FS300100), Appointments (FS300200), Service Contracts (FS305700) and Route Service Contracts (FS300800) screens.

Improvements on the Service Management Preferences Screen

To improve the UI and standardize the field services functionality with that of other parts of MYOB Advanced, some changes have been made to the Service Management Preferences screen (FS100100).

> **Note:** The system must be prepared before it is upgraded if the company has been using the removed functionality described below. Users should contact the MYOB Advanced support team for help with the upgrade process.

New Elements on the Screen

The following check boxes have been added to the Service Management Preferences screen (FS100100) (see the screenshot below):

- **Enable Default Staff on Service Orders**: This check box (if selected) gives users the ability to specify default staff members for appointments of a service order. If this check box is selected, on the Service Orders screen (FS300100), the Default Staff tab (previously called Staff) appears, and the **Staff Member ID** column and **Add Staff** (previously called **Staff Selector**) button appear on the Services tab.

  By default, for a newly installed system, this check box is cleared. In systems that have been upgraded from previous versions of MYOB Advanced, this check box is selected if at least one service order has data on the Default Staff tab.

- **Enable Default Resource Equipment on Service Orders**: This check box (if selected) gives users the ability to specify default resource equipment for appointments of a service order. If this check box is selected, the Default Resource Equipment tab (previously called Resource Equipment) appears on the Service Orders screen.

  By default, for a newly installed system, this check box is cleared. In systems that have been upgraded from previous versions of MYOB Advanced, this check box is selected if at least one service order has data on the Default Resource Equipment tab.

Elements Removed from the Screen

On the Service Management Preferences screen (FS100100), the following elements have been removed:

- **Require Branch Location in Staff Schedules**: The specification of a branch location is no longer required when a user creates a staff schedule rule.
- **Allow Creation of Appointments in the Past**: The system now always allows the creation of appointments and service orders for days and times in the past.
- **Enable Attendees**: The Attendees tab has been removed from the Service Orders (FS300100) and Appointments (FS300200) screens.
- **Default Address From**: Now on the Service Order Types screen (FS202300), the Business Account option is selected by default in the Take Address and Contact Information From box.
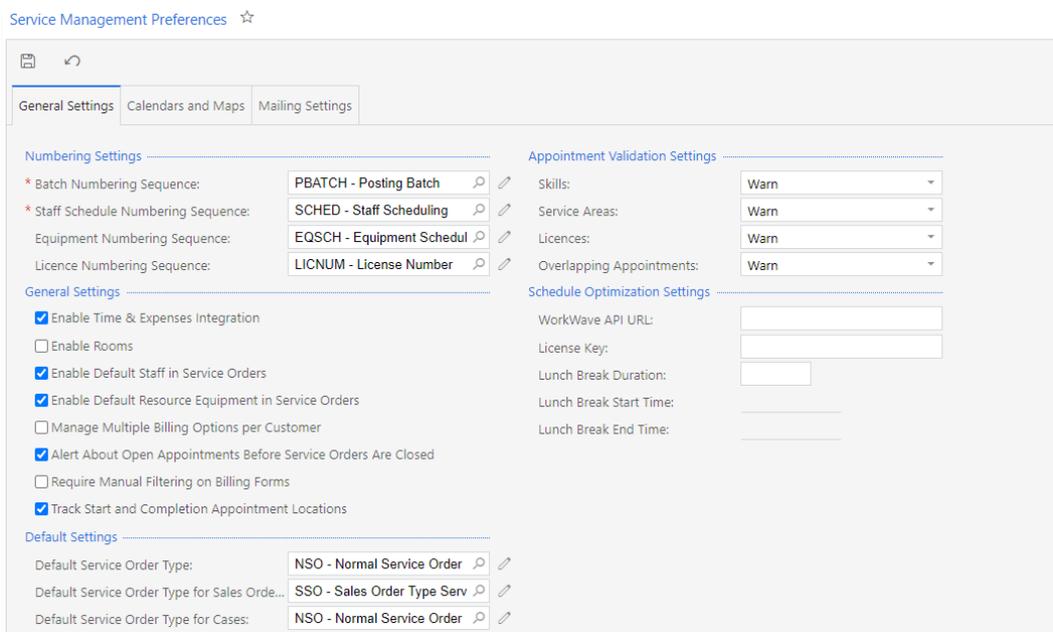
Also, the Custom Namings section of the General Settings tab has been removed. To rename the elements that include staff member, branch location, or appointment in their names on the calendar and map screens, a user now performs the following steps on the Translation Dictionaries (SM200540) screen:

1. On the screen toolbar, the user clicks the **Collect Strings** button.
2. In the **Language** field of the Summary area, the user selects "English", the language of the elements.
3. The user selects the **Show Localized** and **Show Only Unbound** check boxes.
4. The user does the following for each string to be renamed:
   a. In the Default Values table, the user searches for the strings to be renamed.
   b. In the Key-Specific Values table, in the **English** column, the user specifies the custom names of the strings to be renamed for each occurrence for the calendar or map screen specified in the **Key** column.

Other Improvements on the Screen

The following changes, which are shown in the screenshot below, have been made on the Service Management Preferences screen (FS100100):

- The **Posting Batch Numbering Sequence** field has been renamed to **Batch Numbering Sequence** and moved up to be the first box on the screen.
- The **Enable Time & Expenses Integration** check box has been moved from the Integrating with Time & Expenses section to the General Settings section.
- The **Track Start and Completion Appointment Locations** check box has been moved from the Calendars and Maps tab to the General Settings section of the General Settings tab.
- On the Calendars and Maps tab, the **Refresh GPS Locations on Maps Every** field has been renamed to **Refresh GPS Locations Every**, and the **Track Mobile Devices Using GPS** check box has been renamed to **Show Location Tracking**. These elements have been moved to the Map Settings section.

Adding Travel Time to Appointments and Logging Time

This release adds new elements to the Appointments screen (FS300200) that make it possible for users to track and log time by invoking starting and completion actions.

Most Common User Scenarios

The following scenarios related to the tracking of time during appointments can be performed by using new elements on the Appointments screen (FS300200):

- Log the time spent on traveling for staff members that travel. The most common user scenario would be a staff member wanting to log time for travel without adding a travel item (that is, a non-stock item defined in the system as representing a particular travel service) to an appointment.
- Start and complete a travel item that is defined in the system as a service, and log time for the staff members that travel. In the most common user scenario, a staff member wants to log time for one travel item for trips that take place during an appointment (with a specific fee and billing rate) and for another travel item for a trip made to and from the appointment (with a different fee and billing rate).
- Start and complete a specific service, and log time for the staff members that perform it (if any staff members are assigned). In the most common user scenario, when a service manager creates and schedules an appointment, the manager adds services and assigns staff members to the appointment, but does not assign staff members to the services. During the appointment, each staff member selects the service that this employee is going to perform, starts it in the system, and then reflects its completion in the system.
- Log time for multiple staff members by starting and completing the specific services to which they are assigned (if the staff members are assigned to any

services). In the most common scenario, when a service manager creates and schedules an appointment, the manager adds services to the appointment and assigns staff members to the specific services. During the appointment, each staff member selects the service to perform, and starts it and completes it in the system.

- Start and complete multiple services, and log time for all the staff members that are assigned to perform these services (if any staff members are assigned to the services). There are two common user scenarios of this series of actions.
  o In the first user scenario, when a service manager creates and schedules an appointment, the manager adds services to the appointment and assigns individual staff members to the specific services. During the appointment, the team leader selects multiple services to be started and completed. The services are started and completed for all staff members assigned to the services.
  o In the second user scenario, when a service manager creates and schedules an appointment, the manager also adds services to the appointment, but in this case, the manager assigns only one staff member to the appointment. When the appointment is started, the staff member starts the logging of time for the whole appointment (that is, no service is assigned to the log line on the Log tab). During the appointment, the staff member selects services to start and complete. The services will be started and completed and the time will be tracked for them, but the labour for the staff member will not be registered for each particular service because the staff member 's time is registered for the whole appointment. When the appointment is completed, the staff members completes the logging of time for the whole appointment.

The Log Tab

A new Log tab has been added to the Appointments screen (FS300200), as shown in the following screenshot, to provide users with a breakdown of the time that was tracked for an appointment.

When a user selects a line on the Details tab and clicks the Start button on the table toolbar, the system creates new log lines on the Log tab for the item selected in the selected line, which might be a service, a travel item, or a non-stock item. In the table on the Log tab, users can do the following:

- In the Log Line Status column, manually change the status of a particular log line.
- In the Travel column, select or clear the check box to specify that the time is logged for travel or a service.

- In the Detail Line Ref. column, select or modify the reference number that represents the service for which the time is logged. The numbers in this column correspond to the numbers in the Line Ref. column on the Details or Staff tab of the current screen.
- In the Start Time, End Time, and Duration columns, modify the times or the duration of the log line.
- In the Add to Actual Duration column, select or clear the check box to make the system include or exclude, respectively, the duration of the log line in the duration of the related service line, which is recorded in the Actual Duration column of the Details tab.
- In the Track Time column, select or clear the check box to turn on or turn off, respectively, tracking time for the line in time activities of staff members.
- In the Earning Type, Labour Item ID, Project Task, Cost Code, Time Card Ref. Nbr., and Approved columns, select or modify other settings related to time activities and projects.

New Buttons on the Details and Staff Tabs

On the Appointments screen (FS300200), a user can now start logging time for (on the Log tab), finish logging time for, or cancel any service item, non-stock item, or travel item listed on the Details tab. The user clicks the line with the item in the table and then clicks one of the following buttons, which have been added to the table toolbar of the tab:

- **Start**: Opens the Perform Action dialog box with the Start action selected. In this dialog box, the user can modify the logging option and the start time (which has been filled in automatically); in the table of the dialog box, the user selects the unlabelled check boxes for the staff members and services for which the time will be tracked for the item. When the user clicks **OK** in the dialog box, the system closes the dialog box, creates the related log lines, begins logging time on the Log tab, and changes the status of the item and the log lines to In Process.

  This button is available for service lines only if the appointment has the In Process status and the selected line has the Not Started or In Process status. This button is available for travel lines only if the appointment has the Not Started, In Process, or Completed status and the line has the Not Started or In Process status.

- **Complete**: Opens the Perform Action dialog box with the Complete action selected. In this dialog box, the user can modify the logging option and the end time (which has been filled in automatically); in the table of the dialog box, the user makes sure that the necessary unlabelled check boxes are selected in the table. When the user clicks **OK** in the dialog box, the system closes the dialog box, updates the line on the Log tab, and changes the status of the item and the related log lines to Completed.

  This button is available for service lines only if the appointment has the In Process status and the selected line has the "Not Started" or "In Process" status. This button is available for travel lines only if the appointment has the "Not Started", "In Process", or "Completed" status and the line has the "Not Started" or "In Process" status.

- **Cancel**: Changes the status of the selected line to "Cancelled". This button is available for service lines only if the selected line has the "Not Started" status.

Start and **Complete** buttons have also been added to the table toolbar of the Staff tab. They work similarly to the buttons on the table toolbar of the Details tab.

Logging Travel Time

On the Appointments screen (FS300200), users can now log time spent on traveling for the appointment as a whole. To make this possible, **Start Travel** and **Complete Travel** menu commands have been added to the Actions menu on the screen toolbar.

When the travel is starting, a user clicks **Actions > Start Travel** on the screen toolbar, and the system opens the new Perform Actions dialog box with the "Start" action and the "Travel" logging option selected, as the following screenshot shows. In this dialog box, the user can modify the start time of the travel (if necessary) and select the unlabelled check boxes in the table for the staff members for which the travel is started. By default, the currently signed-in user is selected.

After specifying all the necessary settings, the user clicks **OK**, and on the Log tab, the system creates log lines for each selected staff member for the travel.

When the travel is complete, the user clicks **Actions > Complete Travel** on the screen toolbar. The system opens the Perform Actions dialog box with the **Complete** action and the Travel logging option selected, as well as the end time filled in; the system selects the same staff members that were selected when the travel was started. The user can modify the completion time of the travel and select staff members for which the travel is completed. The user then clicks **OK**, and on the Log tab, the system updates the log lines related to the travel with the appropriate **End Time** and **Duration** values, and changes the **Log Line Status** to "Completed". For the log lines related to travel, the check box in the **Travel** column is selected.

During service configuration, users can also create the needed travel items in the system— that is, service items that represent a particular type of travel, such as travel to or from the appointment or travel, to procure supplies during the appointment—so that the travel time of each item during an appointment can be tracked. When a travel item is

created, on the Non- Stock Items screen (IN202000), the user selects Service in the **Type** field and selects the **Is a Travel Item** check box on the General Settings tab, specifies other necessary settings for the item, as the following screenshot shows.

This travel item can be added to an appointment on the Details tab of the Appointments screen (FS300200). On this tab, a user can start tracking time for a travel item by clicking the line with the travel item in the table and clicking **Start** on the table toolbar. The system opens the Perform Actions dialog box with the "Start" action, the "Travel" logging option, the time, and the service line reference number filled in. In the dialog box, the user can modify the default settings as needed, and select the unlabelled check boxes in the table for the staff members who are involved in the travel. (By default, the currently signed-in user is selected.

When the user clicks **OK**, on the Log tab, the system creates a log line for each selected staff member and fills in the start time.

When the travel associated with this travel item is completed, one of the users can complete it in the system by clicking the travel line in the table on the Details tab and clicking **Complete** on the table toolbar. The system opens the Perform Actions dialog box with the Complete action and the Travel logging option. In the dialog box, the user can modify the end time, if needed, and make any needed changes (the system automatically selects the staff members that had been selected when the travel item was started), as shown in the following screenshot.

When the user clicks **OK**, on the Log tab, the system completes the log line (that is, changes the **Log Line Status** to "Completed") for each selected staff member and specifies the end time and duration.

Also, the user can start tracking time for a particular travel item by using the **Start Travel** action of the Actions menu on the Appointments screen. To give users such an ability, during the system configuration, on the Service Order Types screen (FS202300), in the **Default Travel Item** field of the Preferences tab, an administrative user selects the travel item that the system will specify in the Inventory ID column of the Log tab when the travel is started. If the travel item had not been assigned to the appointment before the travel had started, the system will add the travel item to the appointment.

Starting and Completing a Specific Service

An appointment may be defined in the system with the services defined and with the staff members assigned to the appointment, but staff members may not be assigned to services. During the appointment, a staff member selects the service that they are going to perform, starts it in the system (selecting any staff members that will also perform it), and then reflects its completion in the system.

In this case, on the Details tab of the Appointments screen (FS300200), a user can now start the logging of time for a specific service by clicking the service line in the table and then clicking **Start** on the table toolbar. The system opens the Perform Actions dialog box with the Start action and the Service logging option selected. The user can modify the start time (which the system has filled in) and the service line reference number, if needed; the user also selects the staff member or members who are starting work on the service. By default, the currently signed-in user is selected.

When the user clicks **OK**, the system creates a log line on the Log tab for each selected staff member and fills in the selected service and the start time. When the service is finished, a user can complete it in the system by clicking the service line in the table and clicking **Complete** on the table toolbar. The system opens the Perform Actions dialog box with the Complete action and the Service logging option selected; if needed, the user can modify the end time and make changes to the staff members involved in performing the completed service.

When the user clicks **OK**, the system completes the log line for each selected staff member and specifies the end time and duration on the Log tab.

Logging Time for Multiple Staff Members

Services and staff members may be assigned to an appointment when it is scheduled, but some staff members may not be assigned to specific services. During the appointment, staff members select the services they are going to perform, start them in the system at the appropriate time, and then reflect their completion in the system when they are finished. If the staff members have been not been assigned to any services, time can be logged for the staff members.

In this case, to log staff member time and start services, the user selects the staff member on the Staff tab of the Appointments screen (FS300200) and clicks **Start** on the table toolbar. The system opens the Perform Actions dialog box with the Start action and the Staff and Service (If Any) logging option selected and the start time filled in. The user modifies the start time if necessary, and makes sure that the necessary unlabelled check boxes are selected for the staff members (who may or may not have assigned services, as you can see with the staff members selected in the following screenshot) for which the work is starting.

When the user clicks **OK**, the system creates a log line for each selected staff member-assigned service pair and specifies the start time on the Log tab; the system also changes the status of the assigned services to In Process on the Details tab.

When the work is complete, the user can finish logging the time and services in the system by clicking **Complete** on the table toolbar of the Staff tab. The system opens the Perform Actions dialog box, in which the system has selected the Complete action and filled in the time. In this dialog box, the user makes sure the Service logging option is selected, modifies the end time (if necessary), and makes any needed changes to the staff members for whom the service and logging time are being completed.

When the user clicks **OK**, the system completes the log line for each selected staff member-assigned service pair: It fills in the end time and duration on the Log tab and changes the status of the assigned services to Completed on the Details tab.

Starting and Completing Multiple Services and Logging Time for All Assigned Staff Members

In some cases, multiple services have been added to the appointment, and staff members may or may not have been assigned to the services. During the appointment, the services need to be started and completed, and time is logged for the services and all staff members that are assigned to it. If no staff members have been assigned to services, time is logged for only services.

To start a service or multiple services and log the time spent performing them, a user clicks **Start** on the Details tab of the Appointments screen (FS300200). The system opens the Perform Actions dialog box, in which the user selects the **Services** and **Assigned Staff (If Any)** logging option, modifies the start time if necessary, and selects the unlabelled check boxes in the lines of the services being started (see the following screenshot).

When the user clicks **OK**, for each selected service, the system creates a log line for the assigned staff member (if multiple staff members are assigned to a service, a line will be added for each of them) and specifies the start time on the Log tab; the system also changes the status of the services to In Process on the Details tab.

When the work is complete, the user completes services and the logging of time in the system by clicking **Complete** on the table toolbar of the Details or Staff tab. The system opens the Perform Actions dialog box, in which the system has selected the Complete action and the end time. The user selects the Service logging option, modifies the end time if necessary, and selects the services that are being completed.

When the user clicks **OK**, the system completes the log line for each selected service and specifies the end time and duration on the Log tab; it also changes the status of the assigned services to Completed on the Details tab.

New Settings on the Service Order Types Screen

On the Time Behaviour tab of the Service Order Types screen (FS202300), the Start Appointment Action Behaviour section has been renamed to Appointment Starting Settings. The section now contains the following check boxes (see the screenshot below):

- **Set Start Time in Appointment**: A check box that indicates (if selected) that when a user starts an appointment of the selected service order type, the current business time is inserted in the **Actual Start Time** field in the Actual Date and Time section on the Settings tab of the Appointments screen (FS300200). In the previous versions of MYOB Advanced, users achieved this functionality by selecting the Set Actual Start Time in Header option button.
- **Set Not Started Items as In Process**: A check box that indicates (if selected) that when a user starts an appointment of the selected service order type, on the Details tab of the Appointments screen, the system changes the status of the lines with the "Not Started" status to "In Process".
- **Start Logging for Unassigned Staff**: A check box that indicates (if selected) that when a user starts an appointment of the selected service order type, on the Log tab of the Appointments screen, the system creates log lines for staff members that are assigned to the appointment but are not assigned to any service.
- **Start Logging for Services and Assigned Staff (If Any)**: A check box that indicates (if selected) that when a user starts an appointment of the selected service order type, on the Log tab of the Appointments screen, the system starts services and creates log lines for the services and for any assigned staff members.

Also on the Time Behaviour tab of the Service Order Types screen, the Complete Appointment Action Behaviour section has been renamed to Appointment Completion Settings. The section now has the following check boxes (see the screenshot below):

- Set End Time in Appointment: A check box that indicates (if selected) that when a user completes an appointment of the selected service order type, the current business time is inserted in the Actual End Time box in the Actual Date and Time section on the Settings tab of the Appointments (FS300200) screen. In previous releases, users achieved this functionality by selecting the Set Actual End Time in Header option button.
- Status to Set for In Process Items: A check box that is described in the Services: Improvements to Line Statuses of Service Orders and Appointments topic.
- Status to Set for Not Started Items: A check box that is described in the Services: Improvements to Line Statuses of Service Orders and Appointments topic.

    When a user completes an appointment, the system will set the time of appointment completion to the End Time column of the Log tab on the Appointments screen for lines that are affected by the Status to Set for In Process Items and Status to Set for Not Started Items settings.

Finally, an Other Settings section has been added to the Time Behaviour tab with the following check boxes (see the screenshot below):

- **Update Log Start Time When Appointment Start Time is Updated**: A check box that indicates (if selected) that for an appointment of the selected service order type, when a user modifies the value in the **Actual Start Time** field in the Actual Date and Time section on the Settings tab of the Appointments screen, the system updates the **Start Time** on the Log tab for all log lines.
- **Update Log End Time When Appointment End Time is Updated**: A check box that indicates (if selected) that for an appointment of the selected service order type, when a user modifies the value in the **Actual End Time** field in the Actual Date and

Time section on the Settings tab of the Appointments screen, the system updates the **End Time** on the Log tab for all log lines.

- **Manually Manage Time**: A check box that (if selected) makes the Manually Handle Time column available for an appointment of the selected service order type on the Details tab of the Appointments screen. In previous versions of MYOB Advanced, users achieved this functionality by selecting the **Allow Manually Handle Time per Service Line** check box on this tab.
- **Update Appointment Time Based on Logged Time**: A check box that indicates (if selected) that for an appointment of the service order type, the system updates the value in the **Actual Start Time** field on the Settings tab of the Appointments screen with the earliest time specified in the Start Time column on the Log tab. Also, the system updates the value in the **Actual End Time** field on the Settings tab with the latest time specified in the End Time column on the Log tab. The check box works as described if the **Handle Manually** check box is cleared on the Settings tab for the appointment.
- **Require Service Logs on Appointment Completion**: A check box that indicates (if selected) that a user can complete an appointment of the selected service order type only if at least one log line has been created on the Log tab for each service that has been added on the Details tab of the Appointments (FS300200) screen.

Service Order Types

← Save & Close 🖫 ↶ + 🗑 🗋 ▾ I< < > >I	

* Service Order Type: NSO 🔍 ☑ Active
Description: Normal Service Order

Preferences | **Time Behavior** | Problem Codes | Attributes | Mailing Settings

Appointment Starting Settings ─────────
☑ Set Start Time in Appointment
☐ Set Not Started Items as In Process
☐ Start Logging for Unassigned Staff
☐ Start Logging for Services and Assigned Staff (If Any)

Appointment Completion Settings ─────────
☐ Set End Time in Appointment
Status to Set for In Process Items: In Process ▾
Status to Set for Not Started Items: Completed ▾

Other Settings ─────────
☐ Update Log Start Time When Appointment Start Time is Updat...
☐ Update Log End Time When Appointment End Time is Updated
☐ Manually Manage Time
☐ Update Appointment Time Based on Logged Time
☐ Require Service Logs on Appointment Completion

The following option buttons have been removed from the Time Behaviour tab: Set Actual Start Time in Header, Set Actual Start Time in Header and Service Lines, Sets Nothing, Set Actual End Time in Header, Set Actual End Time in Header and Service Lines, Update Actual Start Time in Service Lines When Updating Actual Start Time in Header, Update End Time in Service Lines When Updating Actual Start Time in Header, Allow Manually Handle Time per Service Line, Update Actual Start/End Time of Header Based on Minimum/Maximum Service Line, and Require Actual Start/End Time of Service Lines to Complete the Appointment.

Other Changes to the UI

On the Appointments screen (FS300200), the following columns, which were formerly on the Details and Staff tabs, can now be found on the Log tab:

- Start Time (named Actual Start Time in previous releases)
- End Time (previously named Actual End Time)
- Manage Time Manually (previously named Manually Handle Time on the Details tab; hidden by default)
- Service Order Type (hidden by default)
- Appointment Nbr. (hidden by default)
- Detail Line Ref. (previously named Service Line Ref.)
- Duration (previously named Actual Duration and located on the Staff tab)
- Notes (previously named Comment)
- Approved (previously named Approved Time)
- Time Card Ref. Nbr.

Also, on the Staff tab, the Driver and Type columns have been renamed to Primary Driver and Staff Type, respectively.

On the Employee Time Card (EP305000) and Employee Time Activities (EP307000) screens, the Employee Line Ref. column has been renamed to Log Line Ref.

On the Customer Location Central screens (FS404050), the following columns have been removed from the Services tab:

- Actual Start Time
- Actual End Time

Enhancements to the Mobile App

In the MYOB Advanced mobile app, it is now also possible to perform the actions that have been implemented in the current web version of MYOB Advanced. The **Start Travel** and **Complete Travel** actions have been added to the menu of the Appointments screen.

To perform an action for any number of services, non-stock items, stock items, or staff members, on the needed tab, a user selects the necessary line or lines by tapping them and then selects the action in the menu.

When the user invokes the action, a related action screen appears, on which the user can change default values and specify additional values that are necessary to perform the action. After the necessary data has been entered, the user processes the action by selecting the Process action in the menu.

Improvements to SO and Appointment Line Statuses

To improve the usability of line statuses in service orders and appointments, the changes described below have been made in this release.

New Line Statuses on the Service Orders Screen

On the Service Orders screen (FS300100), the following statuses have been added to the Line Status column of the Details tab:

- **Requiring Scheduling**: The item has not yet been added to any appointment of the service order, or the entire quantity of the item specified in the service order has not yet been added to the related appointments.

  This is the initial status of an item added to the Details tab.

- **Scheduled**: The item has been added to an appointment of the service order. The system assigns this status to a line when the related item is added to the appointment.

Also, the Open and In Process statuses have been removed. The Cancelled and Completed statuses remain available for selection.

The system changes the Requiring Scheduling status to Scheduled when the entire quantity of the item specified in the service order has not yet been added to the related appointments. When a user schedules a new appointment, only the remaining quantity is now scheduled (instead of the estimated quantity as it was in previous versions of MYOB Advanced).

If in an appointment, the Not Finished status has been set for the item, the system changes the Scheduled status to Requiring Scheduling for the related line in the service order and selects the **Appointment Needed** check box on the Service Orders screen.

The system also changes the status of a line on this screen to Completed or Cancelled if the related line in an appointment of the service order was completed or cancelled, respectively.

The statuses can be changed manually, the statuses of the related appointment lines will be changed, respectively. The statuses will also change to Completed or Cancelled when the user selects the **Complete Order** or **Cancel Order** action on the Service Orders screen, respectively.

New Line Statuses on the Appointments Screen

On the Appointments screen (FS300200), the following statuses have been added to the Line Status column of the Details tab:

- **Not Started**: The item has not yet been started for the appointment. This is the initial status of the line.
- **Not Finished**: The item has not been completed fully during the appointment. If the appointment contains lines with this status, the user has to make sure that the **Finished** check box is cleared on the Settings tab.
- **Not Performed**: The item has not been performed (if it is a service) or used (if it is an inventory item) during the appointment. If the appointment contains lines with this status, the user has to make sure that the **Finished** check box is cleared on the Settings tab.

Also, the Open line status has been removed. The In Processed, Cancelled, and Completed statuses are still available for selection.

The statuses can be changed manually, or users can use the buttons on the table toolbar, as described in the User Guide topic "Services: Ability to Add Travel Time to Appointments; Improvements to Logging Time".

Line Status Update on Changing of the Appointment Status

When the user cancels an appointment on the Appointments screen (FS300200), the system changes the statuses of all the lines to Cancelled. When the user attempts to complete the appointment, the system will not allow the user to complete the appointment unless the lines have one of the following statuses: Completed, Not Finished, Not Performed, or Cancelled. That is, if any line has the In Process or Not Started status, the appointment cannot be completed.

Users can, however, configure each service order type so that for an appointment of the type, the In Process or Not Started line status (or both line statuses) will be changed automatically for the applicable lines when the **Complete** action is selected, and the appointment can be completed. On the Service Order Types screen (FS202300) (in the Appointment Completion Settings section of the Time Behaviour tab), the following fields have been added (see the following screenshot):

- **Status to Set for In Process Items**, which has the following options:
  - **Not Finished**: When a user completes an appointment and any line has the In Process status, the system changes it to Not Finished.
  - **Completed** (default): When a user completes an appointment and any line has the In Process status, the system changes it to Completed.
  - **In Process**: When a user completes an appointment and any line has the In Process status, the system does not change the status. The user has to change the status of the line to complete the appointment.
- **Status to Set for Not Started Items**, which has the following options:
  - **Not Performed**: When a user completes an appointment and any line has the Not Started status, the system changes it to Not Performed.
  - **Completed** (default): When a user completes an appointment and any line has the Not Started status, the system changes it to Completed.
  - **Not Started**: When a user completes an appointment and any line has the Not Started status, the system does not change the status. The user has to change the status to complete the appointment.

> **Note:** When a user completes an appointment, the system will set the time of appointment completion to the End Time column of the Log tab on the Appointments screen for lines that are affected by these settings.

Improvements to Billing for Projects

In previous releases, if an appointment or service order was related to projects, it was not possible to perform project billing. In MYOB Advanced 2020.3, the following documents can now be generated for an appointment or service order:

- A batch of project transactions: This document contains project transactions related to the appointment or service order.
- An issue: This document is generated if stock items are used in the appointment or service order, to reflect that the stock items were removed from a warehouse.

For each appointment or service order, one project transaction batch and one issue (if the appointment or service order contains stock items) will be created, even if the **Customer Order**, **External Reference**, or **Time Frame** option button has been selected under **Group Billing Documents By** on the Billing Cycles screen (FS206000).

This topic describes the changes made in the system to implement integration between field service functionality and project billing.

Settings of Project Billing for Field Service Documents

On the Service Order Types screen (FS202300), to give users the ability to set the system to generate project transactions and issues for appointments and service orders of the service order type, a "Project Transactions" option has been added to the **Generated Billing Document** field in the Billing Settings section of the Preferences tab (see the screenshot below).

> **Note:** This option is available only if the *Projects* feature is enabled on the Enable/Disable Features screen (CS100000) and the Regular option is selected in the **Behaviour** field of the Service Order Types screen for the service order type.

When a user selects the Project Transactions option, **Account Group** and **Reason Code** fields appear in the Billing Settings section, as the screenshot below shows. In the **Account Group** field, the user has to select the account group that will be assigned by default to project transactions generated from an appointment or service order. In the **Reason Code** field, the user has to select the reason code that will be used by default in issues generated for inventory items from appointment or service order.

> **Note:** The **Reason Code** field is available only if the *Inventory* feature is enabled on the Enable/Disable Features screen.

Also, **Automatically Release Project Transactions** and **Automatically Release Issues** check boxes have been added to the Billing Settings section. If the **Automatically Release Project Transactions** check box is selected, the system will release the project transaction batch when the batch is created. If this check box is cleared, the batch will be created with the Balanced status. If the **Automatically Release Issues** check box is selected, the system will release the issue when it is created. If this check box is cleared, the issue will be created with the Balanced status.

Additionally, a **Billing Type** field has been added to the Billing Settings section of the Preferences tab with the following options:

- **Cost as Cost** (default): The items will be billed based on the unit cost specified in the document. If this option is selected, the Automatically Release Issues check box is selected and not available for editing.
- **Revenue as Cost**: The items will be billed based on the unit price specified in the document.

The **Salesperson ID** field and the **Commissionable** check box are not displayed in the Default Settings section of the Preferences tab if the Project Transactions option is selected in the **Generated Billing Document** field.

Restrictions on Field Service Documents with Project Billing

If a service order type for which project transactions are generated is assigned to an appointment or service order, the following restrictions will apply to the appointment or service order:

- The system will not calculate taxes.
- Users cannot apply prepayments.
- Users cannot select accounts and subaccounts.
- Users cannot assign a salesperson to the appointment or service order and make it commissionable.

Improvements on the Appointments and Service Orders Screens

On the Appointments (FS300200) and Service Orders (FS300100) screens, on the Other Information tab, you can find the reference numbers of the generated billing documents in the Billing Info section. In the **Reference Nbr.** field, the reference number of the project transaction batch is displayed, as the following screenshot shows. In the I**ssue Reference Nbr.** field, the reference number of the created issue (if any) is shown. In these fields, a user can click the link to open a document on the appropriate screen.

On the Run Service Order Billing (FS500600) and Run Appointment Billing (FS500100) screens, a "Project Transactions" option has been added to the **Generated Billing Document** field (see the following screenshot).

If the Project Transactions option is selected, the system hides the **Ignore the Time Frame** check box.

Ability to Bill for Labour

In MYOB Advanced 2020.3, the profitability is now calculated for services, and users can manually specify the billable labour. This topic describes the changes made in the system.

Profitability of Services

On the Profitability tab of the Appointments screen (FS300200), the system now shows the costs of services whose unit cost is not zero. The **Cost Total** and **Profit (%)** fields in the Summary area now include service costs.

Labour Billing

On the Appointments screen (FS300200), to give users the ability to manually specify that the labour is going to be billed and specify the time that will be billed, the following columns have been added to the Log tab, as shown in the screenshot below:

- **Billable**: A check box that indicates (if selected) that the customer will be billed for labour performed by a staff member during an appointment. If the Track Time check box is selected for a line, the Billable check box is selected by default, but it can be cleared. If the Track Time check box is cleared for a line, the Billable check box is cleared and read-only.
- **Billable Time**: The time in hours and minutes for which the customer will be billed.
- **Billable Amount**: The amount to be billed, which is calculated as Billable Time multiplied by the Unit Cost of the Profitability tab. The column is read-only.

These UI elements are displayed on the screen only if the following conditions are met on the Preferences tab of the Service Order Types screen (FS202300) for the service order type of the appointment:

- The "Project Transactions" option is selected in the **Generated Billing Documents** field of the Billing Settings section.
- The "Cost as Cost" option is selected in the **Billing Type** field of the Billing Settings section.
- The **Automatically Create Time Activities from Appointments** check box is selected in the Integrating with Time & Expenses section.

On the Totals tab, a **Billable Labour Total** field has been added, which shows the total billable amount of the labour lines on the Log tab (see the following screenshot). The **Appointment Total** and **Appointment Billable Total** values now include the total amounts of the labour lines on the Log tab.

On the Profitability tab, the system now calculates the values for labour items as follows:

- If the **Billable** check box is selected on the Log tab, the value in the Billable Quantity column is equivalent to the value in the Billable Duration column but is expressed as a decimal. For example, if 2h 30m is specified in the Billable Duration column, 2.50 is specified in the Billable Quantity column.
- If the **Billable** check box is selected on the Log tab, Billable Amount is equivalent to Billable Quantity multiplied by Unit Cost.

Manual Discounts in Service Orders and Appointments

In previous releases of MYOB Advanced, it was not possible to apply discounts to service orders and appointments. In this release, users can manually specify line-level discounts (which are applied to each line of the document) in a service order or appointment, as described in this topic.

Effects on the Service Orders and Appointments Screen

On the Service Orders screen (FS300100), the following columns have been added on the Services and Inventory Items tabs (see the screenshot below):

- **Ext. Price**: The extended price of the service, non-stock, or stock item, which is calculated by multiplying the estimated quantity of the item and its unit price and can generally be overridden.
- **Discount Percent**: The discount percent to be applied to the extended price of the item.
- **Discount Amount**: The amount to be applied to the extended price of the item as a discount.

    When the user specifies a value either in the Discount Percent or Discount Amount column, the other is calculated automatically.

These values can be overridden unless the service order has been created from a sales order (that is, the **Prepaid Item** check box is selected in the line) or the item is a service contract item (that is, the **Service Contract Item** check box is selected in the line).

For each line on these tabs, the value in the **Amount** column is the extended price minus the discount amount, if applicable.

On the Appointments screen (FS300200), the **Discount Percent** and **Discount Amount** columns have been added to the Services, Inventory Items, and Pickup/Delivery Items tabs. The related changes have been made to the Appointments screen of the mobile app.

Relations Between Service Order and Appointment Discounts

If discounts have been specified for any lines in a service order on the Service Orders screen (FS300100), when an appointment is created for this service order on the Appointments screen (FS300200), the discounts are copied to the appropriate line or lines of the appointment. If any of the copied discounts are subsequently overridden in this appointment, these changes are not applied to the service order from which they were copied.

If a user creates an appointment on the Appointments screen (FS300200) without a service order existing for the appointment, when this user saves the appointment, the system generates the service order for the appointment and copies the discount details specified for any line. If any of the copied discounts are subsequently overridden in this service order, these changes are not applied to the appointment from which they were copied.

Discount-Related Changes in Reports

In the Service Order (FS641000), Appointment (FS642000), and Appointments in Service Order (FS642500) reports, the **Disc.** column has been added to show the discount applied to each item. Also, the **Less Discount** field has been added, which displays the discount amount that has been deducted from a service order or appointment amount.

Other Improvements on the UI

To improve the UI, simplify screens, standardize the field services functionality with that of other parts of MYOB Advanced, the changes described below have been made.

> **Note:** The system must be prepared before it is upgraded if the company has been using the removed functionality described below. Users should contact the MYOB Advanced support team for help with the upgrade process.

Removed Screens and UI Elements Related to Cause and Resolution Codes

The functionality of previously provided screens and elements related to cause and resolution codes can instead be provided by attributes that a user defines in the system.

The following screens have been removed:

- Cause Codes (FS200100)
- Resolution Codes (FS200700)

Because of the removal of cause and resolution codes and to simplify the Summary tab of the Service Orders screen (FS300100), the following fields have been removed:

- Promised Date
- Cause
- Resolution
- Resolution Date

> **Note:** If these elements contained data, during the upgrade, the system will automatically create attributes with this data for the related appointments. Thus, the organization will not lose the data that had been entered.

Improvements on the Appointments Screen

On the Appointments screen (FS300200), the following rarely used elements have been removed from the Signature section of the Other Information tab (the same elements have been removed from the mobile app):

- Additional Comments from Customer
- Additional Comments from Staff
- I, the Person Above, Agree That the Appointment Has Been Completed

> **Note:** If these elements contained data, during the upgrade, the system will create attributes with this data for the related appointments. Thus, the organization will not lose the data that had been entered.

On the Other Information tab of the Appointments screen, users can now view information on the source document from which the appointment has been generated. The **Document Type** and **Reference Nbr.** fields display, respectively, the type of the source document and its identifier (which is a link that a user can click to navigate to the appropriate screen and view the source document). The related changes have been made to the Appointments screen of the mobile app.

Renaming of Elements Related to Billing

The following screens have been renamed:

- Generate Invoices from Appointments to Run Appointment Billing (FS500100)
- Generate Invoices from Service Orders to Run Service Order Billing (FS500600)
- Generate Invoices from Service Contracts to Run Service Contract Billing (FS501300)
- Contract Invoice Generation Batches to Service Contract Billing Batches (FS306100)
- Invoice Generation Batches to Service Billing Batches (FS305800)

On the Service Management Preferences screen (FS100100), the **Filter Invoice Generation Forms Manually** check box has been renamed to **Require Manual Filtering on Billing Forms**.

On the Service Order Types screen (FS202300), elements related to billing settings have been renamed as follows:

- The Invoice Generation Settings section has been renamed to Billing Settings.
- The Generate Invoices In group has been renamed to Generated Billing Documents.
- The **Accounts Receivable** option button has been renamed to **AR Documents**.
- The **Sales Order** option button has been renamed to **Sales Orders**.
- The **SO Invoice** option button has been renamed to **SO Invoices**.

- The **Create a Bill for Negative Balances** check box has been renamed to **Create AP Bills for Negative Balances**.
- The **Order Type for Invoice** field has been renamed to **Order Type for Billing**.
- The **Order Type for Negative Balance Invoice** field has been renamed **to Order Type for Negative Balance Billing**.
- The **Require Appointment Closing for Invoice Generation** check box has been renamed to **Bill Only Closed Appointments**.
- The **Generate Invoice** check box has been renamed to **Run Appointment Billing** and **Run Service Order Billing** on the Appointment Actions and Service Order Actions sections of the Quick Process Settings tab, respectively.

On the Equipment Management Preferences (FS100300) and Route Management Preferences (FS100400) screens, the following elements related to billing settings have been renamed:

- The Invoice Generation Settings section has been renamed to Billing Settings.
- The Generate Invoices In group has been renamed to Generated Billing Documents.
- The **Accounts Receivable** option button has been renamed to **AR Documents**.
- The **Sales Order** option button has been renamed to **Sales Orders**.
- **The Order Type for Invoice** field has been renamed to **Order Type for Billing**.
- The **Activate Upcoming Period on Invoice Generation** check box has been renamed to **Automatically Activate Upcoming Period**.

On the Billing Cycles screen (FS206000), the following changes have been made:

- The **Generate Invoices From** area has been renamed to **Run Billing For**.
- The **Group Invoices By** area has been renamed to **Group Billing Documents By**.
- The **Separate Generation of Invoices by Customer Location** check box has been renamed to **Separate Billing Documents by Customer Location**.
- The **Generate Invoices for Only Completed or Closed Service Orders** check box has been renamed to **Bill Only Completed or Closed Service Orders**.
- The **Bill Only Completed or Closed Service Orders** check box has been placed after the **Separate Billing Documents by Customer Locations** check box. (See the following screenshot.)

On the Run Appointment Billing (FS500100) and Run Service Order Billing (FS500600) screens, the elements related to billing settings have been renamed as follows:

- The Generate Invoices In group has been renamed to Generated Billing Documents.
- The **Accounts Receivable and/or Accounts Payable** field has been renamed to **AR Documents and/or AP Bills**.
- The **SO Invoice** option button has been renamed to **SO Invoices**.
- The Generation Options section has been renamed to Billing Options.
- The **Invoice Date** field has been renamed to **Billing Date**.
- The **Invoice Period** field has been renamed to **Billing Period**.
- The **Invoice Actions** section has been renamed to **Billing Actions**.

On the Service Billing Batches (FS305800), Service Contract Billing Batches (FS306100), and Run Service Contract Billing (FS501300) screens, elements related to billing settings have been renamed as follows:

- The **Invoice Date** field has been renamed to **Billing Date**.
- The **Invoice Period** field has been renamed to **Billing Period**.

On the Service Orders screen (FS300100), the following changes have been made:

- The **Generate Invoice** menu command and check box have been renamed to **Run Service Order Billing**.
- The **Allow Invoice** menu command and check box have been renamed to **Allow Billing**.
- The Invoice Info section has been renamed to Billing Info.
- The **Invoiced** check box has been renamed to **Billed**.

On the Appointments (FS300200) screen, the following changes have been made:

- The Generate Invoice menu command and check box have been renamed to Run Appointment Billing.
- The Invoice Info section has been renamed to Billing Info.

Renaming of Other Elements

On the Service Orders (FS300100) and Appointments (FS300200) screens, the Service Selector button and dialog box have been renamed to Add Service. The Staff Selector button and dialog box have been renamed to Add Staff. In these dialog boxes, the **Close** button has been renamed to **OK**. Some minor changes have been made to these dialog boxes to improve usability.

On the Calendar Board (FS300300), Staff Calendar Board (FS300400), and Room Calendar Board (FS300700) screens, in the Service Order Filters dialog box, the **Assigned Staff** field has been renamed to **Supervisor**.

On the Service Contracts (FS305700) and Route Service Contracts (FS300800) screens, the **Cancelation Date** has been replaced with **Cancellation Date** in the Terminate Contract dialog box and the Activation Contract dialog box has been renamed to Activate Contract.

Merged Tabs

On several screens related to services, the Services, Inventory Items, and Pickup/Delivery Items tabs have been replaced with the new Details tab, as the following screenshot shows. This merged tab can be found on the Service Orders (FS300100), Appointments (FS300200), Service Contract Schedules (FS305100), and Route Service Contract Schedules (FS305600) screens. On this tab, a user can now add services, inventory items, and items that have been picked up and delivered. The **Line Type** column indicates which of these items the particular line holds.

On the Service Contracts (FS305700) and Route Service Contracts (FS300800) screens, the Service Prices and Inventory Item Prices tabs have been replaced with the Prices tab, on which users can specify prices for services, non-stock, and stock items.
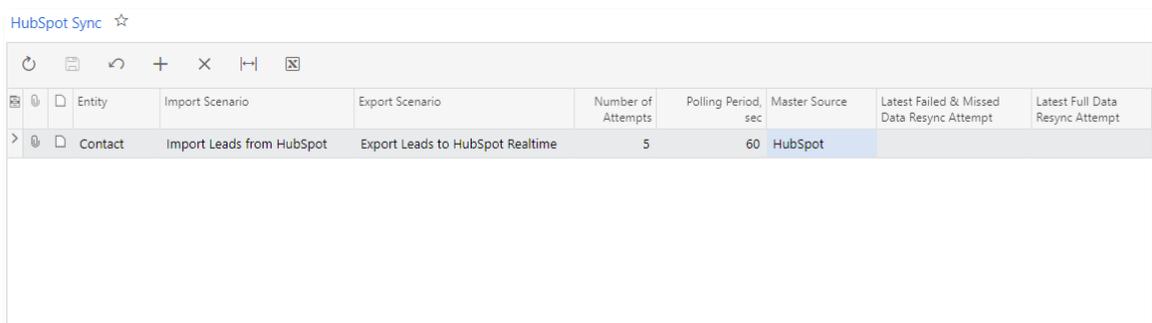
Organisation

HubSpot and Other CRM Improvements

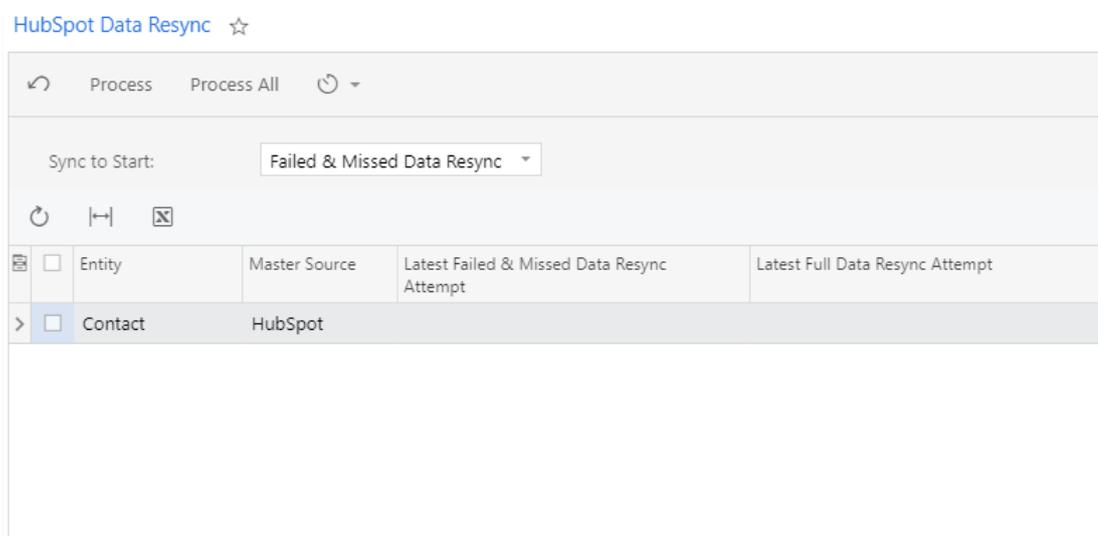### HubSpot Real-Time Bi-Directional Synchronization

This release adds support for bi-directional real-time synchronization with HubSpot, and import and export scenarios have been adjusted accordingly. These changes are described in this topic.

A HubSpot Sync screen (HS205020) has been introduced. On this screen, an administrator can configure real-time synchronization with HubSpot for an entity. (This screen is shown in the following screenshot.)

On the new HubSpot Data Resync screen (HS205035), the administrator can resynchronize entities that had previously failed to synchronize with HubSpot, or perform initial synchronization of entities that were not previously synchronized. (This screen is shown in the following screenshot.)

The new HubSpot Sync State screen (HS205040), shown in the following screenshot, provides the ability to monitor the status of the entities synchronized with HubSpot, or retry synchronization attempts for the failed records. (This screen is shown in the following screenshot.)

A HubSpot Sync process screen (HS205030), shown in the following screenshot, has also been introduced. On this screen, the administrator can start or stop the real-time synchronization process. (This screen is shown in the following screenshot.)

Also, to give users the ability to monitor real-time synchronization with HubSpot, a HubSpot tab has been added to the Leads (CR301000), Contacts (CR302000), Business Accounts (CR303000), and Marketing Lists (CR204000) screens. The following screenshot shows this tab on the Contacts screen.

On the new HubSpot Marketing List Members screen (HS205050), shown in the following screenshot, the administrator can import the contact list membership from HubSpot or export the contact list membership to HubSpot.
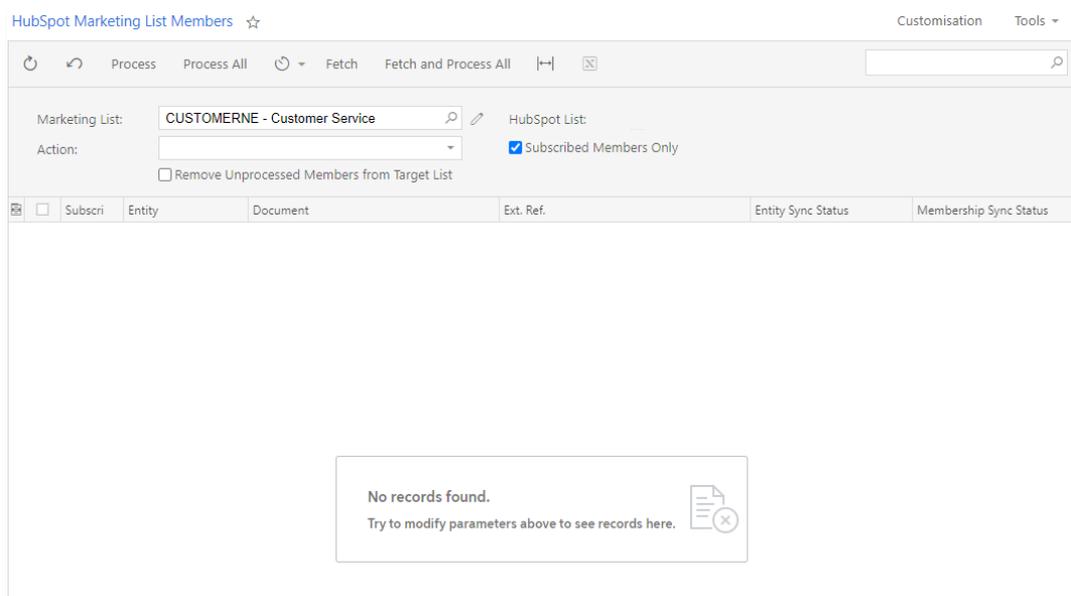
HubSpot Sync State (HS205041) and HubSpot Marketing List Members (HS205051) screens, which are similar to the HubSpot Sync State (HS205040) and HubSpot Marketing List Members (HS205050) screens, have been added for easier access from the MYOB Advanced Marketing workspace.

A HubSpot Sync dashboard has also been added. On this dashboard, users can monitor various data related to synchronization with HubSpot.

On the Data Providers (SM206015) screen, the HubSpot Enhanced Provider data provider has been enhanced with the following parameters.

Parameter	Description
Portal ID	Provides navigation in HubSpot
ContactsListCacheTime	Indicates how long the HubSpot contact list will be cached
DefaultContactType	Indicates the default entity in MYOB Advanced that will be used when a user is creating a contact in HubSpot

Also on the Data Providers (SM206015) screen, the following data provider functions have been added to support real-time synchronization.

Functions	Description
GetAcumaticaContactID(vid, field, value)	Searches for the synchronization state in the list of known real-time synchronization states by HubSpot Contact ID (vid); if the state is not found, then finds a contact that has a field value equal to value.
FindAcumaticaLeadOrContactID(vid)	Searches for the synchronization state in the list of known real-time synchronization states by HubSpot vid.

GetAcumaticaLeadID(vid, field, value)	Searches for the synchronization state in the list of known real-time synchronization states by HubSpot Contact ID (vid); if the state is not found, then finds a lead that has a field value equal to value.
GetHubSpotContactID(id)	Searches for synchronization state in the list of known real-time synchronization states by the MYOB Advanced contact or lead ID (id).
GetAcumaticaMarketingListID(listid, listname)	Searches for the MYOB Advanced marketing list in the list of known real-time synchronization states by HubSpot list ID; if the list is not found, then finds a list that has a name equal to listname.
FindAcumaticaMarketingListID(listid)	Searches for the HubSpot list ID in the list of known real-time synchronization states.
GetHubSpotListId(listid)	Searches for the list ID in the list of known real- time synchronization states by MYOB Advanced marketing List ID.
FindHubSpotListId(listid)	Searches for the list ID in the list of known real- time synchronization states by MYOB Advanced marketing List ID. When this function is used and nothing is found, the system returns error message and does not process a record.
GetAcumaticaAccountID(companyid, field, value)	Searches for the MYOB Advanced business account in the list of known synchronization states by HubSpot company ID; if the state is not found, then finds an account that has a field value equal to value. When this function is used and nothing is found, the system returns no error message. If the function is used in the key field, then if nothing is found the system will create a new record.
FindAcumaticaAccountID(companyid)	Searches for the company ID in the list of known real-time synchronization states.
GetHubSpotCompanyID(accountid)	Searches for the HubSpot company in the list of known real-time synchronization states by the MYOB Advanced business account natural key (AcctCD).
FindHubSpotCompanyID(accountid)	Searches for the HubSpot company in the list of known real-time synchronization states by the MYOB Advanced business account natural key (AcctCD).

Outlook Integration Feature Switch

On the Enable/Disable Features screen (CS100000), the *Outlook Integration* feature switch has been added. With this feature enabled, a user can use the Microsoft Outlook with CRM Outlook add-in to create contacts, opportunities, and support cases from inside Outlook or to log email activities to MYOB Advanced entities.

IMAP Protocol Warning

On the System Email Accounts screen (SM204002), a warning message has been added reminding the user that the IMAP protocol is recommended for use rather than POP3.

HubSpotID Box

The HubSpotID box has been removed from the Leads (CR301000), Contacts (CR302000), and Business Accounts (CR303000) screens.

User-Defined Fields

The following customer relationship management (CRM) screens have been enhanced with user-defined fields:
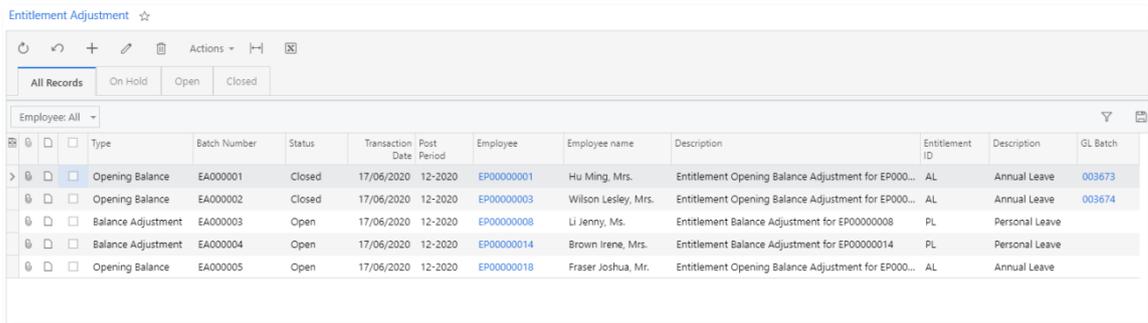
- Leads (CR301000)
- Contacts (CR302000)
- Business Accounts (CR303000)
- Opportunities (CR304000)
- Sales Quotes (CR304500)
- Cases (CR306000)
- Marketing Lists (CR204000)
- Marketing Campaigns (CR202000)

People

Enhanced Entitlement Adjustments

The Entitlement Adjustments screen (MPPP3000) has been reworked to make it easier to use, more consistent with other MYOB Advanced screens, and clearer on what the results of the adjustment will be. Entitlement adjustments are now released like any other document in the MYOB Advanced system, creating a batch that can be reviewed and also reversed.
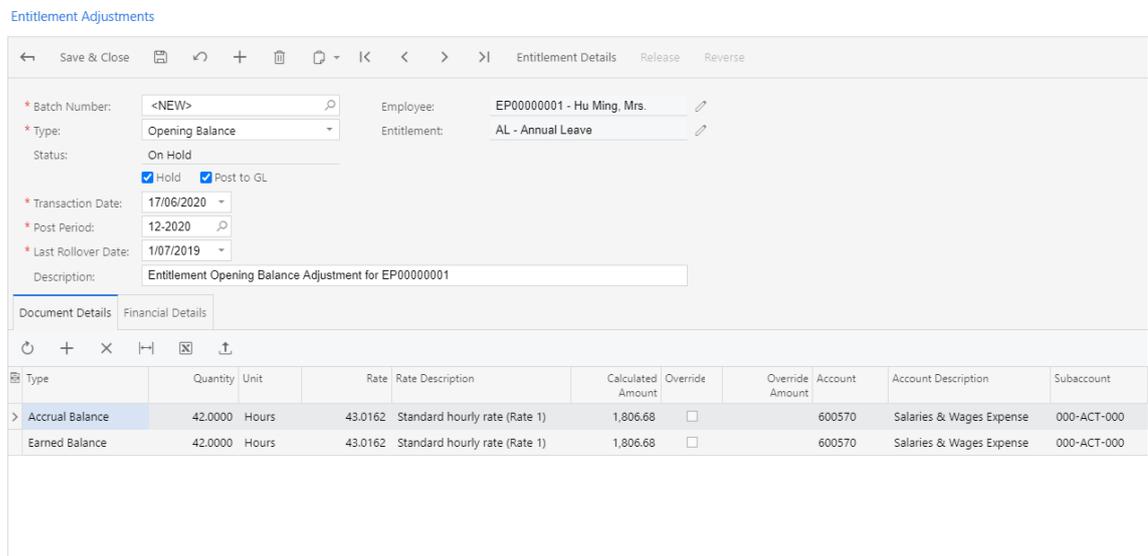
As with many other record screens in MYOB Advanced, the Entitlement Adjustment screen initially displays a standard generic inquiry screen listing existing adjustment transactions:

Selecting a transaction or clicking the **+** button opens the new Entitlement Adjustment entry screen where adjustments can be entered or viewed:

The summary area of the Entitlement Adjustment screen now contains more information about the adjustment transaction, making it clearer what the adjustment affects:

- The **Type** dropdown determines whether the adjustment is an Opening Balance or a Balance Adjustment.
- The **Post to GL** checkbox determines whether the transaction will be posted to the GL and the Payroll module (ticked) or just the Payroll module (unticked).
- The **Transaction Date** and **Post Period** let you control where the adjustment journal transactions will be posted.

- The **Description** field lets you add descriptive text to the adjustment for future reference. This will be carried through to the adjustment journals.

Two tabs have been added to the main area of the Entitlement Adjustments screen:

- Document Details, where you can enter the details of the adjustment.
- Financial Details, where you can select accounts for the journal transactions that will be generated for the adjustment.

Entering Adjustment Details

Enter the details of the entitlement adjustment by adding lines to the Document Details tab. The **Type** column determines which balance will be adjusted: Accrual or Earned.

> **Note:** There can only be one line of each type in an entitlement adjustment batch.

Enter the unit quantity for the adjustment and the system will calculate the adjustment amount, which can be overridden if necessary. Once all details are entered, click **Release** to release the adjustment and generate the necessary GL transactions.

Entering Financial Details

The Financial Details tab lets you specify the Liability account and subaccount that transactions for the adjustment will be posted to. Once an adjustment has been released, a link to the GL batch generated for the adjustment is available on this tab.

If the adjustment has been reversed, the ID of the reversing batch is also displayed.

New Entitlement Adjustment Details Screen

Clicking the new **Entitlement Details** button on the Entitlement Adjustments screen opens the new Entitlement Adjustment Details screen (MPPP4001), which shows details of all changes that have been made for the selected employee and entitlement across the selected date range. This includes normal entitlement accruals that happened as part of a pay run, adjustments made using the new and old versions of the Entitlement Adjustments screen, and adjustment reversals.

The **Reference Nbr** column displays the ID number of the record associated with the adjustment:

- For adjustments made on the Entitlement Adjustment screen, this will be the ID of the transaction batch generated by the adjustment. Clicking on the ID opens the Entitlement Adjustment screen, showing the batch's details.
- For adjustments made as part of a pay run, this will be the ID of the pay run. Clicking on the ID opens the Pay Run Details screen (MPPP3120), showing the pay run's details.

> **Note:** Adjustments that were made in the old version of the Entitlement Adjustment screen do not have an associated batch, so display "N/A" in the **Reference Nbr** column.

Importing Entitlement Adjustments

An "Import Entitlements" Data Provider is available, which can be used in an Import Scenario for the bulk import of entitlement adjustments. The import process creates an adjustment batch per employee/entitlement combination.

Materials Import

This release adds the ability to include material costs when importing timesheet/time card data into the Payroll module. This allows for better integration between the Payroll and Projects modules in MYOB Advanced, as the material costs entered into a time card can be processed in the Payroll module alongside the timesheet information.

A new **Import Materials** option is available on the Data Map Source Types setup window:
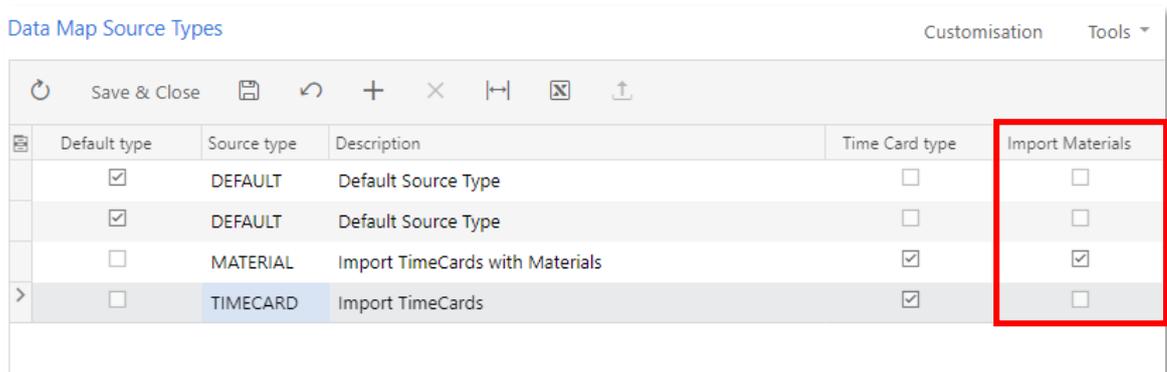
When this option is ticked, data map sources of the selected type will allow for the import of material data.

When setting up a data map on the Data Maps screen (MPPP7020), users can now map the Inventory IDs used for materials to pay items, as with any other imported data.

Once data maps have been set up to support material costs, users can process timesheet imports as normal, and the material costs will be included in the imports automatically.

Updates to Payroll Tax Reporting

Australia only

This release updates the payroll tax features, offering organisations more flexibility around how they report and pay their payroll tax.

> **Note:** Due to the changes in this release, the existing Payroll Tax (MPPP3020), Payroll Tax Batch Summary (MPPP5036) and Payroll Tax Liability (MPPP5035) screens have been deprecated. These screens still exist, but have been removed from menus and sitemaps.

Payroll Tax Options

In previous releases, settings that related to payroll tax were hidden unless a state was specified on the (now deprecated) Payroll Tax screen. The following settings are now always available, so they can be configured at any time:

* The settings on the Payroll Tax tab of the Pay Details screen (MPPP2310)
* The **Liable for Payroll Tax** and **Payroll tax category** columns on the Pay Item Liabilities screen (MPPP1025)

In addition, a new **Apprentice/Trainee** option is available on the Employee History tab of the Employees screen (EP203000). This allows you to mark employees as apprentices or trainees, which has an effect on payroll tax.

Reporting on Payroll Tax

The new Payroll Tax Liability report (MPPP6210) takes all of this data to produce a payroll tax report that can be filtered by state and optionally by branch. The report shows the payments to employees that are liable for payroll tax, broken down by employee tax status and payroll tax category:

The report shows the amount of payroll tax-liable payments for the selected state and an **Interstate** amount for the total payments from other states.

Two new generic inquiries are also available:

- Payroll Tax Liability Details (MPPPGI10) – details all transactions that make up the payroll tax report
- Payroll Tax Liability ETP (MPPPGI11) – details transactions that make up the tax-free portion of any ETPs included in the payroll tax report

Users can use the new report and inquiries to generate the liable payment amounts, then enter these amounts into the online payroll tax portal for each state as necessary. Once this is done and the payroll tax amounts are calculated via the online portal(s), payments matching these amounts can be generated in MYOB Advanced.

Updates to Access Rights

The release updates the access granted to users by the "People User" licence type.

For MYOB Advanced People edition:

The "People User" license type now give users the ability to:

- Select the Customiser and Dashboard Designer roles
- Access the following screens:
    - Work Calendar primary list (CS2090PL)
    - Employees primary list (EP2030PL)
    - Generic Inquiry (SM208000)
    - Dashboards (SM208600)
- Maintain Self-service approval flows using the following screens:
    - Assignment and Approval Maps (EP205500)
    - Approval Maps (EP205015)
    - Assignment Maps (EP205010)
    - Company Tree (EP204061)
- Maintain Self-service leave notifications using the following screens:
    - Notification Templates primary list (SM2040PL)
    - Notification Templates (SM204003)
    - Send Notifications (SM205050)
    - Automation Notifications (SM205040)
    - Automation Notifications generic inquiry (MYGI1000)

When a user has the "People User" license type and the "People MSS User" role, they will now be able to view the Approvals screen (EP503010) for approving ESS leave requests.

For all other editions of MYOB Advanced:

The "People User" license type now give users the ability to:

- Select the Customiser and Dashboard Designer roles
- Access the following screens:
    - Work Calendar primary list (CS2090PL)
    - Employees primary list (EP2030PL)
    - Company Tree (EP204061)

Platform

Classic User Interface Removal and Site Map Replacement

Previously, users could use one of two user interfaces (classic and modern) and switch between them. As of this release, the classic user interface has been terminated and the modern UI has become the only user interface available in the system. **The Show Classic UI by Default** check box, which was previously used to switch between user interfaces, has been removed from the User Profile screen (SM203010).

In the MYOB Advanced User Guide, topics related to the classic user interface have been removed. The term "modern user interface" has been changed to "user interface".

The removal of the classic user interface has resulted in the necessity to replace the site map. In this release, the classic site map tree has been replaced with a list of all available screens.

Site Map Interface

The Site Map screen (SM200520) has been completely redesigned to represent the structure of the modern user interface. The classic site map tree has been replaced with a list of all available screens in the system without nested levels; see the following screenshot.
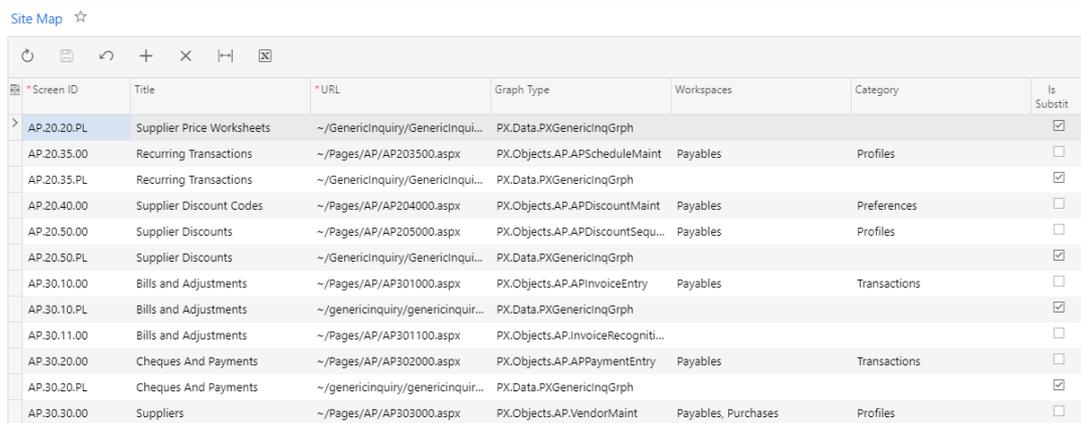
The screen has been changed as follows:

- The right and left panels have been replaced with a single table that gives the administrative user the ability to filter by columns.
- A standard search box has been added so the administrative user can quickly find the needed record.
- New **Workspaces**, **Category**, and **Is Substitute** columns have been added.

Site Map Capabilities

With the new design of the Site Map (SM200520) screen, a user with sufficient access rights can perform the operations that were available in the previous versions of MYOB Advanced—such as adding or removing screens by using buttons on the table toolbar, or changing a screen identifier, title, or URL—by editing the appropriate cells in the table.

By using the new **Workspaces** column, a user can place a screen in multiple workspaces on the UI by selecting their corresponding check boxes in the list, as shown in the following screenshot.

If multiple workspaces are selected, the **Workspaces** column will display all selected workspaces, with commas separating them.

Also, the administrative user can specify a category for a screen by selecting the needed category in the **Category** column.

The **Is Substitute** column indicates whether the screen in the row is a substitute for some entry or maintenance screen.

The Hidden folder has been removed; the new **Workspaces** and **Category** columns replace the functionality provided by the Hidden folder. If no workspace is selected for a listed screen, this screen will be not visible on the UI.

For details on working with the site map, see "Managing the Site Map" in the User Guide.

Other Affected Screens

The classic site map tree was used in elements on multiple screens for the selection of a particular screen. On these screens, it has been replaced with a tree of workspaces.

For the screens where a user creates a new screen or modifies existing ones, the Site Map Title box is used to specify the name of the screen. The Workspace box is used to specify workspaces, and the Category box is used to specify a category under which the screen will be placed in the selected workspaces.

The following screens have been affected:

- Pages and dialog boxes in the Customization Project Editor
- Access Rights by Role (SM201025)
- Access Rights by Screen (SM201020)
- Access Rights by User (SM201055)
- Application Resources(SM301000)

- Assignment and Approval Maps (EP205000)
- Export by Scenario (SM207036)
- Generic Inquiry (SM208000)
- Import by Scenario (SM206036)
- Lists as Entry Points (SM208500)
- Notification Templates (SM204003)
- Pivot Tables (SM208010)
- Portal Map (SM200521)
- Report Definitions (CS206000)
- Site Preferences (SM200505)
- Translation Sets (SM211500)
- User Profile (SM203010)
- Web Services (SM207040)
- Web Service Endpoints (SM207060)
- Wiki (SM202005)

Generic Inquiry Improvements

In this release, multiple enhancements to generic inquiries have been introduced.

Screen ID Numbering Sequence

The numbering sequence for generic inquiry screen IDs has been changed, so that a newly created inquiry will have a screen ID of the GIXXXXXX format even if there are screen IDs with the GIFRXXXX format in the database. The maximum number of generic inquiries in the system is 999999. If a user exceeds this value, an error message will be displayed.

Formula Expression Functions

Generic inquiry formula expression functions PadLeft and PadRight are now working correctly. The PadLeft function adds padding characters to the beginning of a string (such as in @@@Billing string) and the RightPad function adds padding characters at the end of a string (such as in Billing@@@ string).

Dashboard Improvements

Pivot Table Dashboard Widget

In this release, dashboards have been enhanced with the Pivot Table type of widget. This type of widget displays an existing pivot table selected by the user designing the dashboard.

Widget Icons

The Add Widget dialog box used for dashboards has been enhanced with icons indicating the types of the widgets, as shown in the following screenshot.

Report Designer Improvements

This release introduces multiple enhancements to MYOB Advanced Report Designer.

Search Box on the Tables Tab

The Tables tab of the Schema Builder has been enhanced with a Search box. This makes it possible for report developers to search for the necessary tables by typing in a table name or part of a table name in the box.

> **Note:** The Search box is case sensitive.

By pressing the Tab button on the keyboard, a report developer can quickly switch between the fields of the Schema Builder window.
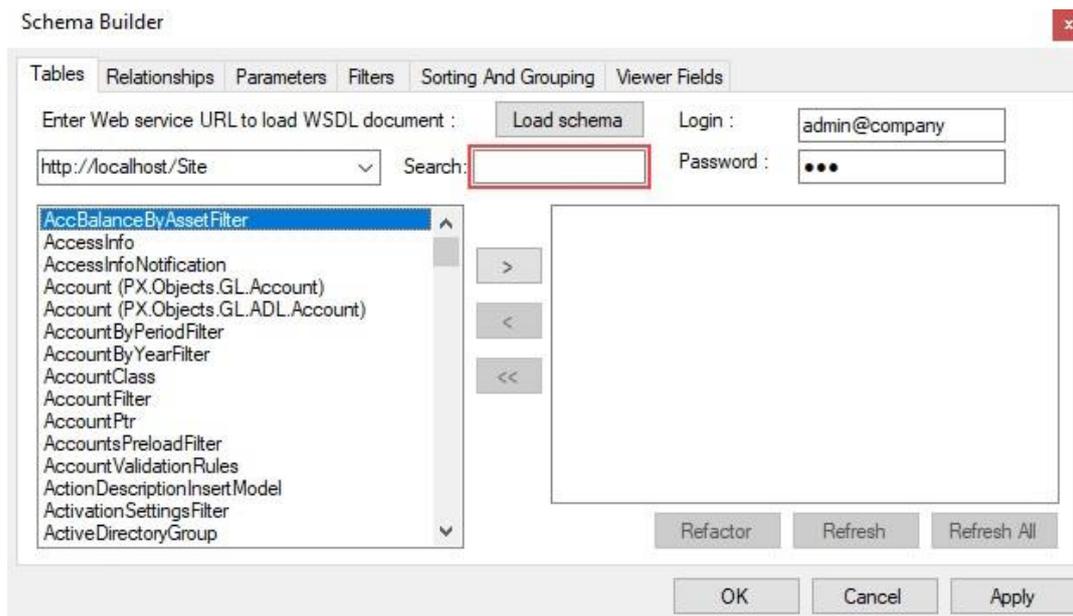
Other Minor Improvements

Many of the Schema Builder boxes now support autocomplete, with the system suggesting values when a user starts typing.

The history of successful connections is now automatically saved and displayed in the drop down list of the **URL** field on the Tables tab of the Schema Builder. A report developer can delete records from the connection history list by right-clicking and then selecting **Delete URL from history**.

Caching of Dashboard Widgets

When a dashboard with many widgets is refreshed or opened, it may take a lot of time to load data for all widgets. This release adds caching of widget data and the ability to manage the interval to be used for refreshing data on widgets, to reduce the time of loading data on widgets.

Dashboard widgets can display information that is updated very frequently (such as every five minutes) or very rarely (such as once a week), which is why this functionality can be controlled at the widget level. Now a dashboard designer can specify the interval at which the system refreshes data or switch off caching by using the **Refresh Data** field of the Widget Properties dialog box for any type of widget (see the following screenshot, which shows an example of this dialog box).
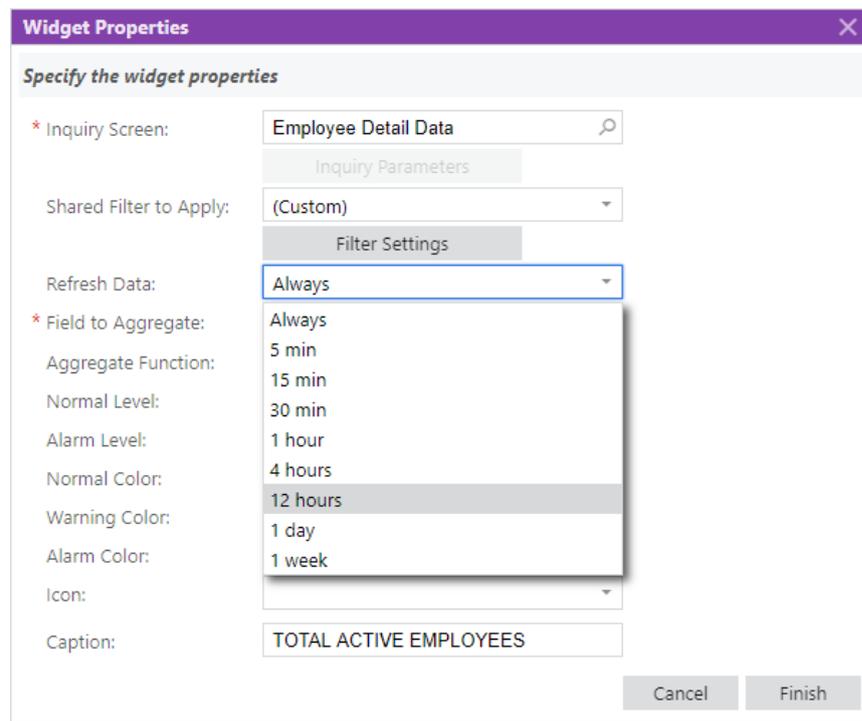
To switch off caching for a particular widget, the dashboard designer should do the following:

1. Open the dashboard that contains the widget.
2. On the dashboard title bar, click **Design**.
3. On the toolbar of the appropriate widget, click **Edit**.
4. In the **Refresh Data** field, select "Always".

When caching of a widget is switched off, the widget data will be updated in the same way as it was in previous versions of MYOB Advanced—that is, each time on open or update of a dashboard.

By using the new functionality, the dashboard designer can specify the interval at which the system refreshes data. For example, to specify that the data of a widget must be cached and refreshed no more often than once a day, the dashboard designer should do the following:

1. Open the dashboard that contains the widget.
2. On the dashboard title bar, click **Design**.
3. On the widget toolbar, click **Edit**.
4. In the **Refresh Data** field, select "1 day".

After a dashboard designer specifies the refresh interval for a widget, the system loads the widget data from the database and caches the data on the first open of the dashboard with the widget. When the dashboard is reopened or the dashboard page is refreshed, the system displays the data on the widget from the cache (that is, does not load the data from the database) if the data was updated a shorter time ago than the interval specified in the **Refresh Data** field.

A user can view information about the date and time of the last update of a widget's data in the pop-up pane that appears when the user points to the widget (as shown in the following screenshot). The user can manually update the widget data by clicking this pane.

Enhancements to the Management of the Automation Schedule History

A new Automation Schedule History screen (SM205035) has been implemented for managing the history of automation schedules. By using this screen, system administrators can view records of the schedule executions, review any errors, and delete particular records.
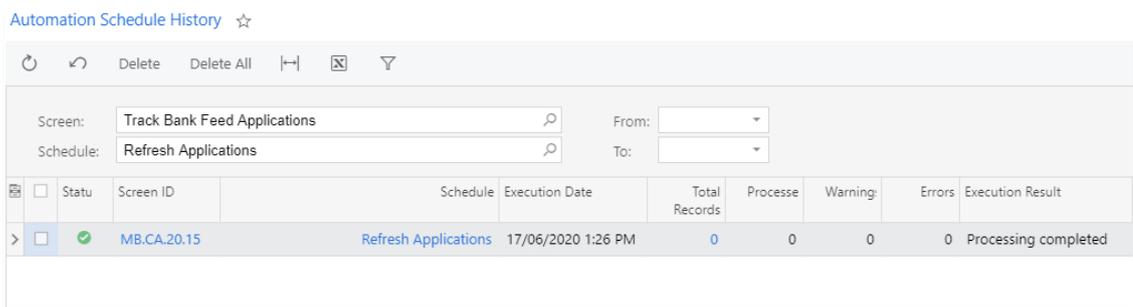
To reduce the number of records displayed in the table, in the Selection area of this screen, a system administrator can specify settings to limit the displayed records to a particular screen, schedule, and period of time.

To view details about the records related to a schedule execution, a system administrator can click the link in the **Total Records** column of the particular row. The system opens the Processing Results dialog box with the detailed information about the schedule execution.

To delete particular records, the system administrator selects the check boxes in the Selected column of the table for the rows to be deleted and clicks **Delete** on the screen toolbar. The system administrator can also delete all history by clicking **Delete All** on the screen toolbar.

A new **View History** button, which opens the Automation Schedule History (SM205035) screen, has been added to the Automation Schedules (SM205020) and Automation Schedule Statuses (SM205030) screens.
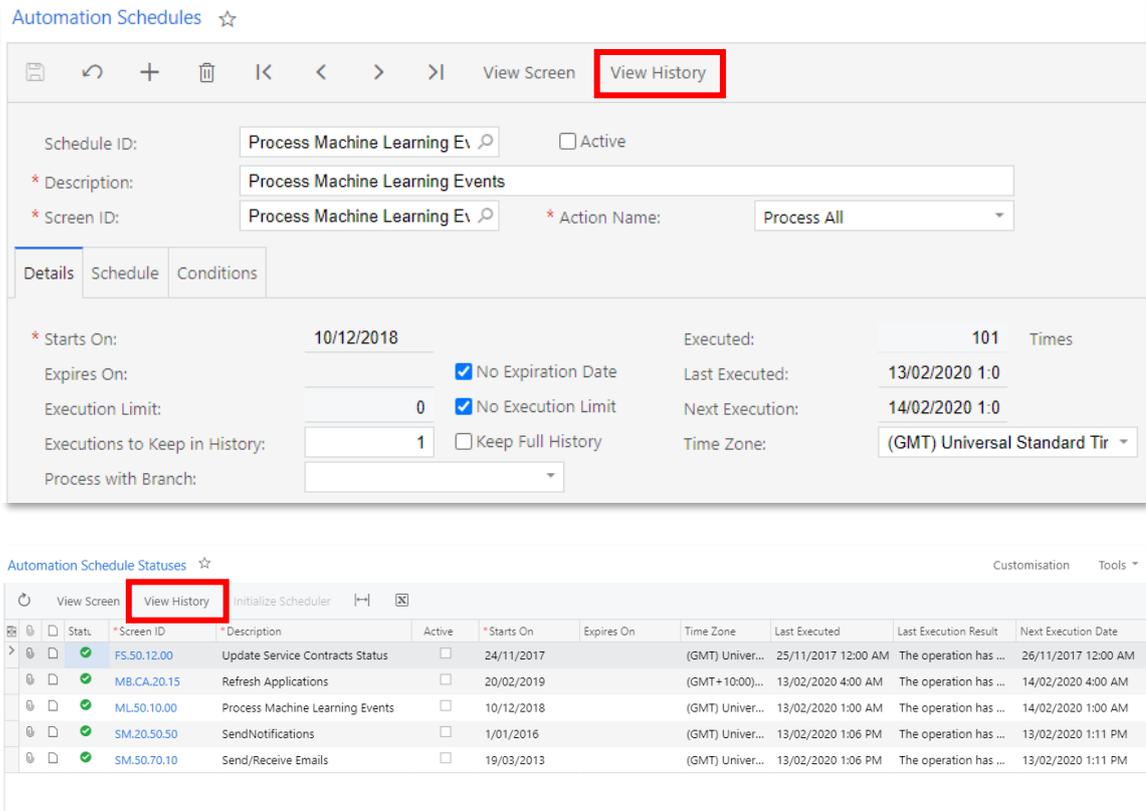
Improvements to Import and Export Scenarios

This release includes multiple improvements that affect the configuration and processing of import and export scenarios. These improvements are described in detail in the following sections.

Preprocessing of the Data Before Import

The data to be imported to MYOB Advanced can contain values that cannot be inserted into the system as it is. These values may require a simple modification before they can be inserted in MYOB Advanced. For example, suppose that the data for import contains country codes that are different from the county codes registered in MYOB Advanced. The country codes in the data must be replaced with the country codes registered in MYOB Advanced before the data import.

In this release, a user can modify the data before the import by using substitution lists, which consists of pairs of source values and the corresponding substitution values. A user can define substitution lists during the creation of an import scenario by clicking the **Substitution Lists** button on the table toolbar of the Mapping tab of the Import Scenarios screen (SM206025), which opens the Substitution Lists screen (SM206026).

The user then can use the substitution lists specified on the Substitution Lists screen in formulas in import scenarios. The special SubstituteListed (sourceField, substitutionList) function is available in **Functions > Others** in the Formula Editor dialog box. This function replaces the values of the sourceField field with the values from the substitutionList substitution list if a substitution value is defined for a particular value of the field.

Detail Export Mode

In previous versions, detail records were exported through export scenarios as follows:

- The first exported detail record contained the data of each field specified in the scenario mapping for the detail object, summary object, and related objects.
- The other exported detail records contained the fields of the detail object and the summary object. The fields of the related objects were blank.

Users can now specify for an export scenario which fields should be exported for detail records. In the new **Detail Export Mode** field on the Export Scenarios screen (SM207025), which is shown in the following screenshot, a user can select one of the following options:

- **Repeat Only Summary Fields**: This is the mode that was used in the previous versions of MYOB Advanced.
- **Repeat All Fields**: In this mode, each exported detail record contains the data of each field specified in the scenario mapping for the detail object, summary object, and related objects.
- **Do Not Repeat Fields**: In this mode, only the first exported detail record contains the data of each field specified in the scenario mapping for the detail object, summary object, and related objects. The other exported records contain the data of the fields of only the detail object.
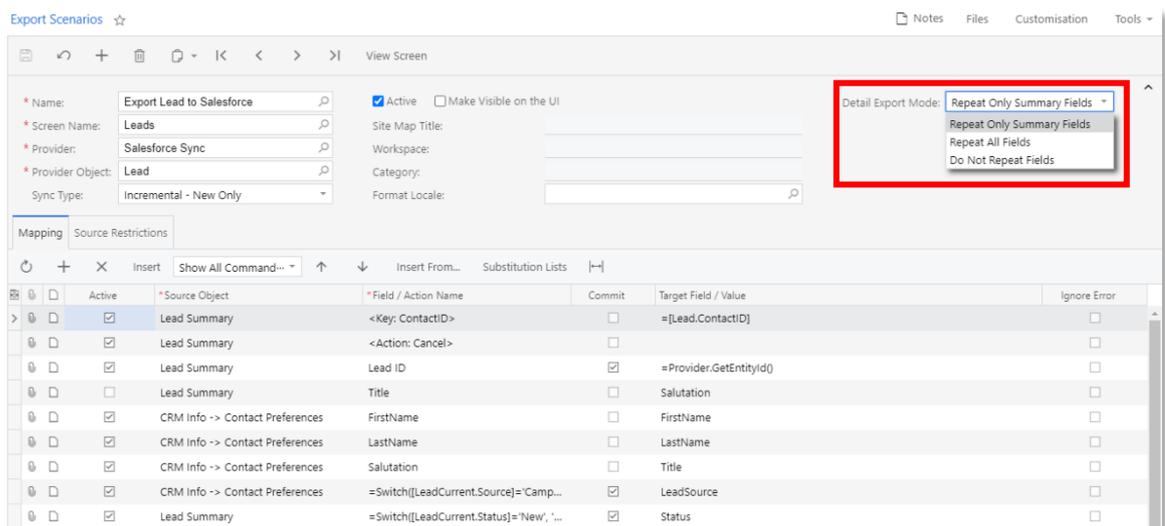
Workflow Actions in Scenario Mapping

The Opportunities (CR304000) and Cases (CR306000) screens now support the new automation workflows instead of automation steps. Developers can also customize an MYOB Advanced screen by defining an automation workflow in Customization Project Editor. For details about automation workflows, see "Customization: Automation of Workflows in Customization Project Editor" in the documentation. Users can use the workflow actions in mappings of import and export scenarios.

> **Note:** By using the import and export scenarios, users can no longer directly modify the statuses of the created or updated records on the Opportunities and Cases screens by specifying the value of the Status field in the mapping. Instead, users should modify the scenario mappings to use the workflow actions for modification of the statuses.

To specify a workflow action in a mapping on the Import Scenarios or Export Scenarios screen, the user can choose from either of the following approaches:

- Select the summary object as the target object (in an import scenario) or the source object (in an export scenario) and the action name in the **Field / Action Name** column. This is the standard way to call actions in import and export scenarios. For details, see "Actions in Import Scenarios" in the documentation.
- Select the summary object as the target object in an import scenario or the source object in an export scenario, select the "<Action: Transition>" action in the **Field / Action Name** column, and specify the type of transition that corresponds to the workflow action in the **Source Field / Value** column (for the import scenario) or the **Target Field / Value** column (for the export scenario). With this approach, the user can use formula to specify the type of transition.

If a workflow action displays a workflow dialog box with the parameters of the action, the user can specify these parameters by using the Transition Parameters object as the target object (in an import scenario) or the source object (in an export scenario). The parameters must be specified before the workflow action.

> **Note:** Simplified import scenarios cannot use workflow actions. For details about simplified import scenarios, see "Simplified Scenarios for Data Import" in the documentation.

Processing of Import and Export Scenarios

On the Import by Scenario (SM206036) and Export by Scenario (SM207036) screens, the **Roll Back** button on the toolbar of the History tab has been replaced with a **Clear Data** button, which has been moved to the screen toolbar.

If a user clicks this button when the History tab is not open, all records on the Prepared Data and History tabs are cleared. If the user clicks the button when the History tab is open and a record is selected on the tab, the system clears all records on the Prepared Data tab; on the History tab, the system also clears the selected record and all records that were created earlier than the selected record.

Ability to Show Deleted Records in Inquiries

This release adds the capability to include deleted records in generic inquiry results, in response to requests from clients and partners.

Including Deleted Records in Inquiry Results

A user creating or modifying a generic inquiry can include deleted records in the inquiry results for any table. To achieve this, on the Results Grid tab of the Generic Inquiry screen (SM208000), the user adds a row for the needed table with the DeletedDatabaseRecords data field. Then the user selects the new **Show Deleted Records** check box in the Summary area of the screen and saves these changes.

With these settings, the system will display the deleted records in the table; it will also indicate the deleted records by selecting the check box in a new column it adds to the table. By default, the "Is Deleted" caption is used for this column, but the user developing the generic inquiry can change this caption in the **Caption** column of the Results Grid tab of the Generic Inquiry screen. If the user adds deleted records for multiple tables, we recommend entering a descriptive caption for each of these columns.

The following screenshot demonstrates rows added to the Results Grid tab to show deleted records of the Batch and Ledger tables. Notice that the "Deleted Batch" and "Deleted Ledger" column captions, respectively, have been specified for these tables.
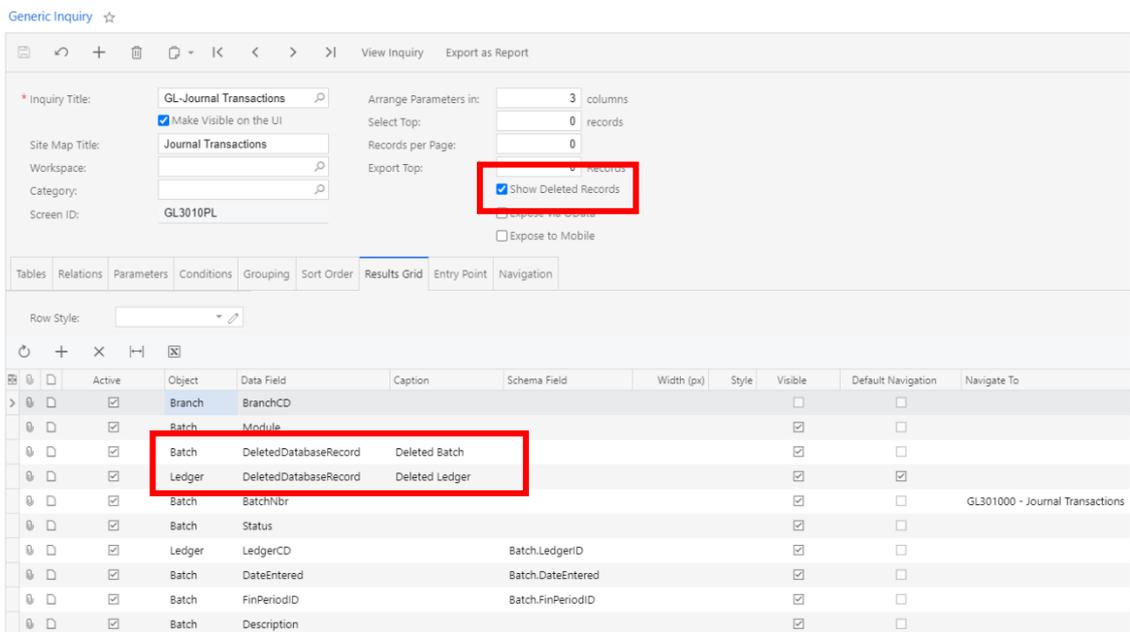
The following screenshot shows the Journal Transactions inquiry, for which the records of deleted batches and ledgers are now included. Newly added columns can be used for filtering records, as can other columns.

Improvements to Pivot Tables

This release adds the ability to specify default sorting for a pivot table, and to calculate the percentage of a row or column total as well as a count of unique values.

Pivot Table Default Sorting

This release includes changes to the default sorting on the Pivot Tables screen (SM208010). On the Properties pane for the fields added to Values pane, the "None" value has been added and is selected by default for the **Sort Order** property. With this value selected, no sorting will be applied to the field values in the pivot table. With the "Ascending" or "Descending" value selected for this property, the pivot table data will be sorted by the last column of the Value records in ascending or descending order, respectively.

Percentage of Total in Pivot Tables

This release adds the ability to calculate the percentage of a row or column total.

A **Show Values As** drop-down box has been added to the Properties pane of the Pivot Tables screen (SM208010). By using the options of the box, a user can specify how the system should display values. As the following screenshot shows, the following options are available:

- Number
- % of Grand Total
- % of Column Total
- % of Row Total
- % of Total by Column Group
- % of Total by Row Group
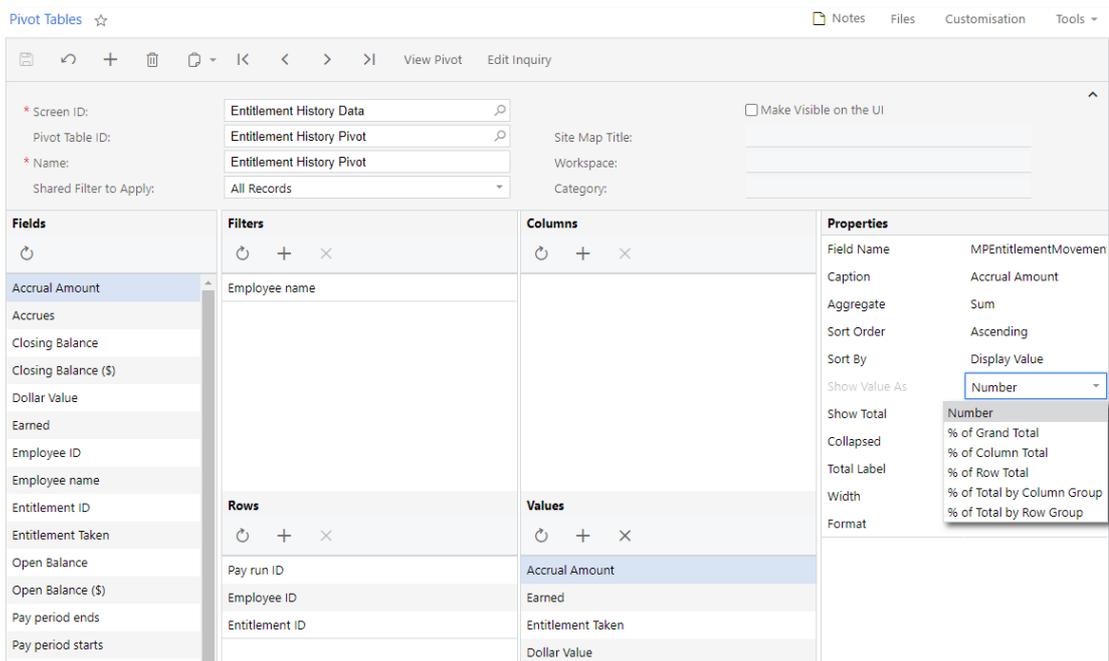
Count of Unique Values

A "Count Distinct" option has been added to the **Aggregate** drop-down list on the Properties pane of the Pivot Tables screen (SM208010). This aggregate function returns the number of the unique field values. Also, the **Count** option has been renamed to **Count All**.

For example, suppose that you need to know how many customers you have invoiced this month. Your inquiry returns the list of recorded invoices with dates and customer names. If you use the Count All aggregate function to count number of invoiced customer in a month the system will count all records within a month. If you use the Count Distinct aggregate function the system will count only unique records within a month.

Updated Demo Database

This release includes updates to the MYOB Advanced Demo Database. This is the first phase of the updated Demo Database release—it includes data for the following modules:

- Finance
- CRM
- Distribution
- Projects
- Field Service Management
- Payroll (AU Only)

> **Note:** The Demo Database only reflects data for demo instances—it is not a replica of live data. Make sure to check the data before you do an actual demo and make further adjustments as required.

The login details for the Demo Database are:

- **Login:** Andrews.Michael
- **Password:** myob@2020

Please send all the questions and feedback related to the updated Demo Database to **proserve.ed@myob.com**.

System Administration

Access Rights for Screens in Workspaces

In MYOB Advanced, for several screens, the classic site map tree has been replaced with a tree where nodes represent workspaces of the modern UI. This makes the process of setting access rights more flexible.

For details on setting levels of access rights, see "Levels of Access Rights" in the User Guide.

Access Rights by Role

On the Access Rights by Role screen (SM201025), an administrator can set up access rights to multiple system objects (such as screens, containers of screen elements, and screen elements) for a particular role in MYOB Advanced. With the replacement of the classic site map with the modern one, the user may set up access rights to all the screens in a particular workspace at once.

In the Summary area of the screen, the user selects the role for which setting up access rights is needed. In the left pane of the screen, the system displays all the workspaces available under the Company node. The user uses the left pane to select and expand nodes. In the right pane the system displays entities grouped under the selected node. In the right pane, the user may specify an access level for each workspace by selecting the level from the drop-down list in the **Access Rights** column.
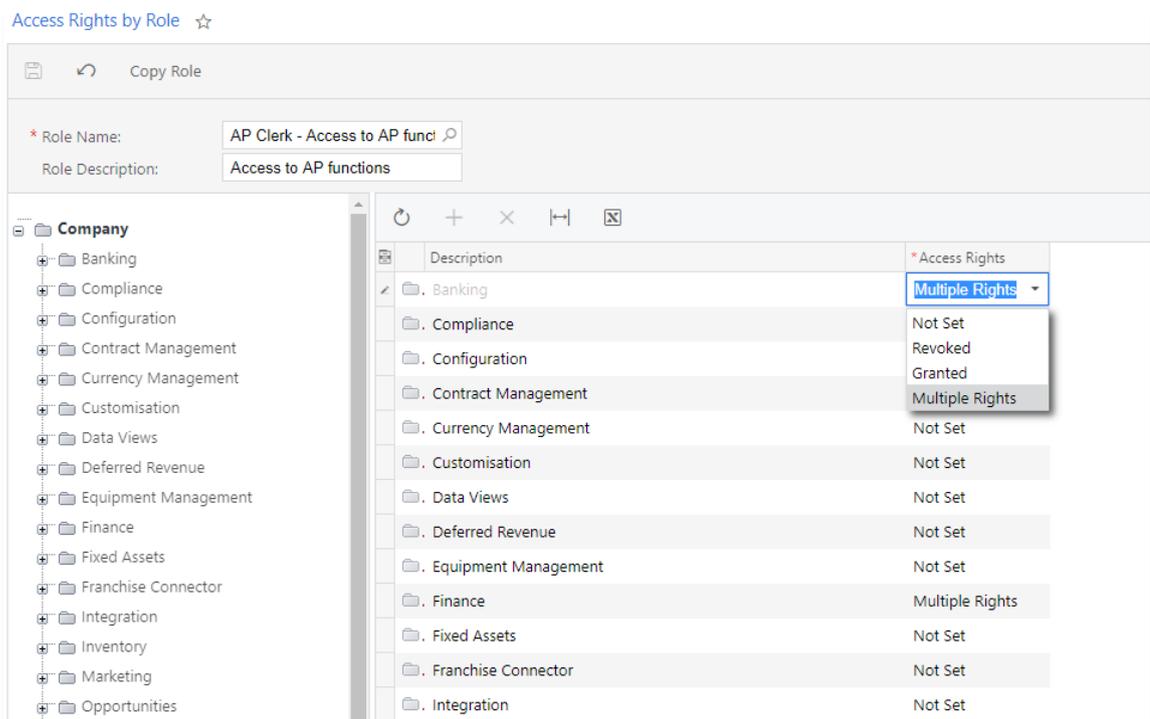
The system will apply the selected access level for all the screens in the workspace. The user may change access level for a particular screen; in this case, the system will automatically change the access level for the workspace to the "Multiple Rights" option. If the user selects the "Multiple Rights" option for a workspace, it will not affect the access level specified for the screens in this workspace.

Access Rights by Screen

An administrative user uses the Access Rights by Screen (SM201020) to set up access rights to system objects for multiple user roles in MYOB Advanced. With the modern site map, the user may set up the access rights to all the screens in a particular workspace at once for multiple user roles.

To do this, the user selects a particular workspace in the left panel of the screen. Then the user may select a particular access level for each user role listed in the right pane.

The system will apply the selected access level for all the screens in the workspace. The user may change the access level for a particular screen; in this case, the system will automatically change the access level for the role to the "Multiple Rights" option. If the user selects the "Multiple Rights" option for a role, it will not affect the access level specified for the screens in this workspace.

Predefined User Roles for Financial Users

MYOB Advanced now provides a number of predefined user roles that have been designed for financial departments of companies. These roles, which are stored in the System company, grant access to specific system functionality. With these roles, it is no longer necessary to set up user roles for financial positions from scratch during the system implementation. The predefined roles can be modified on the Access Rights by Role screen (SM201025) to meet the organization's needs and assigned in any combination to users.

> **Note:** To further simplify setting up new users, on the User Types (EP202500) screen, system administrators can create a user type for a particular financial position in the company, and add the roles necessary for the position to this user type.

As is the case with other predefined user roles, the new roles for financial users are available on the relevant screens—for example, on the User Roles screen (SM201005) and Access Rights by Role screen (SM201025)—and appear in the relevant reports.

The following screenshot shows some of the new roles on the User Roles (SM201005) screen.
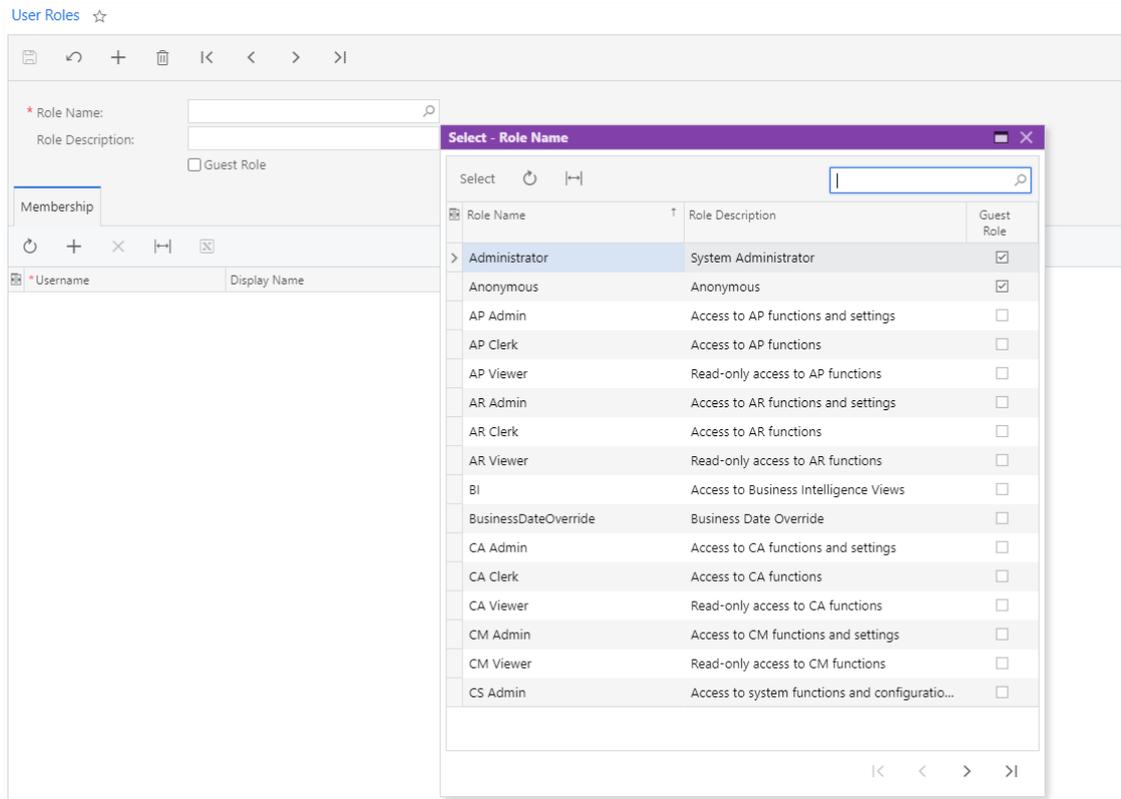
In the following sections, the new roles are described and grouped by the functionality to which they grant access. All roles give users assigned to the roles the ability to print relevant reports and run needed inquiries.

Roles Related to Accounts Receivable Functionality

The following roles related to accounts receivable functionality have been added:

- **AR Clerk**: A user with this role has access to accounts receivable functions as well as read-only access to accounts receivable settings and general ledger transactions.
- **AR Admin**: A user with this role has access to functions and settings related to accounts receivable as well as read-only access to general ledger transactions.
- **AR Viewer**: A user with this role has read-only access to accounts receivable functions.

Roles Related to Accounts Payable Functionality

MYOB Advanced now provides the following roles related to accounts payable functionality:

- **AP Clerk**: A user with this role has access to accounts payable functions, as well as read-only access to accounts payable settings and general ledger transactions.
- **AP Admin**: A user with this role has access to functions and settings related to accounts payable as well as read-only access to general ledger transactions.
- **AP Viewer**: A user with this role has read-only access to accounts payable functions.

Roles Related to General Ledger Functionality

MYOB Advanced now includes the following roles related to general ledger functionality:

- **GL Clerk**: A user with this role has access to general ledger functions, as well as read-only access to general ledger settings.
- **GL Admin**: A user with this role has access to functions and settings related with the general ledger.
- **GL Viewer**: A user with this role has read-only access to general ledger functions.

Roles Related to Cash Management Functionality

The following roles related to cash management functionality have been added to MYOB Advanced:

- **CA Clerk**: A user with this role has access to cash management functions and read-only access to cash management settings.
- **CA Admin**: A user with this role has access to cash management functions and settings.
- **CA Viewer**: A user with this role has read-only access to cash management functions.

Roles Related to Fixed Asset Functionality

MYOB Advanced now includes the following roles related to the functionality of fixed assets:

- **FA Clerk**: A user with this role has access to fixed asset functions, as well as read-only access to fixed asset settings.
- **FA Admin**: A user with this role has access to functions and settings related to fixed assets.
- **FA Viewer**: A user with this role has read-only access to fixed asset functions.

Roles Related to Currency Management Functionality

The following roles related to the currency management functionality of MYOB Advanced have been added:

- **CM Admin**: A user with this role has access to functions and settings related to currency management.
- **CM Viewer**: A user with this role has read-only access to currency management functions.

Roles Related to Deferred Revenue Functionality

MYOB Advanced now provides the following roles related to the functionality of deferred revenue:

- **DR Admin**: A user with this role has access to functions and settings related to deferred revenue.
- **DR Viewer**: A user with this role has read-only access to deferred revenue functions.

Roles Related to Tax Functionality

MYOB Advanced now includes the following roles for tax-related functionality:

- **TX Admin**: A user with this role has access to functions and settings related to taxes.
- **TX Viewer**: A user with this role has read-only access to tax-related functions.

Other Roles

In addition to the user roles that grant access to specific financial functionality, the following general roles have been introduced to MYOB Advanced to simplify the configuration of access for users:

- **Internal Employee**: Users with this role have full access to personal settings, tasks, events, email, and time cards, as well as expense receipts and claims. Additionally, these users can view Help.
- **CS Admin**: Users with this role can access system functions and configuration entities that might be needed by users in financial positions. More specifically, they have administrative permissions to configure most of the common settings, including segmented keys, numbering sequences, tasks, and business process scenarios, as well as to manage business events, notification templates, and document templates. Users with the CS Admin role also have full access to row-level security settings and most of the integration functions.

Visibility of New Screens in the Site Map

In this release, the procedure for adding new screens (such as generic inquiries, pivot tables, ARM reports, and application resources) has been changed.

A **Make Visible on the UI** check box has been added to the following screens:

- Application Resources (SM301010)
- Generic Inquiry (SM208000), which is shown in the screenshot below
- Pivot Tables (SM208010)
- Report Definitions (CS206000)

When a user selects this check box on these screens, boxes related to the adding of the screen to the site map become available on the screens. That is, the **Site Map Title**, **Workspace**, and **Category** fields become available, as shown in the following screenshot. The system fills in these fields with the default values.

The user modifies the default values of these fields (if needed) and saves the changes that have been made on the screen. The system then assigns a screen identifier to the new screen (also shown in the following screenshot) and adds the screen the site map.

After the screen has been added to the site map, a user can modify its settings (its ID, title, workspace, and category) on the Site Map screen (SM200520).

Scanner Support in DeviceHub

A system administrator now can configure scanners by using the DeviceHub application. DeviceHub can be run on a workstation or a server independently from a user session; the application is used for connecting hardware devices to MYOB Advanced.

Scanner Support in Device Hub

Before configuring the scanners, DeviceHub must be installed, and the *DeviceHub* feature must be enabled on the Enable/Disable Features screen (CS100000).

To configure a scanner, the system administrator performs the following actions:

1. Launches DeviceHub, and clicks **Files > Configure** in the main menu of the application.
2. On the General tab, selects the **Enable scanner support** check box (see the following screenshot). The Scanners tab appears.
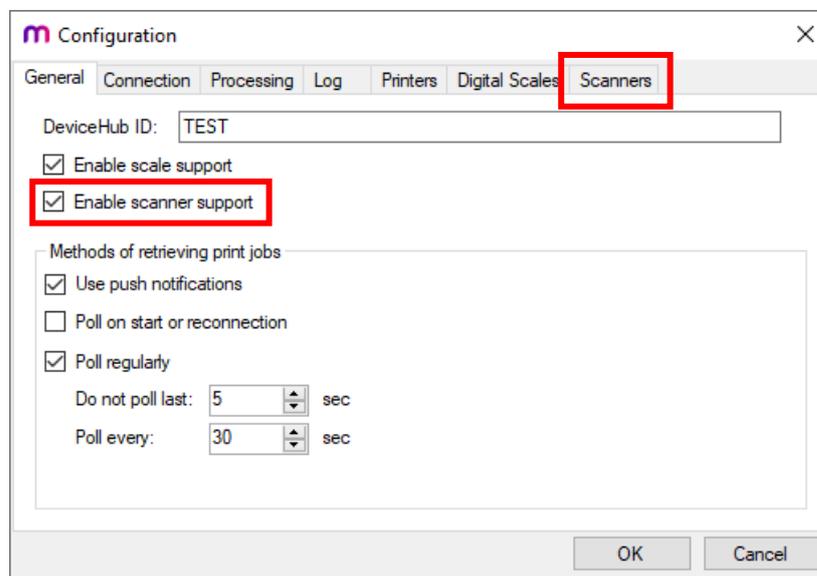
3. Configures a scanner and its default settings on the Scanners tab, as shown in the following screenshot.
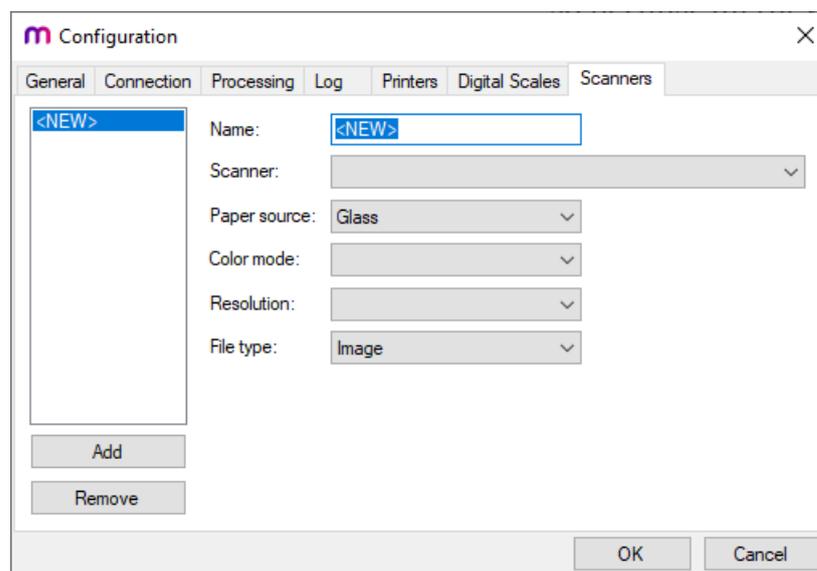
4. Signs in to MYOB Advanced and updates the list of available scanners on the new Scanners screen (SM206540) by clicking **Update Scanner List** on the screen toolbar. The list of configured scanners is sent from DeviceHub to MYOB Advanced (as shown in the following screenshot).

After configuration is completed, a user can review scan jobs that have been performed or are being performed in the system on the new Scan Jobs screen (SM206505).

Default Scanner Configuration

On the User Profile screen (SM203010) screen, a **Default Scanner** field has been added to the General Info tab, so that a default scanner can be configured for a particular user. When a user runs a scan job, the default scanner with the default settings will be selected for performing the scan job. The user can instead select the scanner manually from the list of scanners retrieved from DeviceHub.

Attaching Scanned Documents to Records and Record Details

A **Scan** button has been added to the toolbar of the Files dialog box, which a user can open for a particular record or document (by clicking **Files** on the screen title bar of a screen with a document open), or for a particular record detail (by clicking the **File Attached** icon at the beginning of the particular detail row). When a user clicks the **Scan** button, the Submit for Scanning dialog box is shown (see the following screenshot).
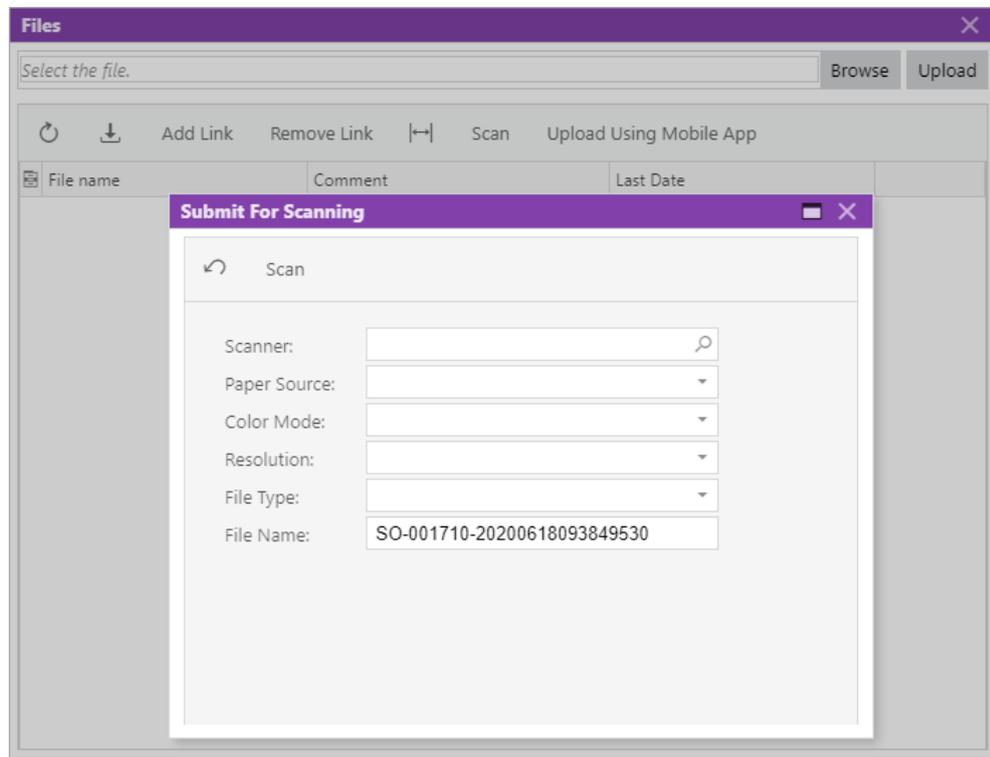
In this dialog box, a user can review the default scanning options, update them (if needed), and run the scanning of a document. The resulting file is attached to the record or record detail from which the scan was initiated.

DeviceHub Enhancements

This release introduces multiple enhancements to the DeviceHub application, which is used for connecting hardware devices to MYOB Advanced. System administrators can now configure various options that improve application performance, such as multi-thread processing of print jobs and connection timeout parameters. DeviceHub can also now log additional system information for investigating the DeviceHub behaviour and debugging issues.

Enhanced Methods of Receiving Print Jobs

On the General tab of the Configuration window of the DeviceHub application, a **Methods of retrieving print jobs** section has been added. The section consists of the following elements:

- **Use push notifications**: A check box that indicates, if selected, that DeviceHub receives new and modified print jobs when a user clicks the Print or Reprint button on any applicable MYOB Advanced screen.
- **Poll on start or reconnection**: A check box that, if selected, causes DeviceHub to receive print jobs each time it runs or restarts.

- **Poll regularly**: A check box that, if selected, enables the system administrator to configure the automatic polling of print jobs pending processing.
- **Do not poll last x sec**: The timeout period in seconds during which the application does not receive print jobs.
- **Poll every x sec**: The period of time in seconds in which the application receives print jobs.
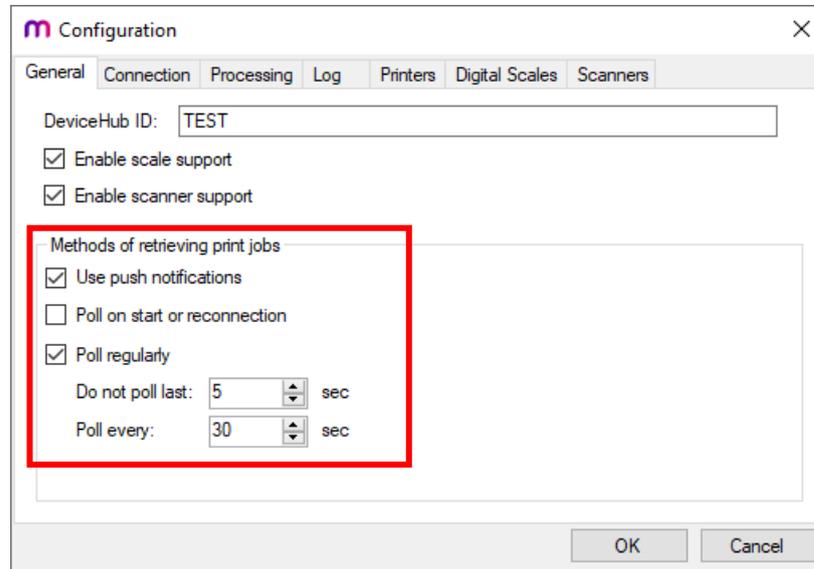
Connection Parameters

On the Connection tab of the Configuration window, a Connection timeout section has been added (see the screenshot below). The section consists of the following elements:

- **Send for x sec**: The amount of time during which the application is sending the connection request.
- **Receive for x sec**: The amount of time during which the application is waiting for the connection response.
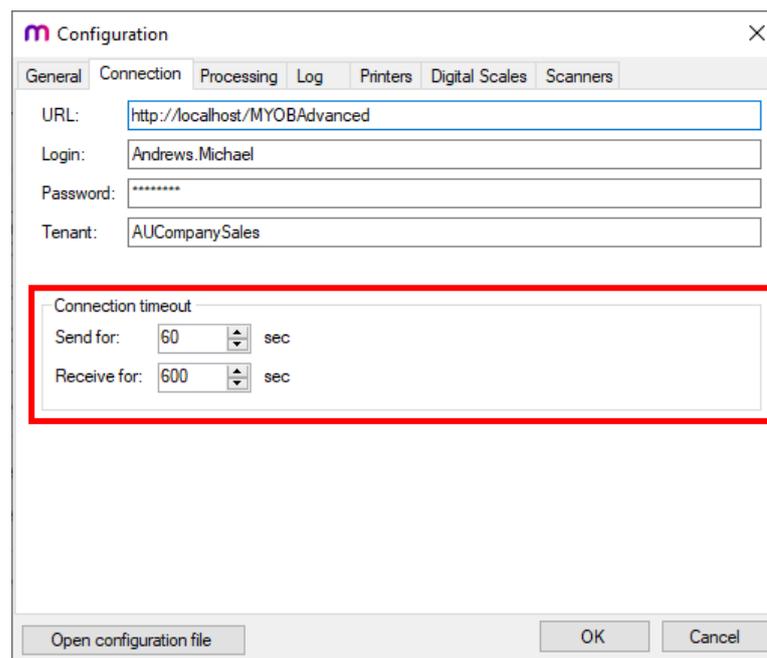
Enhanced Document Processing

DeviceHub now includes settings that allow it to receive multiple documents to be printed into a combined PDF, which speeds the process of receiving documents for printing. Also, DeviceHub can now be configured to process print jobs in multiple threads, which also reduces the time required for processing print jobs.

In the Configuration window, a Processing tab has been added (see the screenshot below). The tab consists of the following elements:

- **Combine every x documents on printing**: A check box that specifies, if selected, that the application will combine the specified number of documents of the same type (that is, the same reports printed on the same printer) into a single PDF file to be printed.
- **Use parallel processing**: A check box that indicates, if selected, that parallel processing is used for print jobs. If the check box is cleared, all print jobs are processed in a global queue.
- **Max loading threads**: The maximum number of threads used for loading print jobs.
- **Max printing threads**: The maximum number of threads used for printing.
- **Create print task every x documents or every y sec**: The number of documents kept in the buffer before the applications processes them; the timeout duration (in seconds) after the documents are processed regardless of the number of the documents in the buffer.
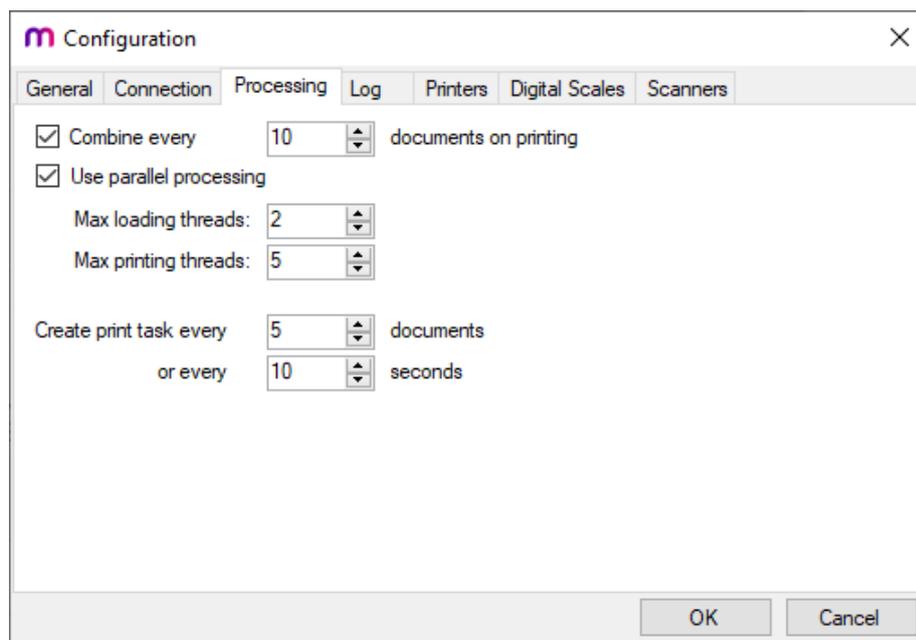
Extended Information for Diagnostics

On the Log tab of the Configuration window, a new **Collect diagnostics** check box has been added, as the following screenshot shows.
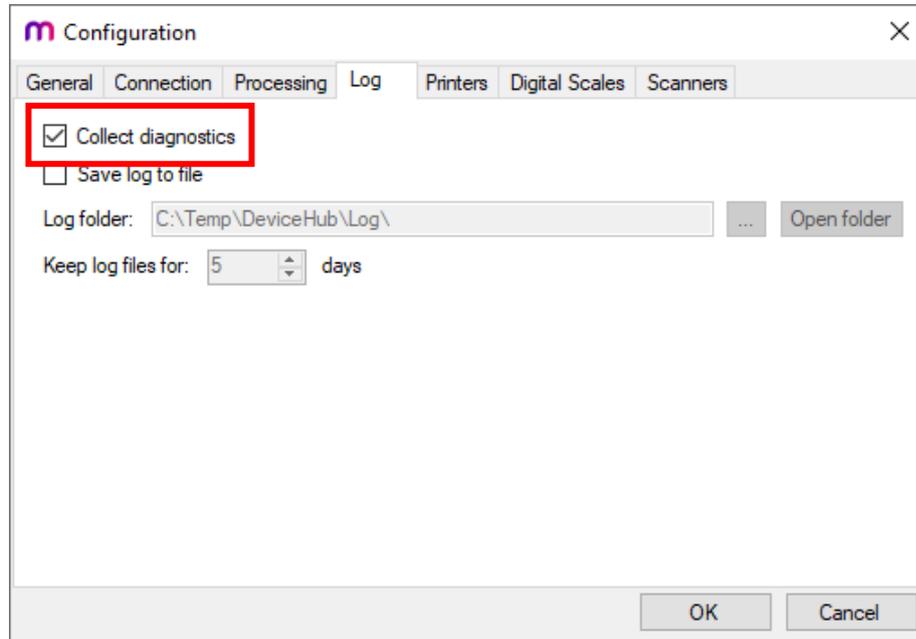
If the check box is selected, the Diagnostics and Resources tabs appear in the application main window, as shown in the following screenshots. The Diagnostics tab shows the log with extended diagnostic information. The Resources tab shows the current statuses of file loading and printing threads.
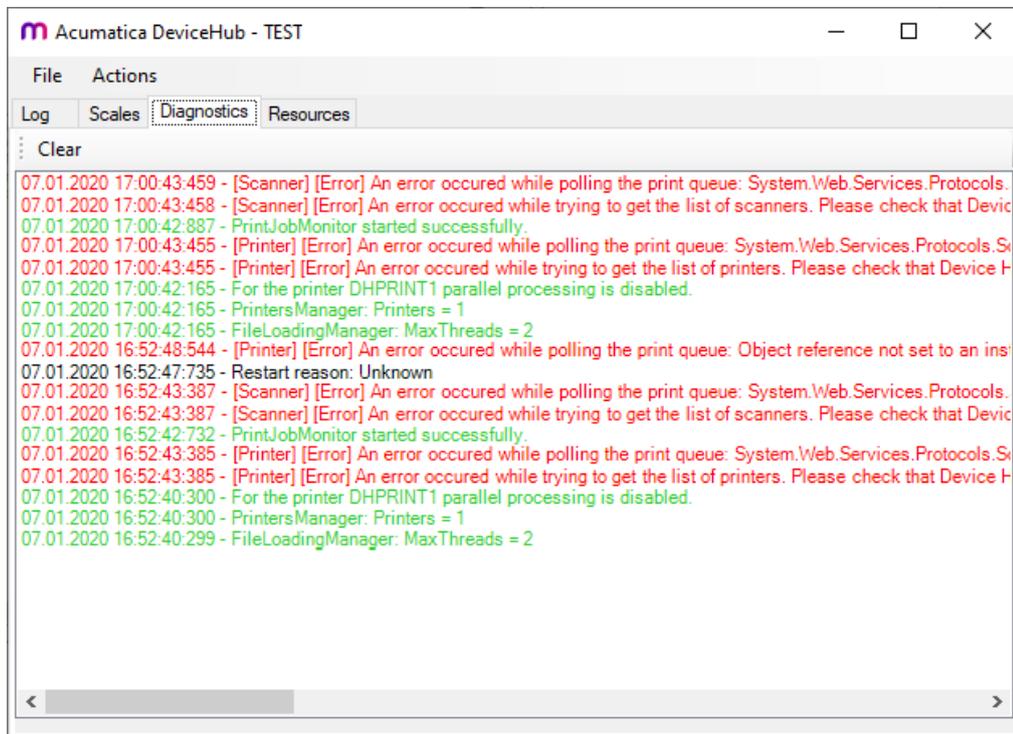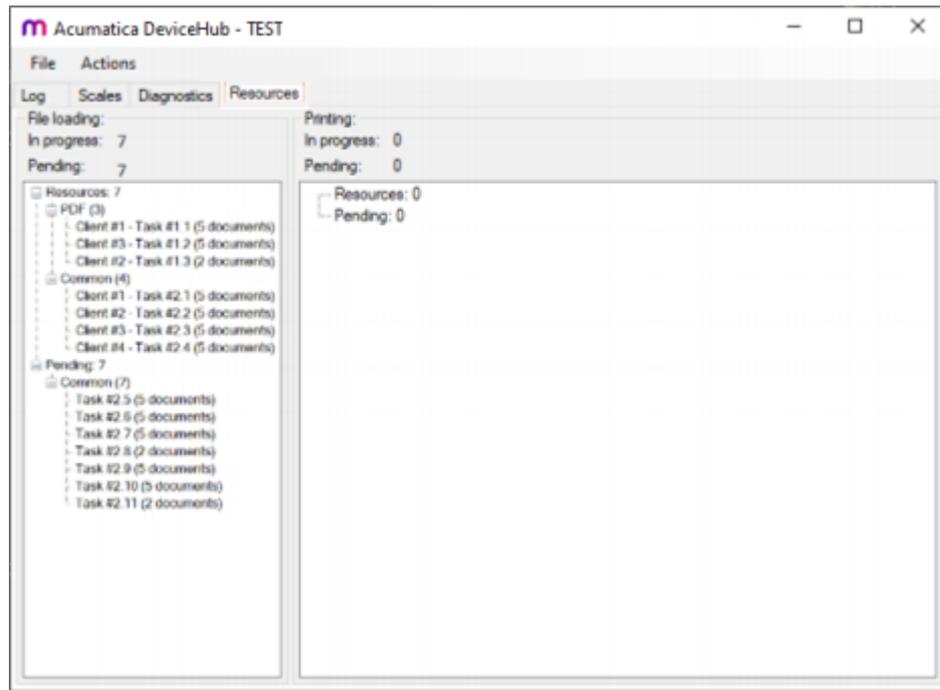
Parallel Processing Configuration for a Particular Printer

On the Printers tab of the Configuration window, a new group of UI elements has been added (see the screenshot below) that allow users to configure parallel processing of print jobs for a particular printer. The group includes the following elements:

- **Parallel processing**: A check box that indicates, if selected, that parallel processing is used for print jobs. If the check box is cleared, all print jobs for this particular printer are processed in a global queue.
- **Max loading threads**: The maximum number of threads used for loading print jobs.
- **Max printing threads**: The maximum number of threads used for printing.
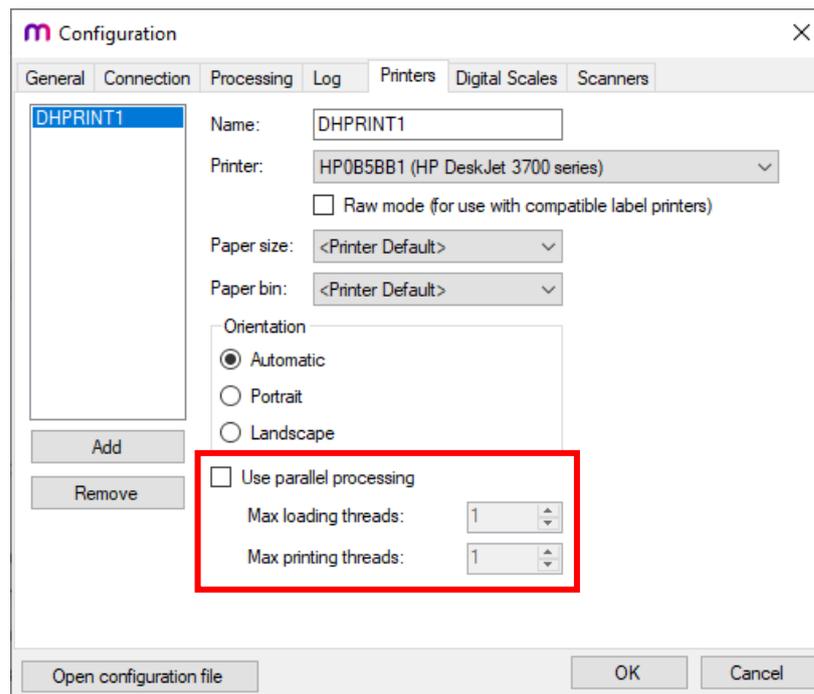
Identifier of the DeviceHub Instance

A unique identifier must now be specified for each DeviceHub instance so that MYOB Advanced can distinguish between devices added in different DeviceHub instances but used in the same MYOB Advanced instance.

In the **DeviceHub ID** box on the General tab of the Configuration window in the DeviceHub application (which is opened by clicking **File > Configuration** in the main menu), a system administrator enters a unique identifier for the DeviceHub instance (see the following screenshot).
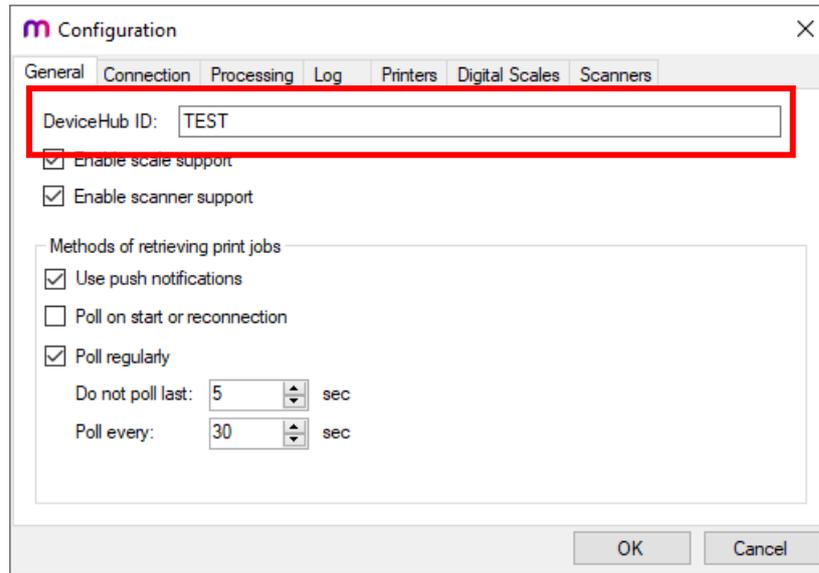
This identifier is shown for each configured device (printer, scanner, or scale) in the DeviceHub column on the Printers (SM206510), Scanners (SM206540), and Scales (SM206530) screens, respectively, to indicate the DeviceHub instance through which the device is connected. The following screenshot shows the **DeviceHub** column on the Printers screen.
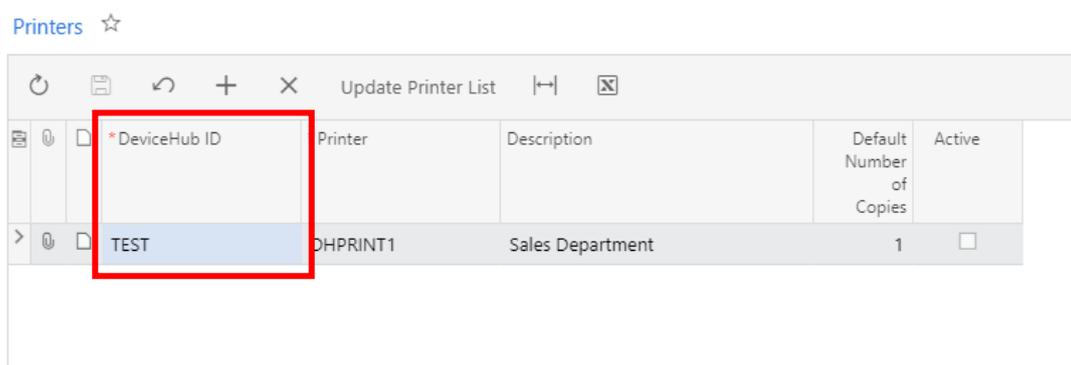
UI Enhancements

The following minor UI enhancements have been made in the Configuration window of the DeviceHub application:

- The Site tab has been renamed to Connection.
- On the General tab of the Configuration window, the Enable scales support check box has been renamed to the Enable scale support.
- On the Log tab of the Configuration window, the Log debug information check box has been removed.
- On the Print Jobs screen (SM206500), the **End Date** field in the Summary area of the screen is now empty by default.

Changes to Incrementing the Business Date

In MYOB advanced, the business date is displayed in the info area. The business date is the date that the system will insert by default into the records that you add to the system.

By default, the current date is set as the business date. If the *Secure Business Date* feature is disabled on the Enable/Disable Features screen (CS100000), all users can change the business date by clicking the **Business Date** menu button in the info area. If the *Secure Business Date feature* is enabled, users can change the business date only if the BusinessDateOverride role is assigned to them.

Incrementing the Business Date

As of this release, the system increments the business date at midnight individually for each user session: The date is automatically incremented at midnight only if the particular user has not modified the business date in any way during the user session.

That is, if a user does not change the business date during the user session and the session is active at midnight, the system increments the date. If the user has modified the business date somehow, the system will keep the changed date as long as the user session is active.

Other Improvements

Multiple changes have been made to MYOB Advanced to improve usability of functionality for system administrators.

The New Filter Conditions

In the dialog boxes used for filtering table columns and in quick filters, the following new conditions have been added: **Does Not Equal** and **Is Empty**. The **Does Not Equal** condition is available for all field types except drop-down lists. The **Is Empty** condition is available for only drop-down lists in which an empty value is allowed.

By selecting the **Does Not Equal** condition, a user can display only the entities whose value for the setting is not equal to the specific value the user enters (see the following screenshot). This addition improves the usability of inquiry screens in MYOB Advanced (especially generic inquiries).
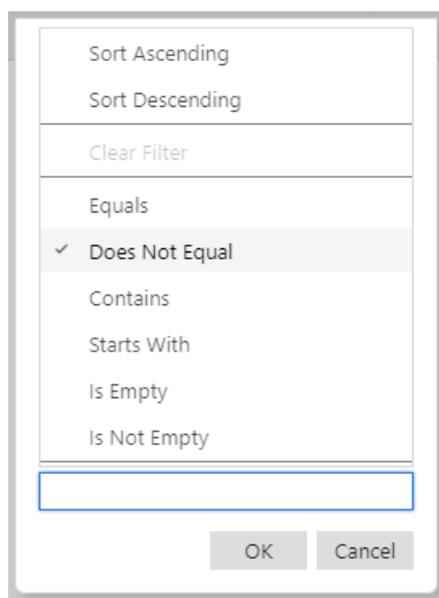
By selecting the **Is Empty** condition, a user can display only the entities whose value for the setting is empty. This addition improves the usability of filters for fields that are drop-down lists that include empty values. If the empty value is not available for selection, the **Is Empty** condition will not be displayed.

Select Screen Name Lookup Table Improved

A variety of screens contain a new **Screen Name** field, in which an MYOB Advanced screen can be selected. If the user clicks the selector button, the Select Screen Name lookup table opens. This lookup table, in which the user can search for and select a specific screen, has been improved to ease the process of finding the correct screen.

This lookup table now has the following columns (see the following screenshot):

- Title
- Screen ID
- Workspaces
- Category

The user can search for a screen by any of the columns, and change the column order by dragging any column to its needed location.

Improvement of the Processing of Images Embedded in Emails

The processing and storing of incoming and outgoing emails in MYOB Advanced having embedded images has been improved. Now all emails that have embedded images encoded by the base64 algorithm are processed in the following way:

1. The base64 attachment is extracted from the email.
2. The extracted attachment is saved as a file.
3. The file is attached to the email.
4. The link to the attached file is inserted into the email body. This improvement does not affect the display of the email.

Changes to the Request Profiler Screen

On the Request Profiler (SM205070) screen, the **Start** and **Stop** buttons have been replaced by the **Log Requests** check box, and the **Log SQL Requests Stack Trace** check box has been renamed to **Log SQL** (see the following screenshot).
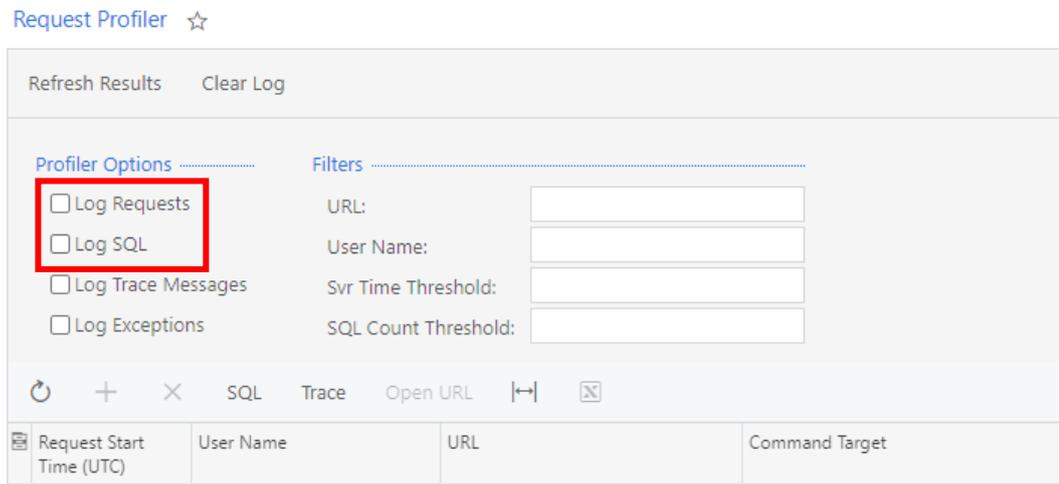
This change is relevant both for SaaS and on-premises MYOB Advanced instances.

Default Number of Copies for Printing

MYOB Advanced gives users the capability of entering the default number of document copies to be printed by using a particular printer connected through DeviceHub. A system administrator can specify the default number of copies in the Default Number of Copies column for a particular printer on the Printers screen (SM206510) (see the following screenshot).
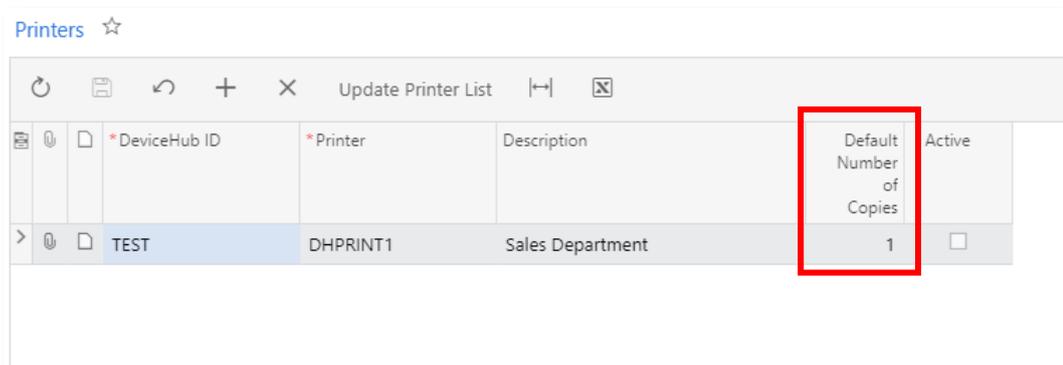
Usability Improvements

Improved File Management

The management of attached files has been improved in this release. A user can sort and filter the files attached to an entity and view the last date when an attachment was modified.

Sorting and Filtering Attachments

In the Files dialog box, a user can sort attached files by setting up a filter on any table columns, as demonstrated in the following screenshot.
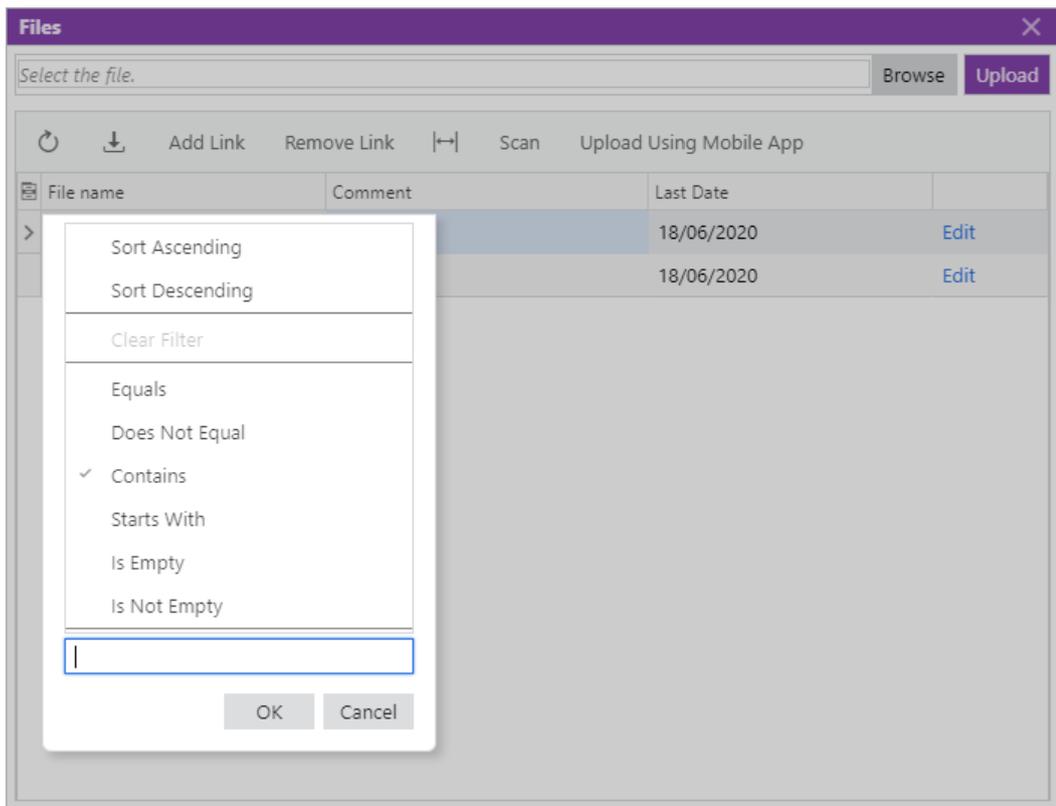
The Company/Branch Selection Menu

This release introduces a new Company/Branch selection menu. With this menu, a user can select the needed branch in one click, instead of selecting first a company and then a branch.

Capabilities of the Selection Menu

The selection menu displays all the available companies with their branches (if any) as a tree to reflect the parent-child relations among these entities, as shown in the following screenshot. The companies and branches an individual user can view in the box depend on the way security has been configured.

If a branch has been selected in the **Company/Branch** field, the selected value is highlighted when a user opens the selection menu.

Also, a user may search for a branch or company by typing a string into the empty **Company/Branch** field. The system will display only those companies and branches that contain the typed string (see the following screenshot).

Affected Screens

The new **Company/Branch** field with its selection menu has been added in place of the **Company** and **Branch** fields on multiple screens, reports, and inquiries related to the general ledger, accounts receivable, accounts payable, cash management, currency management, fixed assets, deferred revenue, and tax-related functionality.

Enhancements in the Use of the Tab Key

In MYOB Advanced, users can press the Tab key to move to the next column of a table. Previously, if a table contained many columns, and a user wanted to navigate to the cell of the last column in the row, the user had to press Tab as many times as there were columns prior to the needed one. As of this release, a user can specify which columns in the table are accessible for keyboard actions and which ones should be skipped by the system.

By default, changes in the column configuration are applied to the current user account. However, a user with administrative access to the system can configure the column accessibility and share its configuration with specific users in the system or make it the default configuration for all users. To share the configuration or make it the default configuration for other users, a user with administrative access rights needs to click **Tools > Share Column Configuration** on the screen title bar. The system opens the Share Column Configuration dialog box, which can be used to set the current table layout on the particular screen as the default layout and to share the settings with multiple users.

Setting the Accessibility of Table Columns

For each table of an entry or processing screen, a user can identify the accessibility of the column cells by using the Column Configuration dialog box. In the **Selected Columns** list of this dialog box, the system displays the columns that are visible on the table. These table columns may look like those in the following screenshot.
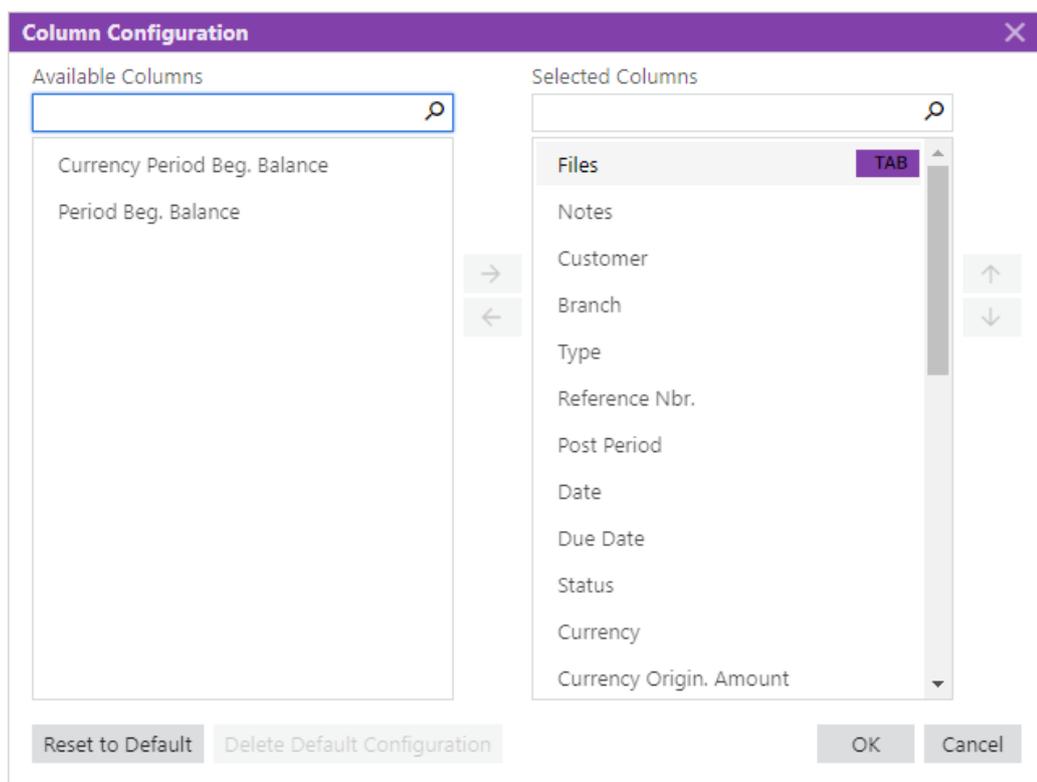
TAB indicates that the column is accessible through a keyboard. This button is not visible by default and appears only when a user points at the column name.

~~TAB~~ indicates that the column is not accessible through a keyboard. If accessibility for a column has been turned off, this button is visible by default and stays visible when a user points at the column name. The system skips this column when the user presses the Tab key on the keyboard.

To change the state of the accessibility of a column, the user needs to point at the column name and click the ▮TAB▮ or ~~TAB~~ button as appropriate.

Quick Opening Entry Screens

As of this release, users have the ability to open an entry screen directly from the workspace where a substitute screen is included. To provide this ability, a **+ NEW** button has been introduced. The **+ NEW** button appears for substitute screens for data entry screens (on which you can initiate a new record) and is not available for reports, inquiry screens, or processing screens.

Differences in Opening the Entry Screen

A substitute screen has a list of records related to the screen for which it is being substituted. Previously, if a user needed to open an entry screen from a workspace, the user had to first perform several steps. For example, when a user opened the Bills and Adjustments substitute screen from a workspace, the system opened the list of vendor documents—including landed cost bills, adjustments, and prepayments. To enter a bill on the data entry screen, the user clicked the **New Record** button on the screen toolbar.

With the newly introduced button, the user can open the entry screen directly from the workspace with just one click. This user needs to hover the mouse over the name of the screen and click the **+ NEW button**.
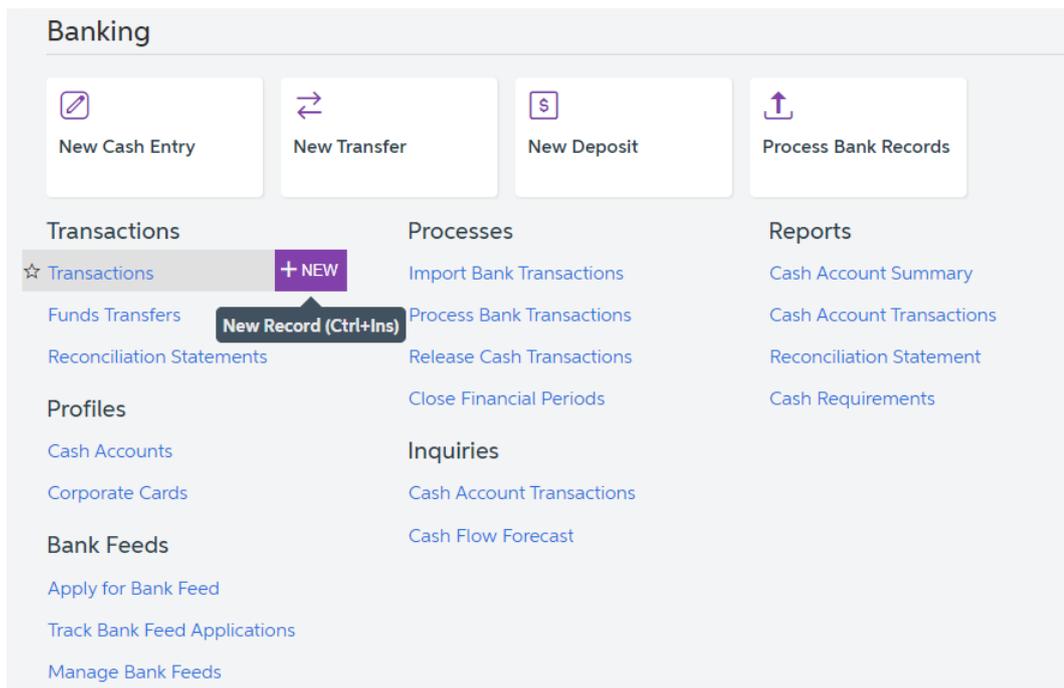
Steps to Open an Entry Screen from a Workspace

To open an entry screen from a workspace, do the following:

1. Open any workspace.
2. Hover over the substitute screen, and click the **+ NEW** button when it appears. The entry screen opens, and you can create a new entity on the screen.

Side Panels for Data Entry Screens

In MYOB Advanced, you can view data on inquiries that have been created on the Generic Inquiry screen (SM208000). An inquiry may include related screens that are displayed as tabs on the side panel. A side panel is a navigation option that could be previously enabled for a generic inquiry only. It displays the details of entities related to the record that is currently selected on the inquiry. As of this release, users can enable the functionality of side panels not only on inquiries but on other screens as well. Side panels for inquiries are added on the Generic Inquiry screen. To add side panels for screens that are not generic inquiries, a user defined as a customizer can create a customization project in the Customization Project Editor.

As the side panel, the customizer can select an inquiry, report, or dashboard. Depending on the information users need to be displayed, the customizer can set up parameters.

In the screenshot below, for the side panel of the Customers screen (AR303000), the Cases screen (CR3060PL) has been selected. Users can open any customer record and view in the side panel the cases associated with the customer whose record is being viewed.

Adding a Side Panel to the Data Entry Screen

A customiser can add multiple side panel navigation paths to a data entry screen. To add a side panel, the customizer navigates to the Customisation Projects screen (SM204505) and creates a new project. In the Customisation Project Editor, the customizer selects the screen for which the side panel is planned to be added.

On the Screens > Screen ID > Actions, the customizer adds an action of the **Navigation: Side panel** type, specifies general settings, adds a **Destination Screen** and specifies parameters if needed (for instance, in the screenshot below, Business Account was selected as a parameter so that the side panel displayed the cases of the specific customer selected on the data entry screen).
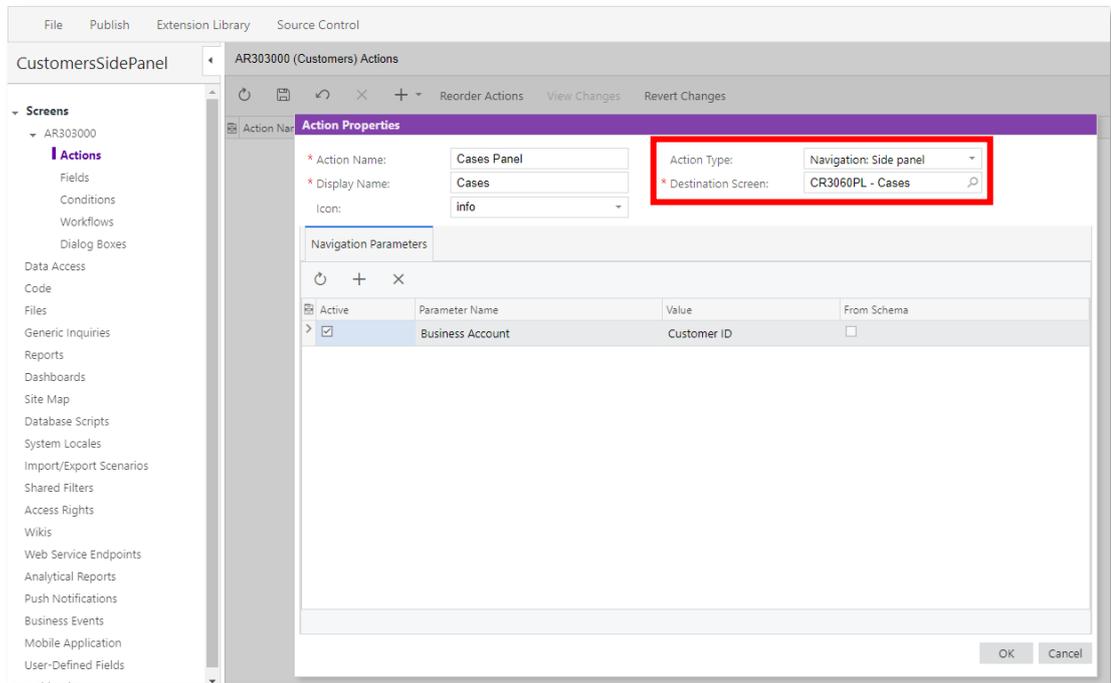
To apply the changes, the customiser must publish the created customisation project.

User-Defined Lookup Boxes

The functionality of user-defined fields has been expanded in this release. A user can now add to a data entry screen a lookup box in which users select a value from a list of values of a data field selected from a data access class.

Creating an Attribute for User-Defined Lookup Box

A user creates new attributes in the system on the Attributes screen (CS205000). On this screen, a new "Selector" option has been added for the **Control Type** box. When the option is selected for the newly created attribute, the system hides the **Entry Mask** and **Reg. Exp.** fields and instead displays the **Schema Object** and **Schema Field** fields.

In the **Schema Object** field, the user selects the data access class (DAC) that contains the field whose values the system will use as attribute values. Then in the **Schema Field** field, the user selects the field whose values the system will use as attribute values.

The following screenshot demonstrates the Order Type attribute with the Selector control type. The system will use the OrderType field from the PX.Objects.SO.SOOrder data access class to retrieve the values for the lookup box.

Adding a User-Defined Field to a Screen

After the attribute has been created, a user can add it as a user-defined field to a data entry screen by using the Customisation menu on the screen title bar.

> **Note:** Only users with the Customiser user role can add user-defined fields. Adding user-defined fields is available to a limited number of screens.

On the screen for which a user added user-defined fields, the original information of the record is displayed on the Document tab. The added user-defined field is displayed on the User-Defined Fields tab, as the following screenshot demonstrates.

Documentation

Improvements in the Structure of Guides

This release includes multiple improvements to the structure of the guides that make up the documentation. Topics have been reorganized to relate to a particular process in the system and are grouped by the process: implementation, configuration, or processing of documents. The topics are organized as training lessons that users can perform independently of other lessons by using the U100 dataset.

For ease of navigation, some of the new and existing content has been regrouped into new guides.

The following sections outline the changes introduced in the end-user guides in MYOB Advanced.

Financial Management

The information related to credit policy management, previously available in Accounts Receivable, is now available under Credit Policy Management in the Financial Management guide, which makes it easier for users to access this guide through the Help dashboard. This guide includes topics about configuring credit terms, statement cycles, write-off methods, and dunning letters. It explains how to work with customers and documents on credit hold, generate customer statements, and create write-offs.

The Accounts Payable and Accounts Receivable guides have been improved and now contain more topics of the new type. Both guides now have a similar structure, which Topics on contract management, which were previously available in the Financial Management guide under Accounts Receivable, have been moved to a separate Contract Management guide.

Topics on tax management have been restructured and now include more topics of the new type. Additionally, the Taxes guide now includes topics describing how to process various types of taxable documents in the system and illustrating how multiple tax calculation methods are applied to the documents that a user creates.

Prices and Discounts

The topics on prices and discounts, which were previously available in the Accounts Payable and Accounts Receivable guides, have been moved to a separate Prices and Discounts guide.

This guide includes all topics about customer and vendor prices and discounts, and explains how to set them up and how to process various documents with prices and discounts in the system. Most of the topics of this guide have been reworked into topics of the new type.

Automated Warehouse Operations

Topics that described automated warehouse operations have been significantly extended and moved from the Order Management guide to a separate Automated Warehouse Operations guide. The topics of the guide are now grouped by automated processes and provide detailed information about each process, including workflow diagrams and implementation guidelines.

New Types of Topics

New types of topics in the Financial Management, Order Management, Inventory Management, Project Accounting, and Implementation guides have been introduced.

These topics are related to a particular process in the system and are grouped by the process: implementation, configuration, or processing documents.

> **Note:** The new topics have been implemented for a limited number of processes only. In future versions, the new topics will be implemented for all processes.

In the following sections, you will read about each type of topics.

General Information

This topic contains conceptual information related to the process. Information from this topic can give the reader basic knowledge about a particular entity or process in the system. Any additional information related to the entity or process is described in more specific conceptual topics in the same chapter.

Implementation Checklist

This topic contains a list of actions to be performed to configure the part of the system from scratch or to prepare the system for a particular business process. The topic may also list any settings that affect the workflow of a business process. Information from this topic can be used during the implementation of the system.

Configuration Prerequisites

This topic includes information about system settings that should be specified before a particular entity is configured. The topic lists the features that must be enabled and the settings that directly relate to the configuration process that is described in the topic. Information from this topic can be used to make sure that the system is ready for the creation of the entity.

Implementation Activity

This topic contains instructions to be performed to configure the described part of the system or to create a particular entity by using a new company or a company with the U100 data set. (The type of company is mentioned in each topic and depends on the process.) This topic can be used to develop skills of configuring a particular part of the system or creating a particular entity.

Generated Transactions

This topic describes the transactions that are generated in the general ledger when a particular business process is executed.

Mass-Processing Documents

This topic contains information about screens designed for the processing of multiple documents related to the business process. Depending on the process and the related screens, the topic may also include details about the rules of grouping documents into a single document and about the mass-printing of documents.

Process Activity

This topic lists the instructions that a user needs to complete to perform a particular business process by using the U100 data set. This topic can be used for training users to safely perform the business process in the system with the usage of demo data.

Related Report and Inquiry Screens

This topic lists the reports and generic inquiry screens related to the described process and to the entities involved in the process. These reports and generic inquiry screens are not used in the general process but can be useful when users need to view additional information related to the process.

New Types of Notes

New types of notes have been introduced in the documentation to improve the user experience.

Tip Notes

This type of note, illustrated in the following screenshot, provides users with information about an easier way to do something or advises them on the best practices for working in the system.

Attention Notes

This type of note replaces the notes used in the previous version of MYOB Advanced and draws extra attention to the information included in it; see an Attention note in the following screenshot. A note of this type can be used, for example, to point out that some functionality in MYOB Advanced is available only if a particular feature is enabled.

New Topics in the MYOB Advanced Framework Guide

The MYOB Advanced Framework Guide now includes the following topics, which were previously included only in the T100 Development: Introduction to MYOB Advanced Framework and T200 Development: MYOB Advanced Framework Fundamentals training courses:

- In the Configuring ASPX Webpages and Reports part:
  - In the Configuring the Page chapter:
    - Configuration of the Datasource Control
    - Configuration of Callback Commands
    - Configuration of Callbacks
  - In the Configuring Containers chapter:
    - Configuration of Container Controls
  - In the Configuring Tables chapter:
    - Configuration of Grids
    - Controls for Joined Data Fields
  - In the Configuring Boxes chapter:
    - Input Controls
    - To Enable Callback on a Control
- In the Accessing Data part:
  - In the Querying Data in MYOB Advanced Framework chapter:
    - PXView Type and Views Collection
    - Data View Delegates
  - In the Defining Relationships Between DACs chapter:
    - Master-Detail Relationship Between Data with PXDBDefault and PXParent
    - Selection of the Linked Data Through the Current Property
  - In the Working with Data in Cache and Session chapter:
    - Modification of Data in a PXCache Object
- In the Implementing Business Logic part:
  - In the Working with Events chapter:
    - Insertion of a Data Record
    - Update of a Data Record
    - Removal of a Data Record
    - Saving of Changes to the Database
    - Cancellation of Attribute Event Handlers
    - Validation of Field Values
    - Validation of a Data Record
    - Update of a Data Record on Update of a Field Value
    - Internal and External Presentation of Values
  - In the Working with Attributes chapter:
    - Replacement of Attributes for DAC Fields in CacheAttached
    - Custom Attributes
    - Update of Data with PXAccumulator Attributes
    - Restrictions in the Accumulator Attribute
  - In the Configuring the UI from the Back End chapter:
    - Data for Controls
    - Configuration of the User Interface in Code
    - Standard Buttons of the Page Toolbar
    - Configuration of Actions
    - Request of the User Confirmation
    - Identification of Actions Initiated in the UI

- Configuration of Drop-Down Lists
- Configuration of Selectors
    - In the Creating Particular Types of Forms chapter:
        - Configuration Parameters of the Application (Setup Forms)

Examples on GitHub

Multiple examples from the Integration Development Guide are now available in the Help-and-Training- Examples repository on GitHub. These examples show the use of the contract-based REST API.

To test the examples, a developer should do the following:

1. Clone the 2019R2 branch of the repository, or download its contents.
2. Find the examples in the **IntegrationDevelopmentGuide.postman_collection.json** file (which is a Postman collection) of the **IntegrationDevelopment\Help** folder in the branch.
3. Deploy a new MYOB Advanced instance with the U100 dataset. For details on deploying an instance, see" To Deploy an MYOB Advanced Instance" in the Installation Guide.
4. Specify the URL of the instance in the BaseURL variable of the collection.

Customization

Ability to Invoke the Base Method in Generic Event Handlers

In MYOB Advanced, an event handler can be overridden with or without the invocation of the base method. In previous versions of MYOB Advanced, only traditional event handlers supported the invocation of the base method. Now developers can invoke base method in generic event handlers, as shown in the example below.

```
void _(Events.RowDeleted<SOOrder> e, PXRowDeleted baseMethod)
{
baseMethod(e.Cache, e.Args);
}
```

In this example, the baseMethod parameter is an interceptor delegate.

Automatic Creation of a Base DAC Extension When a Projection View DAC Is Extended

As of this release, the Customization Project Editor helps developers to properly add a custom field to a projection view DAC— a data access class (DAC) with the PXProjectionAttribute.

In previous versions of MYOB Advanced, if a custom field had to be added to a DAC with PXProjectionAttribute, the developer had to manually add two extensions: an extension of a DAC that represents a database table, and an extension of the projection view DAC. Now when a developer adds a custom field to a projection view DAC on the Customized Data Classes page of Customization Project Editor, it automatically creates an extension of a DAC representing a database table with the same custom field.

Automation of Workflows in Customisation Project Editor

Developers can now customize a screen by defining a workflow in the Customisation Project Editor. A workflow is a process of changing the state of an entity as a result of a user performing an action. For example, the status of an opportunity can be changed depending on the actions a user has performed on the opportunity.

The process of defining a workflow does not require coding. To give developers the ability to define workflows, two new pages have been introduced to the Screens section of Customisation Project Editor, as shown in the following screenshot: the Workflows page and the Dialog Boxes page.
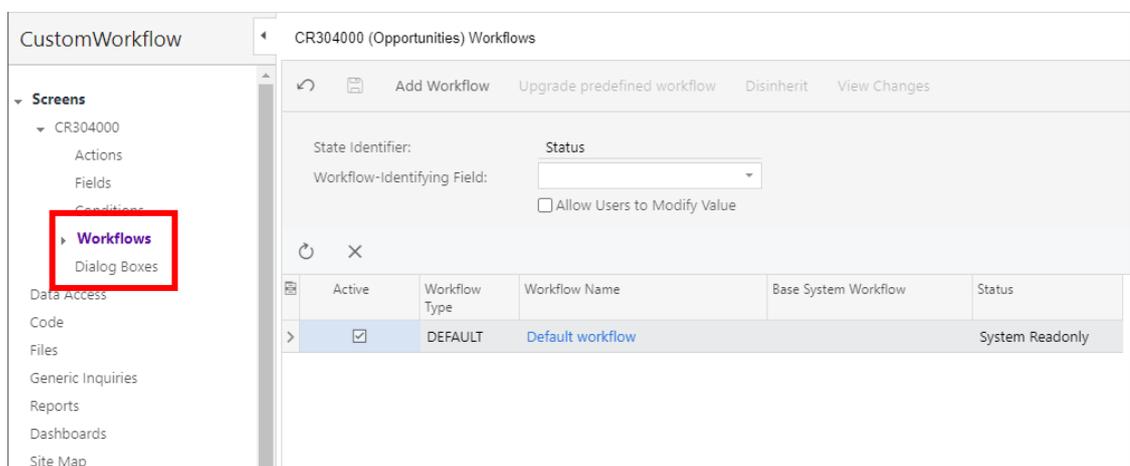
> **Note:** The automation steps and workflow functionality cannot be used simultaneously for a single screen. So if a developer wants to define workflows for a screen, the developer should deactivate any automation steps for this screen first.

Defining Workflows

A developer can define a single workflow for a whole screen or multiple workflows for the entities created on the screen that have a specific field value. For example, a developer can set up a workflow for any opportunity or for only opportunities of a particular opportunity class.

A workflow is defined in the following way: First, a developer determines all the possible states of an entity that is created and worked with on a screen. (For example, with an opportunity, the developer determines all possible statuses of the opportunity.) Then for each state, the developer adds all actions that can be performed with an entity in this state and all transitions—that is, all the ways the values of an entity's properties and state should be changed when each specific action is performed. If a user has to provide additional information to the system during a workflow, a developer can define dialog boxes.

For each state of the workflow, the developer can specify which UI elements and actions on the applicable screen are shown, enabled, and required. Also, the developer can add new values for the field (for example, Status) that determines the state of an entity.

An example of a fully defined workflow for an opportunity is presented in the following screenshot.

In the navigation pane of the screenshot above, you can see that a workflow is defined for the Opportunities screen (CR304000) (Item 1 in the screenshot). Default workflow is shown on the Workflows page. On the States and Transitions pane (Item 2), all possible states of an opportunity (which in this example are values of the **Status** field on the Opportunities screen) are shown. The State Properties tab displays the fields of the Opportunities screen that should have particular settings when the status of an opportunity is "New" (Item 3 in the screenshot).

For each state, any number of transitions can be defined on the Transition Properties tab of the Workflows page. Each transition contains the definition of how the values of the entity's properties and the entity's state should be changed when a specific action (indicated in the **Action Name** field) is performed. An example of the properties of a transition is shown in the following screenshot.
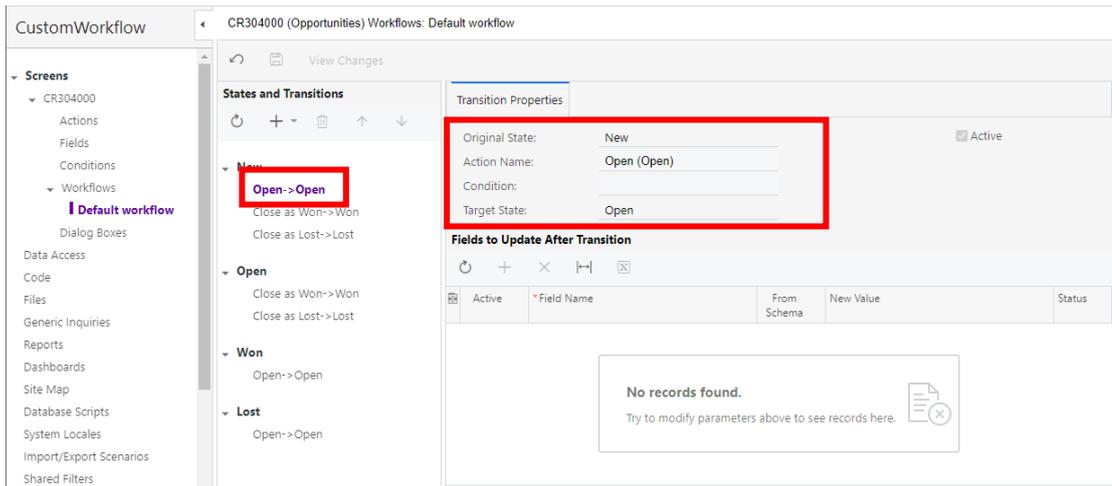
In the screenshot, the Open transition is shown. It indicates that the system should change the state (that is, the status) of an opportunity from New to Open when the Open (Open) action is performed.

Workflow Types

Some MYOB Advanced screens have predefined workflows. A predefined workflow always has a workflow type of "DEFAULT". A workflow with this type is applied to all entities regardless of their properties. Other possible values of the workflow type are values of the selected **Workflow- Identifying Field**.

Developers can define custom workflows from scratch or workflows based on the predefined workflow. To apply a workflow to all entities regardless of their property values, a developer can set the workflow type to "DEFAULT".

To apply a custom workflow to entities with a specific property value, the developer can select the **Workflow-Identifying Field** on the Workflows page and click **Add Workflow** on the page toolbar; in the **Add Workflow** dialog box, which opens, the developer needs to specify a type other than "DEFAULT". For example, to apply a workflow with a specific opportunity class, a developer should select Class ID in the **Workflow-Identifying Field** box on the Workflows page, click **Add Workflow** on the page toolbar. Then in the Add Workflow dialog box, the developer should select a type other than "DEFAULT", as shown in the following screenshot.
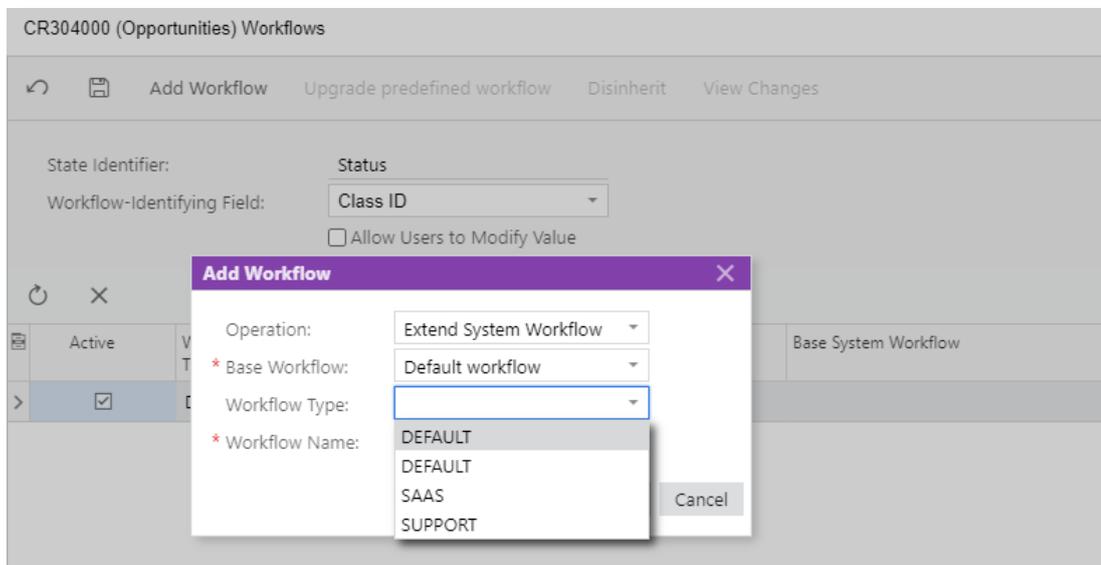
A custom workflow based on the predefined workflow inherits all modifications of the predefined workflow. A developer can view the difference between a predefined workflow and a custom workflow, and revert changes in the custom workflow.

> **Note:** If, in later updates, a predefined workflow is changed, the custom workflows based on the predefined workflow will inherit the changes.

Workflow Dialog Boxes

A developer can configure a workflow dialog box: a dialog box, which is part of the workflow, that is shown to a user who clicks a particular action button or menu command. This might be helpful if the developer wants the user to provide additional values to perform an action and change the state of an entity.

Returning to the example of opportunities, suppose that to open an opportunity, a user should provide a value for the Reason and Stage fields. The following screenshot shows configuration of such a dialog box on the Dialog Boxes page.
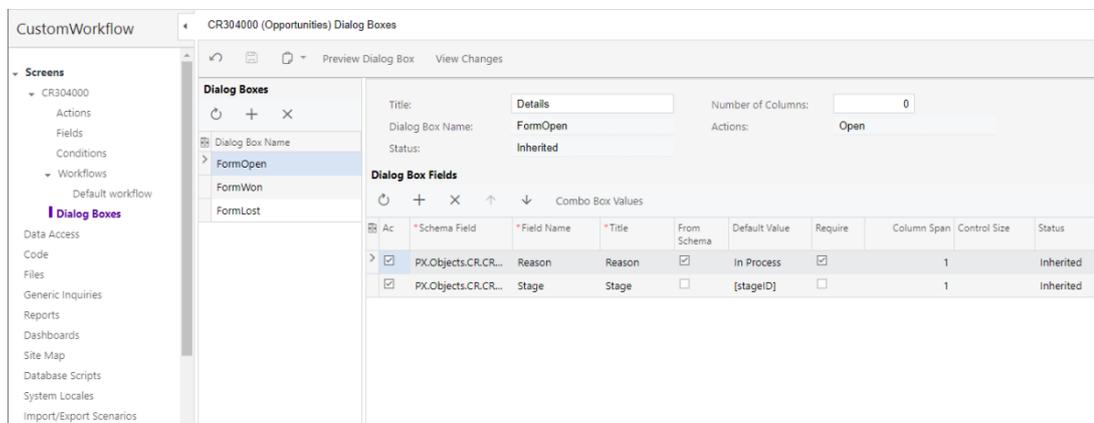
After a dialog box has been created and configured, a developer can define an action in the Screen Editor so that this dialog box is shown when a user clicks this action.

Workflow Actions

For each state of an entity, a developer can define which actions are enabled for the current state and create new workflow actions. A workflow action is a simplified type of an action that is not associated with a graph method. A workflow action can be used only to change the state of an entity, display a dialog box (see "Workflow Dialog Boxes" on page 218), and change the specified field values.

A developer configures the workflow actions for a state on the Actions tab of the Workflows page, as shown in the following screenshot.
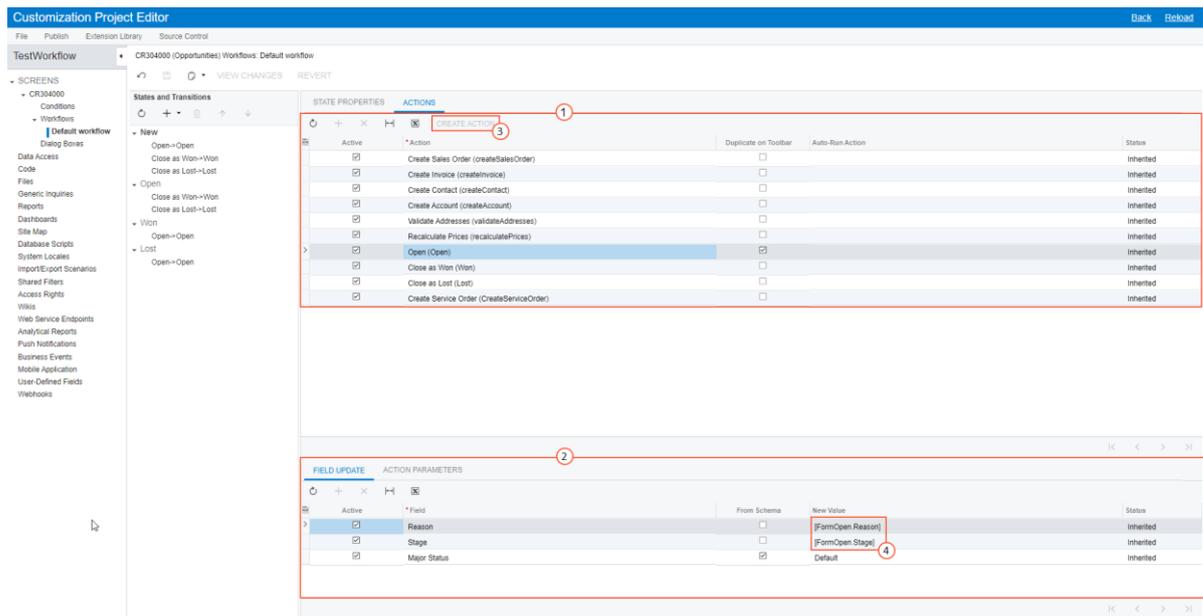
The screenshot above shows a list of workflow actions (Item 1 in the screenshot) configured for the New state of an opportunity and details of the Open action (Item 2 in the screenshot). The developer can click the **Create Action** button on the toolbar (Item 3 in the screenshot) to create a new workflow action. The Field Update tab (also shown in Item 2) shows what value should be assigned to the fields of the Opportunities screen when a user clicks the Open action and enters a value in the FormOpen dialog box (Item 4 in the screenshot).

CRM Workflows

The processing of opportunities and cases has been redesigned to use the new workflow engine. For details, see "New Workflow in Opportunities and Cases" on page 69.

Developers can customize workflows or create new workflows for the Opportunities (CR304000) screen or the Cases (CR306000) screen. Developers can customise existing workflows in the Customisation Project Editor or by extending graphs and workflows in the PX.Objects.CR.Workflows namespace. An example of a workflow extension is shown in the following code:

```
public class OpportunityWorkflowExt
  : PX.Data.PXGraphExtension<OpportunityWorkflow, OpportunityMaint>
```

The automation steps for these screens are no longer available.

Extended Editors for Fields and Actions

Developers can now configure fields and add new actions or customize exiting actions by using the Field Editor and Action Editor of the Customisation Project Editor. The editors can be accessed in the Screens node of the navigation pane.

Action Editor

In the Action Editor, a developer can add a new action, modify an action in a predefined workflow, or modify an action defined in a graph. Actions added in the predefined workflow are automatically displayed in the editor.

The following functions of the editor were previously available in the Screen Editor:

- Creation of an action
- Modification of an action properties

A developer can configure the properties of an action, specify the dialog box that should be displayed when the action is invoked, and specify a processing screen where the action is displayed. The Action Editor page is shown in the following screenshot.
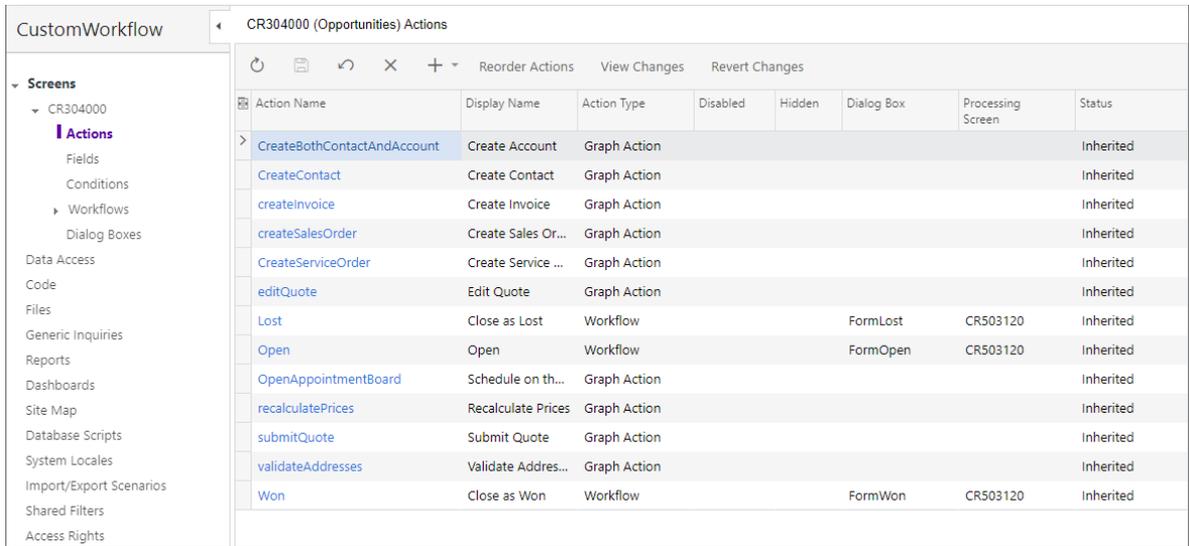
The adding of a new action is performed in the editor by using the Action Properties dialog box, which is shown in the screenshot below. A user can add a new action, modify an action in a predefined workflow, or modify an action defined in a graph.
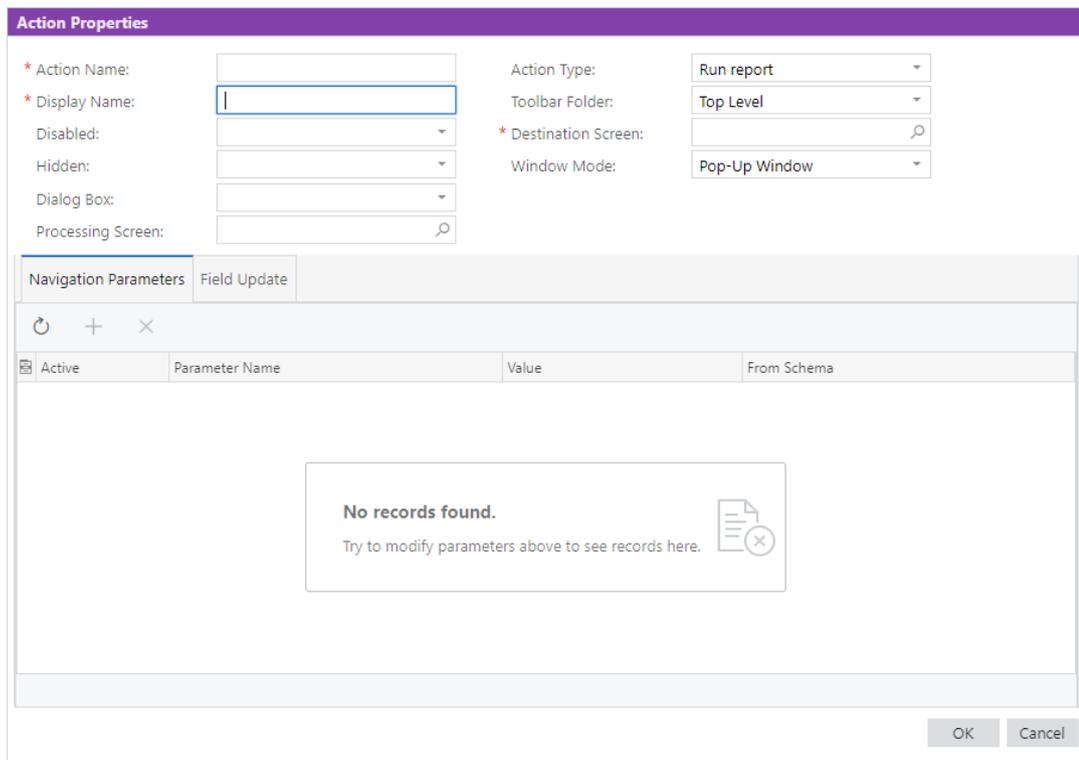
Field Editor

In the Field Editor, a developer can modify the properties of a specified field. Fields modified in the predefined workflow are automatically displayed in the editor.

> **Note:** Modification of the Disabled, Hidden, and Required properties was previously available on the Main Properties tab of the Screen Editor. The Main Properties tab of the Screen Editor has been removed.

The Field Editor page is shown in the following screenshot.
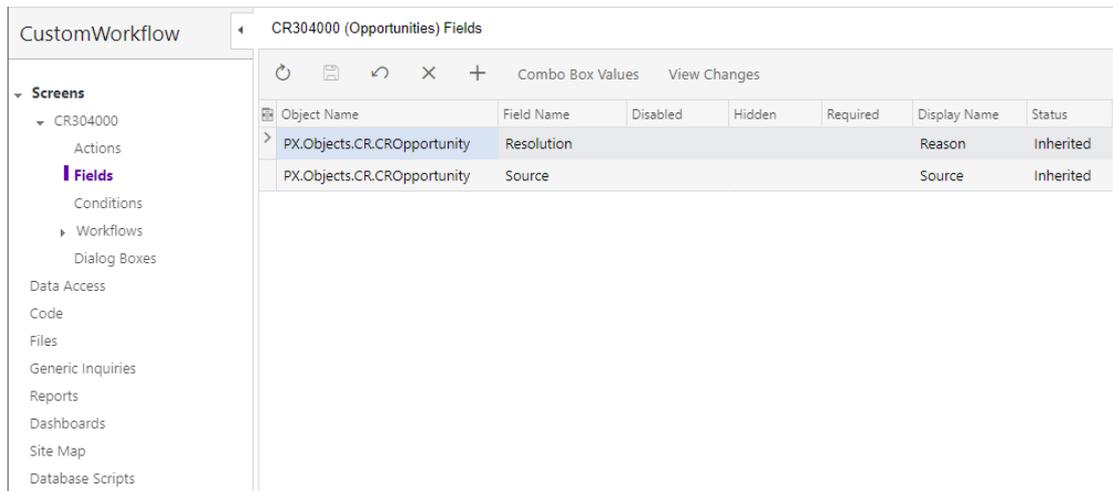
A developer can add only existing fields to the editor. The adding of a field is performed in the editor by using the Add Field dialog box, which is shown in the screenshot below.
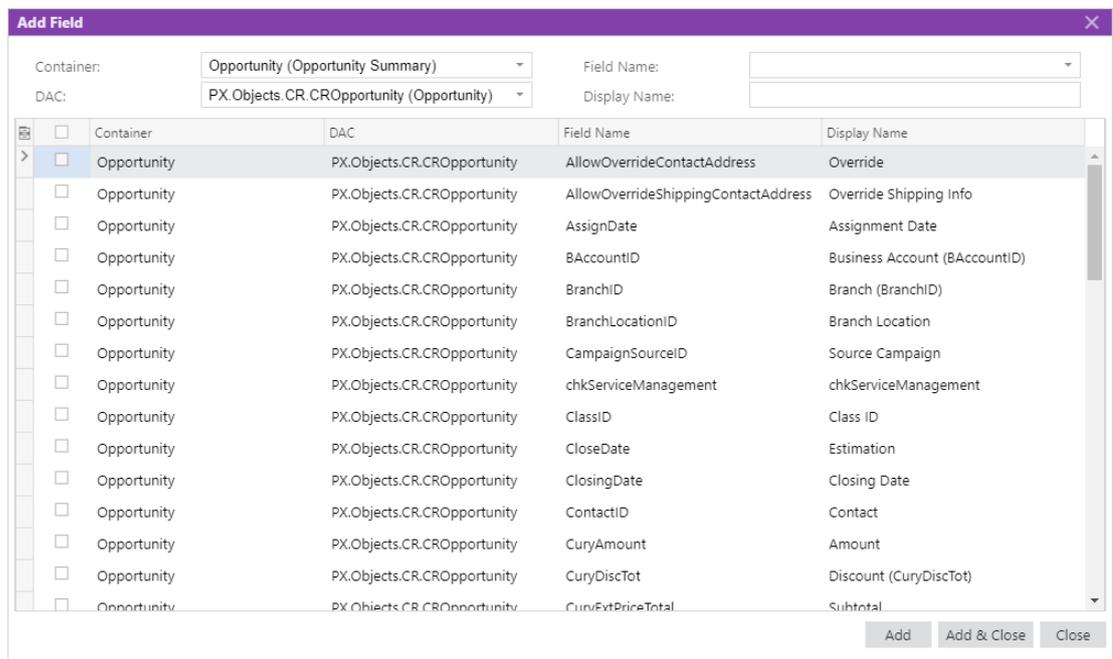
Platform API

The Company/Branch Selection Menu

This release introduces a new Company/Branch selection menu. With this selection menu, a user can select the needed branch in one click, instead of selecting first a company and then a branch—see "The Company/Branch Selection Menu" on page 204 for details.

To add the Company/Branch selection menu to a custom inquiry or processing screen, a developer should do the following:

1. In the filter DAC, create an integer field and add the OrganizationTree attribute to this field, as shown in the following code example.

```
#region OrgBAccountID
public abstract class orgBAccountID : PX.Data.BQL.BqlInt.Field<orgBAccountID>
 { }

[OrganizationTree(
    sourceOrganizationID: typeof(organizationID),
    sourceBrancID: typeof(branchID),
    onlyActive: false)]
public int? OrgBAccountID { get; set; } #endregion
```

2. In the ASPX code of the screen, add the PXBranchSelector control, as the following code example shows.

```
<px:PXBranchSelector CommitChanges="True" ID="edOrgBAccountID"
     runat="server" DataField="OrgBAccountID"/>
```

For details about the configuration of the Company/Branch selection menu, see "Company/Branch Selection Menu" in the User Guide.

Classic Site Map Replacement

In this release, the classic site map tree has been replaced with a list of all available screens—see "Classic User Interface Removal and Site Map Replacement" on page 171 for details.

To replace the classic site map tree with a list of screens on a custom MYOB Advanced screen, a developer should do the following:

1. In the ASPX code of the screen, make the following changes:
   a. Replace the PXTreeSelector control with PXSelector, which is shown in the following code example.

```
<px:PXSelector ID="edScreen" runat="server" DataField="ScreenID"
     DisplayMode="Text" FilterByAllFields="true" CommitChanges="True" />
```

   b. Remove the PXTreeDataMember element that corresponds to the site map tree from the DataTrees section; this section is shown in the following code example.

```
DataTrees>
    <px:PXTreeDataMember TreeView="SiteMapTree" TreeKeys="NodeID" />
</DataTrees>
```

2. In the graph that corresponds to the ASPX page, remove the data view of the site map tree control. An example of this data view is shown in the following code.

```
public new PX.SM.PXSelectSiteMapTree<False, False, False, True, False>
 SiteMap;
```

3. In the data access class that provides data for the ASPX page, add the PXSiteMapNodeSelector attribute (which is defined in the PX.Data namespace) to the field that stores the screen ID and is used to display the site map location. The attribute is shown in bold type in the following code example.

```
#region ScreenID
public abstract class screenID : PX.Data.BQL.BqlString.Field<screenID> { }

[PXDBString(8, IsFixed = true, InputMask = "CC.CC.CC.CC")]
[PXDefault]
[PXUIField(DisplayName = "Screen Name", Visibility =
 PXUIVisibility.SelectorVisible)]
[PXSiteMapNodeSelector]
public virtual string ScreenID { get; set; }
#endregion
```

Calling Protected Members in Graph Extensions

In previous releases, a developer could override a protected member of a graph in a graph extension but could not call this member in a graph extension. In this release, the new PXProtectedAccess attribute is introduced (in the PX.Data namespace), which developers can use to make a protected member of a graph available to be called in a graph extension. If the developer annotates a member in a graph extension with the PXProtectedAccess attribute and this member has the same signature as the corresponding member in the graph or lower-level graph extension, the framework replaces the body of the member annotated with PXProtectedAccess with the body of the corresponding member in the graph or lower-level graph extension.

The following sections show examples of PXProtectedAccess usage.

Calling Protected Members of a Graph

Suppose that the code of MYOB Advanced includes the following graph:

```
public class MyGraph : PXGraph<MyGraph>
{
    protected void Foo(int param1, string param2) { ... }
    protected static void Foo2() { }
    protected int Bar(MyDac dac) => dac.IntValue;
    protected decimal Prop { get; set; }
    protected double Field;
}
```

The developer can use the members in an extension of the graph, as shown in the following example.

```
public abstract class MyExt : PXGraphExtension<MyGraph>
{
    [PXProtectedAccess]
    protected abstract void Foo(int param1, string param2)
    [PXProtectedAccess]
    protected abstract void Foo2();
    [PXProtectedAccess]
    protected abstract int Bar(MyDac dac);
    [PXProtectedAccess]
    protected abstract decimal Prop { get; set; }
    [PXProtectedAccess]
    protected abstract double Field { get; set; }
    private void Test()
    {
        Foo(42, "23");
        int bar = Bar(new MyDac());
        decimal prop = Prop;
        Prop = prop + 12;
        double field = Field;
```

```
       Field = field + 15;
    }
}
```

Calling Protected Members of a Graph Extension

Suppose that the code of MYOB Advanced includes the following graph.

```
public class MyGraph : PXGraph<MyGraph>
{
    protected void Bar() { }
}
```

Suppose also that custom code includes the following extension of this graph.

```
public class MyExt : PXGraphExtension<MyGraph>
{
    protected void Foo() { }
}
```

The developer can use the protected member of the graph extension by specifying the
parameter of the attribute, as shown in the following example.

```
public abstract class MySecondLevelExt : PXGraphExtension<MyExt, MyGraph>
{
    [PXProtectedAccess]
    protected abstract void Bar();
    [PXProtectedAccess(typeof(MyExt))]
    protected abstract void Foo();
}
```

Logging Improvements

MYOB Advanced 2020.3 supports the logging mechanism provided by the
Microsoft.Extensions.Logging.Abstractions NuGet package. A developer can use this
mechanism in custom code to write to the trace log.

To use this mechanism, a developer should do the following:

1. Install the Microsoft.Extensions.Logging.Abstractions NuGet package to the Visual
   Studio project that contains custom code.
2. Add the following `using` directive to the code file that contains the logic for which
   a developer needs to write to the log.

   ```
   using Microsoft.Extensions.Logging;
   ```

3. In the graph that executes the logic, add a property of the ILogger<T> type, and
   assign the InjectDependency attribute to the property, as shown in the following
   example. Use the graph as the type parameter.

   > **Note:** For details about the InjectDependency attribute, see Dependency Injection
   > in the documentation.

   ```
   public class RSSVWorkOrderEntry : PXGraph<RSSVWorkOrderEntry,
   RSSVWorkOrder>
   {
       //Other code of the graph

       //The logger
       [InjectDependency]
       private ILogger<RSSVWorkOrderEntry> MyLogger { get; set; }
   }
   ```

4. In the code for which the developer needs to write to the log, such as in an action
   of the graph, call the methods of the ILogger<T> interface to write to the trace
   log. For details about the methods of the interface, see ILogger<TCategoryName>

Interface in the Microsoft documentation. The following example shows the call of the LogInformation method.

```
public class RSSVWorkOrderEntry : PXGraph<RSSVWorkOrderEntry, RSSVWorkOrder>
{
    //Other code of the graph

    //The logger
     [InjectDependency]
    private ILogger<RSSVWorkOrderEntry> MyLogger { get; set; }

    //A method in the graph
    public void AssignOrder(RSSVWorkOrder order)
    {
        //Implementation of the method
        //Writing to the log
        MyLogger.LogInformation(
        "The {OrderNbr} work order has been assigned.", order.OrderNbr);
    }
}
```

Do not use string formatting inside the log messages, as is shown in the following code example.

```
MyLogger.LogInformation(
    string.Format("The {0} work order has been assigned.", order.OrderNbr));
MyLogger.LogInformation(
    $"The {order.OrderNbr} work order has been assigned."));
```

A user can see the log message in the trace log (shown in the following screenshot) if the user clicks **Tools > Trace** on the screen title bar after the corresponding logic has been executed.

Enhancements in Dependency Injection

Developers can use dependency injection to encapsulate particular logic as a service, which they can then use anywhere in their application. In previous versions of the platform, this technique could be used only in graphs. As of this release, developers can also use dependency injection in attributes and custom action classes, as described below.

> **Note:** Dependency injection in MYOB Advanced Framework-based applications requires the use of the **Autofac.Module** class, which is provided by the external Autofac library. MYOB Advanced does not guarantee the backward compatibility of this library. For details about the Autofac library, see **https://autofac.readthedocs.io/en/latest/**.

For the examples shown in the following sections, suppose that dependency injection is defined as follows.

```
using System;
using Autofac;
using PX.Data;
namespace MyNamespace
{
    //An interface for the service
    public interface IMyService
    {
        void ProvideServiceFunctions();
    }
    //A class that implements the logic to be used for dependency injection
    public class MyService : IMyService
    {
        public void ProvideServiceFunctions()
        {
            //An implementation
        }
    }
    //A class that registers the implementation class with Autofac
    public class MyServiceRegistrarion : Module
    {
        protected override void Load(ContainerBuilder builder)
        {
            builder.RegisterType<MyService>().As<IMyService>();
        }
    }
}
```

For more information about the definition of the service for dependency injection, the registration of the service, and the use of dependency injection in graphs, see "Dependency Injection" in the documentation.

Dependency Injection in Attributes

For an attribute derived from PXEventSubscriberAttribute, developers can use dependency injection in the following way:

1. Define an attribute class and assign to its property the InjectDependency attribute, as shown in the following code example.

```
using System;
using PX.Data;
namespace MyNamespace
{
    public class CustomAttribute : PXEventSubscriberAttribute
    {
        [InjectDependency]
        public IMyService Service { get; set; }
    }
}
```

2. To support dependency injection in a constructor of the implementation class of the service, pass PXEventSubscriberAttribute, PXCache, or PXGraph (or any combination of these objects in the constructor), as shown in the following code example.

```
public class MyService : IMyService
{
    //A constructor with PXEventSubscriberAttribute
    public MyService(PXEventSubscriberAttribute parent)
    {
    //Code of the constructor
    }

    //A constructor with PXCache
```

```
    public MyService(PXCache cache)
    {
        //Code of the constructor
    }

    //A constructor with PXGraph
    public MyService(PXGraph graph)
    {
        //Code of the constructor
    }

    //A constructor with PXEventSubscriberAttribute and PXGraph
    public MyService(PXEventSubscriberAttribute parent, PXGraph graph)
    {
        //Code of the constructor
    }
    //Other code of the implementation class
}
```

Dependency Injection in Custom Action Classes

For a custom action class derived from the PXAction class or its descendants, developers can use dependency injection as follows:

1. Define a custom action class as shown in the following code example.

```
using System;
using PX.Data;

namespace MyNamespace
{
    public class CustomCancel<T> : PXCancel<T>
    where T: class, IBqlTable, new()
    {
         [InjectDependency]
        public IMyService Service { get; set; }

        //Other code of the custom action class
    }
}
```

2. To support dependency injection, in the implementation class of the service, add a constructor with PXAction or with both PXAction and PXGraph as parameters, as shown in the following code example.

```
public class MyService : IMyService
{
    public MyService(PXAction parent)
    {
        //Code of the constructor
    }

    public MyService(PXAction parent, PXGraph graph)
    {
        //Code of the constructor
    }

}
```

Web Services

Improvements to the Contract- Based APIs

This release includes the improvements to the contract-based SOAP and REST APIs that are described in the following sections.

Ability to Retrieve Multiple Detail Lines at a Time

In previous versions, for endpoints with Contract Version 3, multiple records could not be retrieved from MYOB Advanced with multiple kinds of detail lines at a time to exclude performance issues. For example, if a developer sent a GET HTTP request to the Default/18.200.001 endpoint to retrieve the list of sales orders with order details and shipments, the developer received the error More than one detail properties have been used in the request. To eliminate the error, the developer had to use separate requests for each kind of detail line.

In this release, a request of multiple kinds of detail lines at a time has been optimized for speed and can now be processed without any errors being generated. Therefore, through an endpoint with Contract Version 3, a developer can retrieve multiple kinds of detail lines in one request.

Persistent IDs of Top-Level Entities

In previous versions, each record that the system had returned in a response to a contract-based API request was assigned a session entity ID (in the ID property), which was different for each new session with MYOB Advanced.

Now the records of top-level entities that a developer retrieves through the contract-based API have persistent IDs, which are the values of the NoteID column of the corresponding database tables. Thus, developers can use the value from the ID property of a top-level entity returned from MYOB Advanced throughout different sessions with MYOB Advanced. However, if a record does not have a note ID (which could be the case for detail entities, entities that correspond to generic inquiries, or custom entities), this record will still be assigned an entity ID that is new for each new session.

For details about the entity ID, see "Retrieval of a Record by ID" in the documentation.

Other Changes

In this release, the REST API is now case insensitive. For example, the following issues related to case sensitivity have been fixed:

- If an improper case was used in the letters that make up the entity name, the filtering of records could work incorrectly.
- In PUT requests, the system ignored the value keyword if it was specified starting with an uppercase letter (Value).
- In PUT requests, the system ignored the fields if there was a mistake in the case of the field name.

In the contract-based SOAP API, the GetProcessStatus() method now returns the Completed status if a synchronous operation was invoked by the Invoke() method.

Ability to Obtain the MYOB Advanced Version and the List of Endpoints

As of this release, a developer can obtain the MYOB Advanced version and the list of contract- based endpoints available in this version by using the REST API.

To obtain this information, the developer should send a GET HTTP request to the following URL:

```
http://<MYOB Advanced instance URL>/entity
```

An example of the response in JSON format is shown below.

```
{
    "version": {
        "acumaticaBuildVersion": "19.191.0093",
        "databaseVersion": "19.191.0093"
    },
    "endpoints": [
        {
            "name": "Default",
            "version": "17.200.001",
            "href": "/MYOBAdvanced/entity/Default/17.200.001/"
        },
        {
            "name": "DeviceHub",
            "version": "17.200.001",
            "href": "/MYOBAdvanced /entity/DeviceHub/17.200.001/"
        },
        {
            "name": "POS",
            "version": "17.200.001",
            "href": "/MYOBAdvanced /entity/POS/17.200.001/"
        },
        {
            "name": "Default",
            "version": "18.200.001",
            "href": "/MYOBAdvanced /entity/Default/18.200.001/"
        },
        {
            "name": "Default",
            "version": "6.00.001",
            "href": "/MYOBAdvanced /entity/Default/6.00.001/"
        }
    ]
}
```

The list of endpoints in the response includes the custom endpoints configured in a particular tenant of the MYOB Advanced instance if the request is sent along with the authentication information.

For details about the retrieval of the list of endpoints, see "Retrieval of the MYOB Advanced Version and the List of Endpoints" in the documentation.

Support of OAuth 2.0 and OpenID Connect for OData

MYOB Advanced supports the OAuth 2.0 mechanism of authorization for applications that are integrated with MYOB Advanced through application programming interfaces (APIs). When a client application of MYOB Advanced uses the OAuth 2.0 mechanism of authorization, the client application does not operate with the MYOB Advanced credentials to sign in a user to MYOB Advanced; instead, the application obtains an access token from MYOB Advanced and uses this token when it requests data from MYOB Advanced.

In previous versions of MYOB Advanced, only the client applications that use the contract-based web services APIs could implement the OAuth 2.0 or OpenID Connect authorization mechanism. Now developers can authorize the client applications that use OData by using OAuth 2.0 or OpenID Connect.

For the OData client applications, developers can use the same authorization flows that are supported for the contract-based web services applications. These flows are the following:

- Authorization code
- Implicit
- Resource owner password credentials

For more information, see "Comparison of the Flows", "To Register a Client Application", and "To Revoke the Access of a Connected Application" in the documentation.

Ability to Limit API Connections for Integrated Applications

In previous versions of MYOB Advanced, if the integration application did not properly sign out from MYOB Advanced, this application could use all API sessions included in the license, thus preventing other integration applications from signing in. As of this release, a developer or system administrator can limit the number of sessions that an integration application uses.

How to Configure the Limitation

To limit the number of sessions used by integration applications, the developer or system administrator can perform the following general steps:

1. On the User Roles screen (SM201005), create a user role that will be used by integration applications.
2. On the User Types screen (EP202500), create a user type that will be used by integration applications, and add the role that has been created in previous step to the list of allowed roles for this type.
3. Remain on the User Types screen with the new user type selected, and on the Login Rules tab, specify the following settings (which are shown in the following screenshot):
    - **Allowed Login Type**:
        - o "API" if the integration application uses the Login method of one of the web services API to sign in to MYOB Advanced
        - o "Unrestricted" if the integration application uses OAuth 2.0 mechanism of authorization
    - **Allowed Number of Sessions**: The maximum number of sessions you want to allow for each integration application
    - **Turn Off Two-Factor Authentication**: Selected

4. On the Users screen (SM201010), create a user account for each integration application that can work with this MYOB Advanced instance and specify the user type and user role that have been created in the previous steps.
5. In each of the integration applications, implement the signing in to MYOB Advanced with its own user account (one of the user accounts created in the previous step).

For details about the configuration of the limitation, see "To Limit the Number of API Connections of Integrated Applications" and "To Limit API Connections of a Particular Application" in the documentation.

Webhooks for Integration

This release provides webhooks as a new way to integrate external applications that provide data in their own format and need to submit this data to MYOB Advanced. For example, HubSpot collects data about email clicks and can export this data in a specific format to a particular URL. With the new webhooks, a developer can configure MYOB Advanced to process the data submitted to a particular URL and save the data in MYOB Advanced.

To process data from an external application in MYOB Advanced with webhooks, a developer needs to perform the following general steps, which are described in greater detail below:

1. The developer creates an implementation class that will process the requests from an external application.
2. The developer registers the implementation class on the Webhooks screen (SM304000) of MYOB Advanced.
3. The developer copies the URL that is generated during the registration of the implementation class, and then specifies this URL in the external application so that it sends requests to this URL.
4. The developer tests the processing of the requests.
5. If the webhook must be used on multiple MYOB Advanced instances, the developer includes the webhook in a customization project and publishes this project to the needed MYOB Advanced instances.

1. Creation of an Implementation Class

An implementation class is a custom class that processes the requests passed to a particular URL. This class must implement the IWebhookHandler interface. For more convenient implementation, we recommend that the developer implement this interface in a graph (that is, a class of the PXGraph type).

The IWebhookHandler interface has one method with the following signature.

```
IHttpActionResult ProcessRequest(
    HttpRequestMessage request, CancellationToken cancellationToken)
```

In this method, the developer needs to process a request from an external application, including the following:

- Process authentication information in the request
- Transform the data in external format to the data that can be saved in MYOB Advanced
- Invoke graph methods that save the data in MYOB Advanced

The developer needs to place a DLL file with the implementation class in the Bin folder of the MYOB Advanced instance.

2. Registration of the Implementation Class in MYOB Advanced

On the new Webhooks screen (SM304000), which is shown in the following screenshot, the developer needs to register the implementation class. When the developer saves the webhook for the implementation class on the screen, the system inserts into the URL box the URL that can be used by an external application to send data to MYOB Advanced. The developer should copy this URL for use in the next step.

3. Configuration of the External Application

In the external application, the developer should specify the URL that has been generated on the Webhooks screen (SM304000) for the webhook, so that the external application sends requests to this URL.

A request sent to MYOB Advanced must satisfy the following requirements:

- The request type must be POST or GET.
- The body must contain only the data that can be transferred with the HTTP protocol.
- The body of the request must be no longer than the value specified by the `webhook:maxrequestsize` key of the **web.config** file of the MYOB Advanced instance. By default, this value is 1 MB. The developer can change the default value by specifying a different value in the key of **web.config**.

4. Testing of the Requests

The developer can use the Request History tab of the Webhooks screen (SM304000) to specify which requests should be saved in the log and to check the statuses of the processing of requests. By clicking the **Show Request Details** button (shown in the following screenshot) on the table toolbar of the tab, the developer can open the dialog box, which contains the details of the request, the response, and any errors.
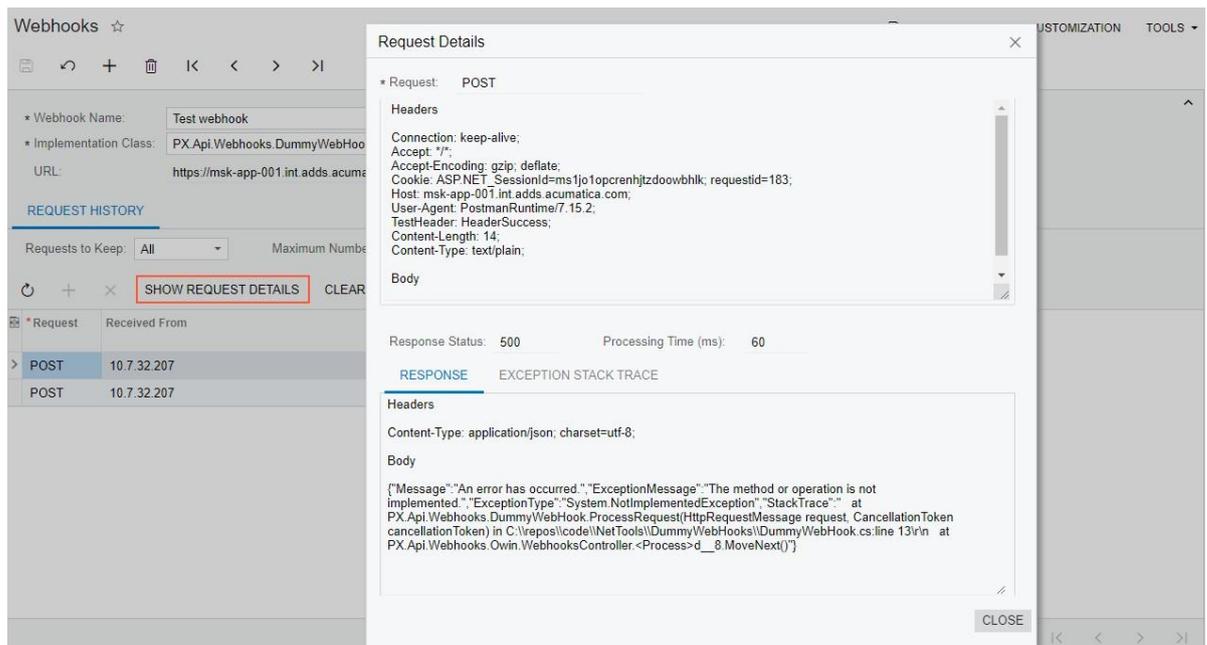
The developer can limit the length of the body of the request that is stored in the history by using the `webhook:maxbodysizetolog` key of the **web.config** file of the MYOB Advanced instance. By default, the length is 10 KB. In the request details stored in the history, the system trims the rest of the body that exceeds the specified length.

5. Inclusion in a Customization Project

The developer can include the webhook in a customization project by using the Customization Project Editor, which contains a new Webhooks page (shown in the following screenshot). For a webhook listed on this page, the developer can select the **Predefined** check box, which (if selected) makes the implementation class of the webhook unavailable for editing in the instance where the customization project is published. (In this instance, an administrative user can still make the webhook inactive and modify the request history settings.)

> **Note:** A developer must also include the DLL file with the implementation class in the customization project as a File item.
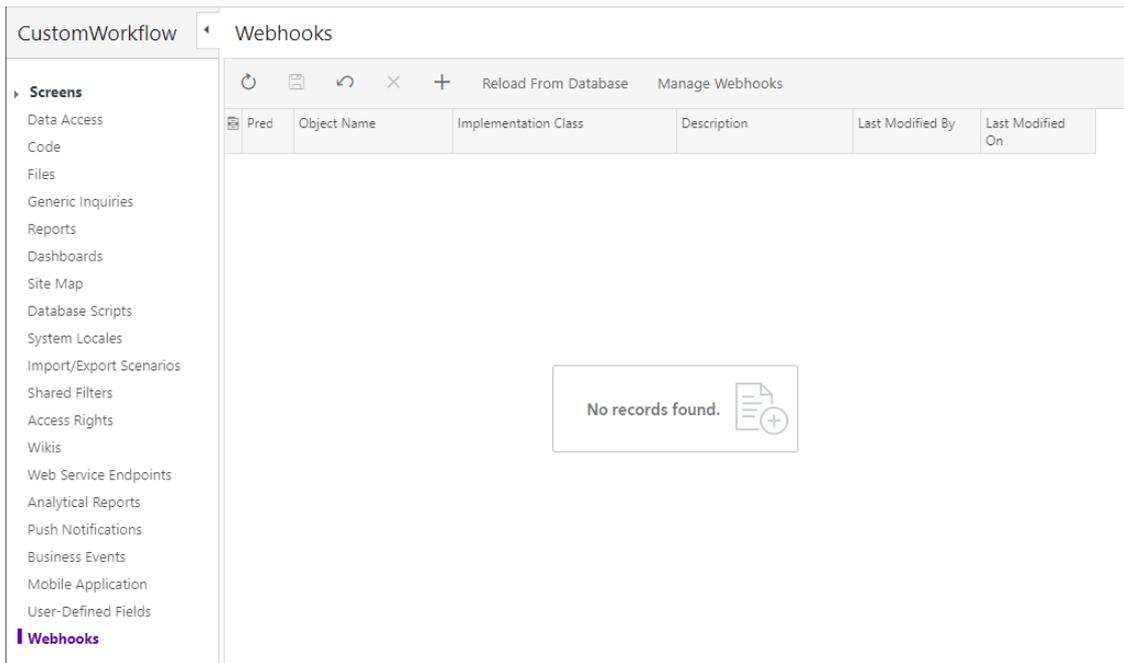
Automation Workflows in the Contract-Based APIs

Developers can now customize MYOB Advanced screens by defining automation workflows in the Customization Project Editor. For details about automation workflows, see "Automation of Workflows in Customisation Project Editor" on page 215.

A developer can use custom workflow actions though the contract-based APIs if the developer creates a custom endpoint or endpoint extension with these workflow actions—more specifically, if the developer does the following:

1. On the Web Service Endpoints screen (SM207060), creates a custom endpoint or endpoint extension.
2. Adds the custom workflow action to the custom endpoint or endpoint extension.

3. If the custom workflow action can display a workflow dialog box with parameters of the action, maps the parameters of the action in the endpoint to these parameters by using the Transition Parameters object, as shown in the following screenshot.
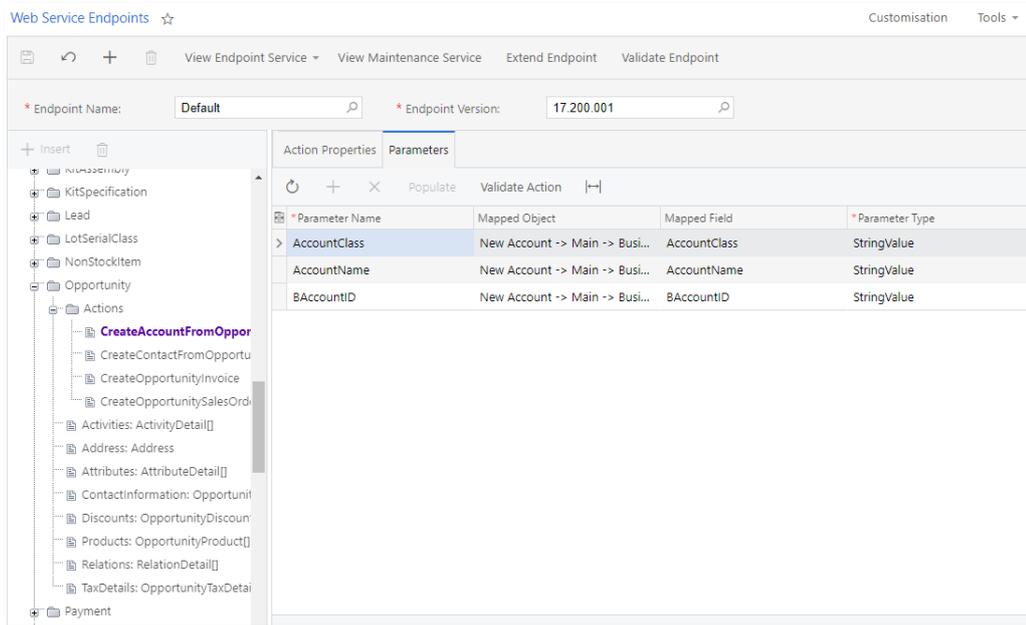
Mobile

Ability to Display User-Defined Fields

Developers can now configure the mapping of user-defined fields to the MYOB Advanced mobile app. In previous versions, a user could see user-defined fields only in the browser version of MYOB Advanced. Now user-defined fields can be displayed in the MYOB Advanced mobile app as well.

By default, the User-Defined Fields tab is displayed on a mobile screen if the associated screen has user-defined fields. For example, the following screenshot shows user-defined fields displayed on the Cases screen of the mobile app.
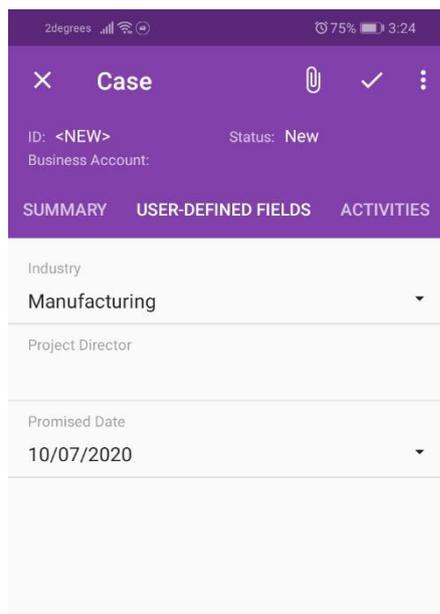
To override the default display of user-defined fields on a tab, a developer can use the following MSDL extensions:

- A new object type, UDFields. By using an object of this type, a developer can organize the layout of the fields by putting all user-defined fields into an object of the following types:
    - layout
    - container
    - group

  For example, if user-defined fields should be displayed not on a separate tab, but as a group of fields alongside other fields, a developer can use the following code. The add instruction should be used with an object of the UDFields type as you can see from the highlighted line in the example.

```
update screen CR306000 {
  update container "CaseSummary" {
    update layout "Settings" {
      add group "UDFGroup" {
        displayName = "User-Defined Fields Group"
        add UDFields "UDFInline"
        placeAt 0
      }
    }
  }
}
```

The code above puts all user-defined fields in a group on the Settings tab of the Cases screen, as shown in the screenshot below.

> **Note:** UDFInline is an arbitrary name that has not been used anywhere else in the mapping.

- A new Boolean screen attribute, hideUDF (the default value is False). This attribute can be used to cancel the display of user-defined fields on a screen, as the following code shows.

```
update screen CR306000 {
   hideUDF = True
}
```

> **Note:** : The hideUDF attribute and the add UDFields instruction cannot be used in the same screen mapping.

For details on configuring user-defined fields in the mobile app, see "Configuring User-Defined Fields" in the documentation.

Deleting Attachments

Users can now delete attached files by using the mobile application.

To access the attachments to a record in the mobile application:

- **iOS**: Tap **Files** at the bottom left of the screen.
- **Android**: Tap the files icon ( ) at the top right.

This opens the Attachments screen, where a user can delete attachments:

- **iOS**: Click **Edit** and then select the attachments to be deleted. To delete the selected attachments, tap **Delete**.
- **Android**: Long press on an attachment to select it. To delete, tap the delete button that appears at the top right:
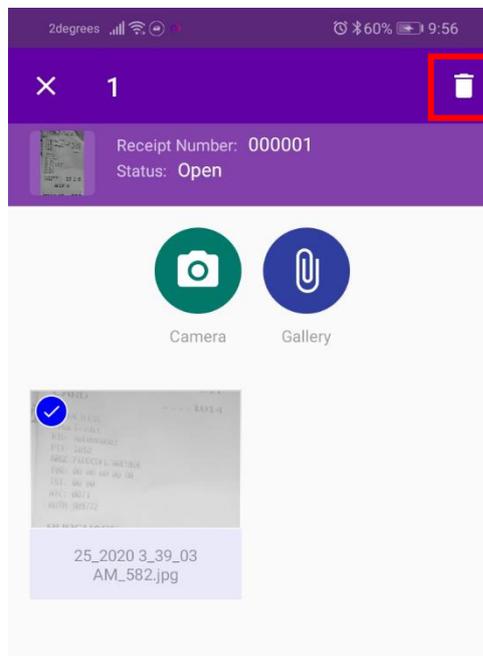
Other Improvements

Finance

- The **Automatically Post on Release** check box is now selected by default on the following screens:
    - General Ledger Preferences (GL102000)
    - Cash Management Preferences (CA101000)
    - Accounts Payable Preferences (AP101000)
    - Accounts Receivable Preferences (AR101000)
    - Fixed Assets Preferences (FA101000)
    - Currency Management Preferences (CM101000)
- The **Pay Date** column has been removed from the following reports and the **Doc. Date** column has been added to them:
    - AP Aged Past Due (AP631000)
    - AP Aged Past Due MC (AP631100)
    - AP Aged Period Sensitive (AP630500)

    Users can now see the document dates directly on these reports.

- On the Funds Transfers screen (CA301000), the **Document Ref.** fields were previously required even if the **Require Document Ref. Nbr. on Entry** check box was cleared on the Cash Management Preferences screen (CA101000), which made it impossible to register a funds transfer without specifying its reference numbers. Now the **Document Ref**. boxes are required only if the **Require Document Ref. Nbr. on Entry** check box is selected.
- Various check boxes, as described below, are now selected by default on report screens to prevent situations in which deferrals are missing from the reports.

    The **Include Expense Recognized in the Same Period as Deferred** check box is selected by default on the following report screens:

    - DE Recognition by Account (DR630075)
    - DE Recognition by Vendor (DR630085)
    - DE Recognition by Component (DR630095)
    - DE Projected Recognition by Account (DR660085)
    - DE Projected Recognition by Vendor (DR660055)
    - DE Projected Recognition by Component (DR660065)

    The **Include Revenue Recognized in the Same Period as Deferred** check box is selected by default on the following report screens:

    - DR Recognition by Account (DR630070)
    - DR Recognition by Customer (DR630080)
    - DR Recognition by Component (DR630090)
    - DR Projected Recognition by Account (DR660080)
    - DR Projected Recognition by Customer (DR660050)
    - DR Projected Recognition by Component (DR660060)
- On the Segmented Keys screen (CS202000), users can now configure the *BRANCH* segmented key, which has been added to MYOB Advanced as a child of the *BIZACCT* segmented key. Also, to make it easier to create multiple prospects, customers, and vendors in the system, auto- numbering for the *BIZACCT* segmented key is now supported.
- On the Customers (AR303000) and Vendors (AP303000) screens, user-defined fields are now supported. Users can now add user-defined fields directly to these screens by using attributes.

- When the *External Tax Calculation Integration* feature is enabled on the Enable/Disable Features screen (CS100000) and the Avalara tax plug-in is used, MYOB Advanced sends Avalara the warehouse ID as the Location Code for the transaction for the following types of documents: cash sales, AR invoices, SO invoices, bills, adjustments, appointments, and service orders. If multiple warehouses are specified in the lines of any of these documents, the warehouse ID from the first document for which a warehouse ID is specified is sent to Avalara as the Location Code for the document. This enhancement makes it possible for organizations to report taxes with location codes to Avalara and to aggregate reports by location code.
- On the Generate FA Calendars screen (FA501000), the **Company ID** column is now hidden if the *Multiple Calendar Support* feature is not enabled on the Enable/Disable Features screen (CS100000).
- On the Payments and Applications screen (AR302000), when a user clicked the **Refresh** button right of the **Payment Amount** field in the Summary area, the payment amount was updated to match the value in the **Applied to Documents** field. Also, subsequent clicks of the **Refresh** button changed the amounts in the **Payment Amount** and **Available Amount** to their previous values.

  Now when the **Refresh** button is clicked, the **Payment Amount** value is recalculated as the sum of the amounts in the **Applied to Documents** and **Applied to Orders** fields.

- On the Accounts Receivable Preferences screen (AR101000), a **Terms** field has been added to the Dunning Fee Settings section on the Dunning Settings tab. In this box, an administrative user can specify the payment terms for dunning fee invoices that are generated by the system when a user creates dunning letters. If this box is empty, the system inserts into the dunning fee invoice the payment terms specified for the customer in the Terms box, which is in the Financial Settings section on the General Info tab of the Customers screen (AR303000).
- The following UI changes have been introduced on the cited screens:
    o Release AP Retainage (AP510000): The **Retainage Vendor Ref.** column has been removed from the table. Also, in the Summary area, the **Show Bills with Open Balance** check box has been renamed to **Show Lines with Open Balance**.
    o Release AR Retainage (AR510000): In the Summary area, the **Show Invoices with Open Balance** check box has been renamed to **Show Lines with Open Balance**.
- The MYOB Advanced database now holds the bank transaction match and relevance calculation settings configured for a particular cash account in the Transaction Match Settings dialog box, which is invoked when a user selects a cash account on the Process Bank Transactions screen (CA306000) and clicks the **Match Settings** button on the screen toolbar.

  In previous versions, when a user updated the settings for a cash account in the Transaction Match Settings dialog box, the updated values were effective for only the duration of the user's session. When the user was signed out, the account-specific settings were reset to the

  default values, which are configured on the Bank Statement Settings tab of the Cash Management Preferences screen (CA101000).

  As of this release, the settings saved for a particular cash account in the Transaction Match Settings dialog box are maintained in the database and not limited to a particular user's session. On the Process Bank Transactions screen, when a user selects a cash account for which custom settings were previously

saved and opens the Transaction Match Settings dialog box, the settings that have been specified for the cash account are now displayed in this dialog box.

A user can reset the settings specific to a cash account to the default values by clicking the new **Reset to Default** button on the Transaction Match Settings dialog box.

Project Accounting

- On the Allocation Settings tab of the Allocation Rules screen (PM207500), a user can now change the **Task** without specifying the **Project**.
- The filtering area has been added to some screens (listed below) related to project accounting. If a user enters a text string in the search box on these screens, the system filters the contents of the table by using columns named for the screen, as follows:
    - Project Transactions (PM3040PL): Ref. Number, Description, Orig. Doc. Nbr.
    - Change Orders (PM3080PL): Reference Nbr., Customer ID, Project ID, Description
    - Pro Forma Invoices (PM3070PL): Reference Nbr., Customer ID, Project ID, Description, AR Ref. Nbr.
    - Project Quotes (PM3045PL): Quote Nbr., Opportunity ID, Description, Account ID, New Project ID
    - Projects (PM3010PL): Project ID, Customer ID, Description
    - Project Tasks (PM3020PL): Task ID, Description, Project ID
    - Account Groups (PM2010PL): Account Group ID, Description
    - Billing Rules (PM2070PL): Billing Rule, Description
    - Change Order Classes (PM2030PL): Class ID, Description
    - Allocation Rules (PM2075PL): Allocation Rule, Description
    - Project Templates (PM2080PL): Project ID, Description
    - Project Template Tasks (PM2081PL): Task ID, Project ID, Description
    - Common Tasks (PM2083PL): Task ID, Description
- The following columns have been added to the Tasks tab of the Projects (PM301000) screen:
    - Default Account
    - Default Subaccount
    - Planned Start Date
    - Planned End Date

    These columns are hidden by default.

- Some screens related to project accounting have been improved as follows to simplify data entry and make the screens more convenient to use:
    - A link or the edit button have been added to some boxes to make it possible to navigate to the appropriate data entry screen, where the user can view the full details of the entity shown in the particular box without leaving the initial screen.
    - Additional data fields, which are used to look up entities, have been added to some lookup boxes that support autocomplete or that have a lookup table and can be used for search.
    - Additional columns have been added to the lookup table of some lookup fields.

    The following screens have been improved in these ways:

    - Project Transactions (PM304000)

- o Project Transactions (PM401000)
  - o Change Orders (PM308000)
  - o Pro Forma Invoices (PM307000)
  - o Projects (PM301000)
  - o Project Quotes (PM304500)
  - o Validate Project Balances (PM504000)
  - o Run Allocations by Tasks (PM502000)
  - o Run Allocations by Projects (PM502500)

  Also, user-defined fields have become available for the following screens:

  - o Project Transactions
  - o Change Orders
  - o Pro Forma Invoices
  - o Project Quotes
- On the Activity History tab of the Projects screen (PM301000), the **Add Event** button has been removed from the table toolbar.
- On the Commitments screen (PM306000), a **Branch** column has been added; this screen displays commitments associated with the branches to which the current user has sufficient access rights. Also, the Branch box has been added to the External Commitments (PM209000) screen.
- In the Copy Revision dialog box on the Project Budget Forecast screen (PM209600), validation has been added for the **New Revision** field, where a user enters the identifier to be used for the copied revision. In the validation process, the system ensures that the length of the ID is 10 or fewer characters, and that it consists of only alphanumeric characters and spaces.
- If a time and material step of a billing rule was configured to use the sales account and subaccount from the inventory item and if the item of a project budget line that was billed with the billing rule was either not specified or filled in with the empty item code (<N/A>), the system used the sales account and subaccount of the customer specified for the project.

  Now in these cases, the system uses the default account and subaccount of the project specified on the Settings tab of the Projects screen (PM301000).

- On the Projects screen (PM301000), the GL Accounts tab has been renamed to Settings.
- AC-131076: On the Financial Details tab of the Payments and Applications screen (AR302000), a user can specify a project and a project task; the project task is required if a project is selected. If a document with the project and project task specified is released, the corresponding batch of GL transactions is posted to a non-project code with an empty task and empty cost code and does not affect the project.
- All the sort order conditions of the PMBudget inquiry have been removed on the Sort Order tab of the Generic Inquiry screen (SM208000) in order to increase the performance of the following screens, which use this inquiry:
  - o Budget Details (PMGI0010)
  - o Budget Summary by Account Group (PMPV0010)
- The functionality of expense claims and expense receipts is now available if the *Expense Management* feature is enabled on the on the Enable/Disable Features screen (CS100000).

  For an existing instance of MYOB advanced that has been upgraded to 2020.3, this feature is enabled by default. For a new instance of MYOB Advanced 2020.3, the feature is disabled by default.

- On the Employee Time Card screen (EP305000), a user cannot create a time card for a completed or cancelled project.
- If a transaction with an account group and the corresponding debit account, which was mapped to that account group, updated the project balances, and then that debit account was mapped to another account group and the project balances were recalculated, the system updated the project balances with the new account group mapped to the debit account. This sequence of events caused the project balances to be incorrect. Now in such a case (if an account is mapped to another account group and the project balances are recalculated), the system uses the initial debit account group from PMTran.
- If there were any default recipients specified on the Mailing Settings tab of the Projects Preferences screen (PM101000), a copy of a project template could not be saved.
- On the Change Orders screen (PM308000), validation of the change date has been added. The change date must now belong to an existing financial period of the master calendar. If the date does not belong to such a period, the system shows an error and does not allow the user to save the change order.
- On the Allocation Settings tab of the Allocation Rules screen (PM207500), the Create Non-Billable Transaction check box has been renamed to Allocate Non-Billable Transactions.
- On the Budget tab of the Common Tasks screen (PM208030), a **Load Records from File** button has been added to the table toolbar. By clicking this button, a user can import budget lines from an Excel file to the table.
- On the Revenue Budget and Cost Budget tabs of the Change Orders screen (PM308000), a user can now change the Unit Rate of a change order line manually. The system calculates the amount of the line as follows: Amount = Quantity × Unit Rate.
  On the Commitments tab of this screen, a user can now change the Unit Cost of a commitment line manually. The system calculates the amount of the line as follows: Amount = Quantity × Unit Cost.
- A Default column has been added to the Cost Codes screen (PM209500). The column shows which cost code is the default; the default cost code has the check box selected in the column. The column is hidden by default and read-only.
- In the MYOB Advanced mobile app, a menu with the **Approve** and **Reject** commands has been added to the Change Requests screen, and a Compliance tab has been added to the Purchase Orders screen.

Customer Management

- Tax validation has been added for opportunities. With this validation, the system recalculates the tax amount when an opportunity is converted to a sales order or an invoice.
- In notification templates, the <foreach> tag inside the <table> tag is now supported.

  In HTML 5, custom data can be stored in a tag by using data-*attributes. These attributes can then be processed and interpreted by MYOB Advanced. Because they are a standard part of HTML 5, they can be processed correctly by HTML parsers both on the client side and on the server side.

  The syntax for the definition of the loop that goes through the entity lines has also been enhanced.

  An HTML tag can include the data-foreach-view="view_name" attribute. The attribute indicates that markup that is embedded inside the tag will be repeated

for all document lines, as shown in the following example. The new attribute is supported for the following HTML tags: <tr>, <td>, <li>, and <div>.

```
<table data-foreach-view="transactions">
  <tr>
    <td>$((inventory))</td>, <td>$((amount))</td>
  </tr>
</table>
```

In the above example, when the email content is generated, all tags included in the <table> tag are repeated for every record in the "transactions" view.

- The navigation between the Business Accounts (CR303000) and Customers (AR303000) screens has been improved. On the Business Accounts screen, the **View Customer** action has been moved from the Actions menu to the screen toolbar. On the Customers screen, the **View Account** action has been moved from the Actions menu to the screen toolbar.
- In previous releases if two or more customer portal sites ran as a cluster with a load balancer, saving the portal preferences on one site did not cause an update of the preferences on the other sites of the cluster. As of this release, the new PortalSiteID setting has been added to the appSettings section of the web.config file for the portal. The setting contains the identifier of the group of portals that belong to the same cluster.

> **Note:** If there are two or more separate portals that do not belong to the same cluster, then the value of the PortalSiteID setting has to be different for each portal.

- The following obsolete MYOB Advanced inquiry screens have been deleted:
  - Leads (CR401000)
  - Contacts (CR402000)
  - Opportunities (CR403000)
  - Business Accounts (CR404000)
  - Cases (CR405000)
  - Marketing Campaign Members (CR406000)

The functionality of the obsolete screens can be implemented by using generic inquiries.

- If a lead was created from an email, and the email contained a dash symbol, the email was truncated after the dash symbol. This incorrect system behaviour has been fixed.

Inventory and Order Management

- The Unposted to IN Documents report (IN656500) has been renamed to Documents Not Posted to Inventory.
- On the General Settings tab of the Purchase Orders Preferences screen (PO101000), new **Copy Line Notes to Receipt** and **Copy Line Attachments to Receipt** check boxes have been added. These check boxes specify, if selected, that when a purchase receipt is created for a purchase order, the system should copy any line notes and line attachments, respectively, to the related lines of the prepared purchase receipt.
- The triggers for the system to generate intercompany transactions for transfers have been changed. Now the transactions are generated in any of the following cases:
  - When a user clicks **Actions > Update IN** on the screen toolbar of the Shipments screen (SO302000) for a shipment of the Transfer type

- o When a user releases an inventory transfer of the 2-Step type on the Transfers (IN304000) or Release IN Documents (IN501000) screens
- On the Warehouses screen (IN204000), a **Pick by Locations Pick Priority** check box has been added to the Location Table tab. When this check box is selected (which is the default value), to select a warehouse location for picking items in a shipment, the system searches for locations in the following order until it finds a match:
  1. A warehouse location for which the project and project task specified on the Location Table tab of the Warehouses screen are the same as the project and project task specified for the line in the related sales order on the Document Details tab of the Sales Orders screen (SO301000).
  2. A warehouse location for which the project specified on the Location Table tab of the Warehouses screen is the same as the project specified for the line in the related sales order on the Document Details tab of the Sales Orders screen.
  3. A warehouse location with the highest possible pick priority specified on the Location Table tab of the Warehouses screen. (The value 1 indicates the highest priority, 2 the next highest, and so forth; 0 means that the pick priority is not defined.)
  4. The warehouse location with the first identifier in alphabetical order.

  If the check box is cleared, to select a warehouse location for picking items in a shipment, the system searches for locations in the following order until it finds a match:

  1. A warehouse location for which the project and project task specified on the Location Table tab of the Warehouses screen are the same as the project and project task specified for the line in the related sales order on the Document Details tab of the Sales Orders screen.
  2. A warehouse location for which the project specified on the Location Table tab of the Warehouses screen is the same as the project specified for the line in the related sales order on the Document Details tab of the Sales Orders screen.
  3. The warehouse location specified for the item in the Default Issue From box on the General Settings tab of the Stock Items screen (IN202500).
  4. A warehouse location with the highest possible pick priority specified on the Location Table tab of the Warehouses screen. (The value 1 indicates the highest priority, 2 the next highest, and so forth; 0 means that the pick priority is not defined.)
  5. The warehouse location with the first identifier in alphabetical order.
- The Subitem/Restriction Groups tab on the Item Classes screen (IN201000) has been renamed to Restriction Groups.
- On the Sales Orders screen (SO301000), the **Show Drop-Ship Sales** check box has been added to the Inventory Lookup dialog box, which is opened when a user clicks the Add Stock Item button on the table toolbar of the Document Details tab. The check box appears if the Sold Since option button is selected and indicates, if selected, that items that have been drop-shipped since the Sold Since date will be listed in a table in the dialog box.
- On the Purchase Orders screen (PO301000), the system now inserts as the warehouse in each line the warehouse specified in the **Warehouse** field on the Shipping Instructions tab. Also, the system will show a warning if the line-level warehouse in any of the purchase order lines differs from the document-level warehouse on the Shipping Instructions tab.
- On the Financial Settings tab of the Sales Orders screen (SO301000), the **Orig. Order Type** and **Orig. Order Nbr.** fields now show the type and order number,

respectively, of the quote from which the sales order was created; a user can click the link in the **Orig. Order Nbr.** field to review the details of the quote on the Sales Orders screen, which opens.

- If the *Multi-Currency Accounting* feature is enabled on the Enable/Disable Features screen (CS100000), a new **Use Currency Rate from Sales Order** check box is now available on the General Settings tab of the Order Types screen (SO201000). If this check box is selected, the system copies the currency rate from sales orders of this type to the invoice created for this sales order. If the check box is cleared, in invoices prepared for the sales orders of this type, the system inserts the currency rate of the rate type that is specified in the sales order and effective on the invoice date.
- On the Countries/States screen (CS204000), a new **Override Address Automatically** check box has been added. If this check box is selected for a particular country, when a user validates addresses of this country on any MYOB Advanced screen via Avalara address validation functionality, the system will automatically replace the incorrect address or postal code (or both) with the correct address data returned by Avalara and mark the address as validated.

  If the check box is cleared on this screen for a particular country and a user validates addresses of this country on an applicable screen, the system will not replace the incorrect values; it will, however, show a warning with the correct address and postal code.

- When a user selects the **Print Pick List** action on the Shipments (SO302000) or Process Shipments (SO503000) screen, the system now checks whether the shipment lines are included in a physical inventory count in progress for the warehouse and location from which the items must be taken. If an item is included in the in-progress physical inventory, a warning is displayed in the printed pick list near this item. Users who pick items by using this list will thus be aware that they cannot take the items from the location until the counting is completed.
- On the Location Table tab of the Warehouses screen (IN204000), the Assembly Allowed column is now displayed only if the *Kit Assembly* feature is enabled on the Enable/Disable Features screen.
- The following check boxes are now displayed only if the *Lot or Serial Tracking* feature is enabled on the Enable/Disable Features screen:
  o **Use Default Lot/Serial Number** on the Warehouse Management tab of the Sales Orders Preferences screen (SO101000)
  o **Use Default Auto-Generated Lot/Serial Number** and **Use Default Expiration Date** on the Warehouse Management tab of the Purchase Orders Preferences screen (PO101000)

Field Service Management

- Users can now modify an order of services and inventory items by dragging lines on the Appointments (FS300200), Service Orders (FS300100), Service Contract Schedules (FS305100), and Route Service Contract Schedules (FS305600) screens.
- An Equipment screen has been added to the mobile app. The screen contains Summary, Warranty, Components, and Attributes tabs, on which users can review and modify general information on a piece of equipment, warranty dates, information on components of the equipment, and attributes of the equipment, respectively.
- On the Equipment Management Preferences (FS100300) and Route Management Preferences (FS100400) screens, the Posting Class option has been added to the Use Sales Account From box of the Billing Settings section. If a user selects this option, in transactions related to service contracts, the system inserts the sales

account specified in the Sales Account box on the GL Accounts tab of the Posting Classes screen (IN206000) for the posting class.

- The **Vendor** field has been removed from the Schedules tab of the Service Contracts (FS305700) and Route Service Contracts (FS300800) screens.
- If a service order or appointment has a service order type for which AR documents are generated as billing documents, the system fills in the boxes in the Ship-To Contact and Ship-To Address sections (Address Details tab) of the AR document on the Invoices and Memos screen (AR301000) based on the shipping settings of the applicable customer on the Customers screen (AR303000). The state of the **Manage Multiple Billing Option per Customer** check box (in the General Settings section of the General Settings tab) on the Service Management Preferences screen (FS100100) determines which setting defines the source of the ship-to contact and address data of the AR document as follows:
  - o If this check box is selected, the system bases the ship-to contact and address settings on the option in the **Ship-To Address** column of the Service Billing tab of the Customers screen.
  - o If this check box is cleared, the system bases the ship-to contact and address data on the option in the **Ship-To Address** field on the Billing Settings tab (Service Management section) of the Customers screen.
- In previous versions of MYOB Advanced, if a service order was created for a customer whose billing cycle is defined on the Billing Cycles screen (FS206000) to run billing for service orders and a billing document was generated before an appointment was created for the service order, in the appointments generated for the service order, the system did not correctly set the value in the **Unit Cost** column on the Profitability tab of the Appointments screen for lines with the Non-Stock Items type. As of the release, the system updates the **Unit Cost** column of the Appointments screen for the appointment with the value specified in the **Unit Cost** column on the Transaction Details tab of the Issues screen (IN302000) in the issue released for the service order.
- Suppose that a user created a service order for a customer whose billing cycle is set to run billing for service orders on the Billing Cycles screen, added a serialized stock item, and billed the customer for the service order before an appointment was created for a service order. In previous versions of MYOB Advanced, when the appointment was created, the lot or serial number specified in the service order was not available for selection in the **Lot/Serial Nbr.** column on the Appointments screen. This issue has been fixed in this release and the needed lot or serial number is now available for selection.
- Users can now add attributes to generic inquiries that are created for any of the following screens: Appointments, Service Orders, Service Contracts, Service Contract Schedules, and Equipment (FS205000).
- If a service order has been created from a sales order, the system now fills in the **Customer Order** field on the Service Orders screen with the customer order reference number of the sales order, which is specified in the **Customer Order Nbr.** field of the Summary area of the Sales Orders screen (SO301000). Similarly, the system fills in the **External Reference** field on the Service Orders screen with the external reference number of the sales order, which is specified in the **External Reference** field of the Summary area of the Sales Orders screen.
- The **Rollover** column has been removed from the Services per Period tab of the Service Contracts and Route Service Contracts screens.
- On the General Info tab of the Equipment screen (FS205000), users could not specify the value in the **Colour ID** field for a piece of equipment. The selection was negated when the equipment was saved. The selected colour is now saved along with other equipment settings.

- On the Licenses screen (FS4020PL), the **Staff Member Name** field has been removed.
- On calendar boards, the system no longer opens the Appointments screen (FS300200) when a user creates an appointment by dragging an entity from the Unassigned Appointments or Service Orders tab. Instead, the appointment is created, and the system keeps the appointment selected. The user can press the E key to open the Appointments screen and edit the created appointment. The user can also press D to delete the appointment.
- On the Payments and Applications screen (AR302010), the **Service Contract ID** field has been removed from the Summary area. Also, on the Appointments (FS300200) and Service Orders (FS300100) screens, if the selected appointment or service order is related to a service contract with standardized billing, the Prepayments tab is now hidden.
- On Service Contracts (FS3057PL), Route Service Contracts (FS3008PL), Service Contract Schedules (FS3051PL), and Route Service Contract Schedules (FS3056PL) generic inquiry screens, the name of the **Project** column has been changed to **Project ID**.
- Customers and Customer Locations screens have been added to the mobile app. These screens are hidden and can be opened from the Appointment screen. On the Customers screen, users can view the appointment history of a customer.
- The **Staff Member Name** field has been removed from the Licenses screen (FS4020PL).
- If the **Complete Service Order When Its Appointments Are Completed** check box is selected on the Service Order Types screen (FS202300) for a service order type, the system does not complete a service order of the type if at least one item listed on the Details tab of the Service Orders screen (FS300100) has the Requiring Scheduling status.

People

To improve loading times in the MYOB Advanced mobile app, the Payslips screen (MPES3014) now loads only the most recent three months' payslips. Older payslips can be viewed from the **All records** tab.

Platform

- The Connected Applications screen (SM303010) is now available for all editions. This screen can be accessed by the admin user, partner support users and users with the "Full User" licence type.
- Standard reports have been re-styled to use a lighter colour scheme and cleaner layout.
- Improvements to the browser-side caching process have been made. The site map menu has become available for caching, which has improved the performance of MYOB Advanced.

> **Note:** If you experience issues with the menus (for instance, that your changes are not applied), try clearing the cache in the browser you use and reloading the page.

- If a document contains more than 1000 detail lines, only the first 1000 detail lines are copied to a new document. MYOB Advanced now displays a warning for such documents when a user copies the document or creates a template from the document.

- MYOB Advanced now supports Microsoft.Web.Redis.RedisSessionStateProvider as a session state provider. An administrator can use Microsoft.Web.Redis.RedisSessionStateProvider in the <sessionState> node in the web.config file, as shown in the following example.

```
<add name="PXSessionStateStore" type="PX.Data.PXSessionStateStore, PX.Data"
  ignoreUrl="~/Frames/Menu.aspx,~/Frames/GetFile.ashx"
  internalProviderType="Microsoft.Web.Redis.RedisSessionStateProvider"
  internalProviderConfig="connectionString=127.0.0.1:6379,abortConnect=
  False,ssl=false,"
  internalProviderName="Local" serializeItems="true" />
```

- Some changes have been made to the system behaviour in the mobile browser. If a user long-presses a link to a screen, the system now displays a pop-up box in which the user can select one of the following options:
    - **Open in a new tab**: Opens the screen in a new tab, and all other user interface elements are available, such as the main menu, the Home button, and the Search box.
    - **Open in a new window**: Opens the screen in a new tab and no UI elements except for this screen and its elements are available.

System Administration

- On the Security Preferences screen (SM201060), a Modern UI section has been added with the **Menu Editor Role** field. A system administrator should specify a user role in the box. A user with this role will be able to customize the modern user interface (in particular, the main menu and workspace links). We recommend that each company create a role dedicated to these capabilities and assign it to users who should be able to modify the user interface.
- An administrator can configure an access rights audit and review its results. On the Audit screen (SM205510), the administrator can enable an audit trail for access rights screens, such as Access Rights by Screen (SM201020) and Access Rights by Role (SM201025). On the Audit History screen (SM205530), the administrator can view the results of the access rights audit and can narrow the range of data shown by selecting any of the following: **Screen ID**, **User**, **Table Name**, **Start Date**, and **End Date**. In the table, the system will display the record changes for the specified selection criteria.
- The new DisableExternalFileStorage configuration key has been added in the web.config file. Its allowed values are true and false. If DisableExternalFileStorage is set to true, the External File Storage screen (SM202540) becomes unavailable.
- The minimum version of the Microsoft .NET Framework required to be installed on the server has been changed to 4.8.
- The platform now supports MySQL 8.0.11 and later versions.

Platform API

- The Serilog.Sinks.File.dll library has been updated to Version 4.0.
- Visual Studio 2019 can be used for the creation of stand-alone applications with MYOB Advanced or the development of customizations and add-on solutions on top of MYOB Advanced.
- LINQ queries in MYOB Advanced Framework-based code now use a query cache, which improves the performance of the application.
- If a field was missed in the collection of values of PXCache, the GetValuePending method of PXCache returned null, and in the PXUIFieldAttribute.FieldVerifying event handler, it was impossible to reset the value of the field to null.

If the value of the field is not specified, the GetValuePending method now returns NotSetValue, and in the PXUIFieldAttribute.FieldVerifying event handler, it is now possible to reset the value of the field to null.

- The PXStringList and PXIntList attributes now have the SetList methods that accept a collection of value tuples. The following example shows the use of a new SetList method of the PXStringList attribute.

```
PXStringListAttribute.SetList<Dac.field>(cache, null,
    (Value: Val1, Label: "Value 1"), (Value: Val2, Label: "Value 2"));
```

Mobile Development

The MSDL Code Editor of the Customization Project Editor now supports syntax highlighting for MSDL.

Integration Development

- On the Web Service Endpoints screen (SM207060), on the Entity Properties tab of the right pane, the name and ID of the screen that corresponds to the entity of the endpoint are now displayed in the **Screen Name** and **Screen ID** boxes, respectively.
- In the Default/18.200.001 system endpoint, the retrieval of all records through the CustomerLocation entity returned the locations of all business accounts (including locations of vendors, employees, and branches) instead of the locations of customers. The locations of only customers are now returned.
- User-defined fields are now returned in the schema of custom fields. For details about the schema of custom fields, see "Retrieval of the Schema of Custom Fields" in the documentation.
- If a user does not have rights to access a screen, the contract-based REST API now returns the 403 Forbidden status code with a message that specifies the screen to which access rights are required to perform the request.

Documentation for Developers

- In Parameters for Retrieving Records in the documentation, the description of the $custom parameter has been updated. Now it contains information about how to retrieve a custom field from a detail or linked entity.
- Information about how to work with the values of user-defined fields through the contract-based API has been added to "Parameters for Retrieving Records" (in the description of the $custom parameter) and "Custom Fields" in the documentation.

Resolved Issues

The following tables detail the issues that are addressed by this release.

Finance

Problem ID	Description
171691178357 171683230901	The Customers screen (AR303000) would not save without an email address, even if none of the **Send … by Email** settings were ticked on the Billing Settings tab. This has been resolved.
171794299544 171590347801	In some cases, a prepayment could be incorrectly applied to a payment from the Cheques and Payments screen (AP302000). This has been resolved.
171986095470 168416803591	When the Release AP Documents screen (AP501000) was sorted by the Date column, an error occurred when an attachment was opened. This has been resolved.
172144814056 171914902891	In some cases, GL accounts would not be available to the Transactions for Account report (GL633500), even though they were set to be included. This has been resolved.
172435615044 171997763461	In some cases a journal could appear with the wrong currency, which could not be reversed. This has been resolved.
172479304604 172351693221	After uploading a budget using the **Load Record from File** button on the Budgets screen (GL302010), no data was loaded. This has been resolved.
174014462458 173860024901	The Prepare Payments screen (AP503000) would not export data to Excel if the data included an inactive subaccount. This has been resolved.
174083104363 173891338881	The **Use Master Calendar** setting did not affect the "As Of" date displayed on Balance Sheet reports, but it did affect the results returned. This has been resolved.
174207963875 174171873411	The Prepare Statements process (AR503000) could sometimes skip customers who should be included. This has been resolved.
174311488324 173913531121	In some cases, a Bill could show the wrong currency corresponding Landed Cost/Receipt. This has been resolved.
174341046959 174320249991	In some cases, the YTD Net Earnings Account could be incorrectly configured. This has been resolved.
174388134386 174362922581	The error "Error: An error occurred during processing of the field CustomerID: Year, Month, and Day parameters describe an unrepresentable DateTime." could occur when creating a SO or AR invoice for certain customers. This has been resolved.
CE00008641	The error "Error: 'Project and Project Template' of 'Project/Contract' does not exist in the system" could appear when attempting to save or reverse records on the Journal Transactions (GL301000) and Bills and Adjustments (AP301000) screens. This has been resolved.

Distribution

Problem ID	Description
166017349569 165735267631	MYOB Advanced was not using stock items' **Default Issue From** locations during shipment. This has been resolved.
172940537874 172879382531	UOM quantity rounding could result in "quantity shipped is greater than quantity ordered" errors, making it impossible to complete a shipment. This has been resolved.
-	If the visibility of warehouses to users has been restricted in the system (that is, if users can view only particular warehouses, based on their job responsibilities), on the Process Orders screen (SO501000), all sales orders were displayed to all users even if a particular user did not have appropriate permissions to view the warehouse specified in the sales order line. This has been resolved

Payroll

Problem ID	Description
173984800973 173825318511	WorkCover was not accruing on superannuation. This has been resolved.
174348485833 174300234041	When transferring an employee from one branch to another in a new company, the YTD figures showed earnings from the previous company even though the company is a different entity for tax purposes. This has been resolved.
CE00008056	If Net Pay was zero, the Salary packaging did not show in batch payments. Any employee with a Net Pay of zero was excluded from the Payment batch. This has been resolved.
CE00008199	Entitlement balances displayed in the Employee Details report were not filtering out pay runs that were not in the "Completed" state. This has been resolved.
CE00008027	An error message appeared when an employee tried to access the Superannuation screen (MPES3013) in Employee Self-Service. This has been resolved.
CE00008048	The Payslip report (draft copy) did not have a page break between each employee. This has been resolved.
CE00006365	The Employment Details screen (MPES3011) in Employee Self Service was showing an incorrect **Hours per Week** value, which did not match the Calendar or Pay Groups. This has been resolved.
-	The Employee Detail Report (MPPP2311) reversed the values of two fields under the Payment Information: Name of User and Number of User. This has been resolved.
-	In cases where leave request dates didn't match the pay run dates, and a pay run was manually set on the Leave Administration screen (MPPP5040), the leave request was not processing correctly. This has been resolved.

Problem ID	Description
-	Inactive employees were included in Public Holiday batches on the Public Holiday Processing screen (MPPP3110). This has been resolved.
-	On the Approvals screen (EP503010), leave requests displayed the approving employee instead of the employee submitting the leave request. This has been resolved.
-	Unpaid Break Time was not displaying on the Work Calendar screen (CS209000). This has been resolved.
-	The **Approve**, **Decline**, **Edit** and **Ready To Pay** actions were not available on the Submit a Leave Request screen (MPES3020) when viewed in the MYOB Advanced mobile app. This has been resolved.

Field Service Management

Problem ID	Description
CE00008178	Users with the Service Technician and Service Manager roles were not able to process payments against Service Orders or Appointments. This has been resolved.
-	On the General Info tab of the Equipment screen (FS205000), users could select a value in the Colour ID box for a piece of equipment, but the selection was negated when the equipment entity was saved. The selected colour is now maintained and saved along with other equipment settings.

Fixed Assets

Problem ID	Description
174296817196 174362922591 174362949481 174264083231 174221105344	Deprecation calculations could be incorrect following the upgrade to MYOB Advanced 2020.1. This has been resolved.
174301279204 174204870753 174180815841	The error message "Index was outside the bounds of the array." could appear after updating a fixed asset's useful life. This has been resolved.
171923884059 171903546281	In some cases, the error "FA Error: Book Period cannot be found in the system" could occur when calculating depreciation. This has been resolved.
172126103465 171931968001	On the FA Balance by GL Account report (FA643000), the Company parameter did not function correctly for transferred assets. This has been resolved.
CE00007907	The error "CurrentPeriodID cannot be found in the system." could appear when attempting to unsuspend Fixed Assets, if the Depreciation Periods were before the first Financial Calendar. This has been resolved.

System and Platform

Problem ID	Description
163385315775 162989370281 **166352189664** 165127477721	In some cases, right-justified report headings could appear truncated when the report was generated as PDF. This has been resolved.
169970093651 171925528691 170040682101 169901084871	An error message could occur when attempting to send ARM reports from the Send Reports screen (SM205060). This has been resolved.
165285850945 172361819221 163916628411	Date Filter values on the Automation Schedule screen (SM205020) could behave incorrectly or disappear. This has been resolved.
172830624940 172577081621	ARM reports would not work if parameters were entered in lower case. This has been resolved.
170963736025 170465116501	In some cases, customised reports on the Cash Sales screen contained no data when printed out. This has been resolved.
172347339088 172089796321	In some cases, the **Last Login Date** on Statistics tab of the Users screen (SM201010) was not accurate. This has been resolved.
173817418220 173672813931	In some cases, emails would fail to send with the error "startIndex cannot be larger than length of string. Parameter name: startIndex". This has been resolved.
173850366960 173813585631	In some cases, duplicate onboarding emails could be sent to users. This has been resolved.
CE00008543	In some cases, the side panel set up for a generic inquiry would not refresh as the user selected different records. This has been resolved.
-	If a Tenant's name included the @ character, errors could occur when attempting to log in. This release adds validation to ensure that Tenant names cannot include the @ character.
-	Bank feed setup information is no longer included in system snapshots. **Note:** If you have customised your snapshot configuration, bank feed setup information may not be excluded.

Known Issues

The following known issues and breaking changes have been identified in this release.

Currency refresh may not happen immediately

After refreshing currency rates on the Refresh Currency Screen (CM507000), the updated rates may not appear on the Currency Rates screen (CM301000) immediately. If the user's Time zone matches the UTC time zone, the rates will be updated instantly; otherwise the updates will appear once the local time matches the UTC time when the update was made.

Disabled Partner Support users see the wrong error message

Partner Support users whose accounts have been disabled see the error message "Looks like you're ready to use Secure Authentication! Just log into Advanced as normal and we'll send you a prompt to sign up." when they attempt to log in via Secure Authentication. Disabled users are correctly prevented from logging in, but the error message may cause confusion.

Error message appears after Secure Authentication onboarding

When a new licenced user receives an onboarding email and uses the link it, the Secure Authentication signup process completes and the user is authenticated, but they are returned to the Advanced login page displaying an error message. This error can be disregarded—if the user clicks the purple **Sign in with Secure Authentication** button, they will be logged in successfully.

Services module can disappear from workspace menus

After upgrading MYOB Advanced, the Services module could disappear from workspace menus in the Modern UI. The individual screens are still available in the Data Views section.

Credit Card controls available on some screens

The following controls relating to credit cards are currently visible:

- The **Validate CC Payment** option in the Actions Menu on the Payments and Applications screen (AR302000).
- The CCEXPIRENOTE Notification Template on the Mailings tab of the Customers screen (AR303000).

Credit card features are not currently supported—these controls cannot be used.

Outlook Add-in requires a login on each e-mail

After installing the Outlook Add-in for MYOB Advanced, users are required to re-enter their login details for the add-in each time they navigate to a new email in Outlook.

Non-Stock Item images displaying incorrectly

The Attributes tab of the Non-Stock Items screen (IN202000) does not display images correctly when a new browser tab or window is opened.

Unable to delete Contacts in the customer portal

The **Delete** button on the Contact screen in the customer portal does not work. (The ability to delete contacts should not be available; this button will be removed in a future release.)

Error when attempting to create an Invoice from a Shipment

When trying to Create Invoice from a Shipment that was created from a Sales Order with a Project assigned, the Prepare Invoice functionality fails with the error "Failed to automatically assign Project Task to the Transaction." A workaround is to create the Invoice manually, assigning the Project/Task as required.

Create Purchase Orders link on menu not working

The link to the Create Purchase Orders screen (PO505000) on the menu for the Service Management workspace does not work. As a workaround, this screen can be accessed from another menu or by entering its URL in the browser's address bar.

Compliance workspace visible to Admin users

When logged in as an admin user, a Compliance workspace is visible in the menu bar of the left of the screen. This workspace currently contains no features and has no effect on the system.

DeviceHub error on single tenant sites

On sites with a single tenant, errors can occur if the **Tenant** field on the Connection tab of the DeviceHub configuration window is not left blank.

Enabling HubSpot features

The "HubSpot Integration" feature on the Enable/Disable Features screen (CS100000) does not control all HubSpot screens. For all HubSpot features to be available, the features for "HubSpot Integration" (under Third Party Integrations) and "HubSpot" (under Connectors) should both be enabled.

Creating appointments from a calendar

When creating an appointment from a calendar screen, e.g. the Staff Calendar Board or the Calendar Board, the user is not given the option of setting the Service Order Type, even if the **Select Service Order Type on Creation from Calendars** option is ticked on the General Info tab of the User Profile screen. The order type can still be changed on the Appointment screen once the appointment has been created.