

**Orchid**

# Training Guide:



Extender

*Work Smarter with Orchid*

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## Extender Overview

**Important!** The documentation refers to the latest product update for the latest version of Sage 300, currently version 2024. Unless otherwise specified, the content applies to all supported versions, currently versions 2022, 2023 and 2024.

Use Extender to extend the business logic of your Sage 300 system.

### EVENTS AND SCRIPTS DETAILS

Extender is a multi-function module that allows you to extend the functionality of Sage 300 (Accpac) in many different ways.

- Configure events to enable alerts, log changes and monitor changes in Sage 300 Data.
- Customize scripts to automate business processes, enhance systems integration and provide tailored validation and alerting by extending Sage 300 Business Logic (as defined in the Sage 300 Views).
- Develop Custom Tables and Custom Screens which form part of the Sage 300 database and database dictionary to tailor the core system to meet a Customer's exact needs.

Extender allows you to configure Events to be run when a Sage 300 View Field is amended or Sage 300 View operates (Inserted, Updated or Deleted).

### EXTENDER EVENTS WHICH CAN BE CONFIGURED

- Log when a record is inserted, updated or deleted through Sage 300 View or log when a view field being amended
- Send an email when a view record is inserted, updated or deleted or a view field is amended
- Create an Information Manager Note when a view record is inserted, updated or deleted or a view field is amended
- Run a program when a view record is inserted, updated or deleted or log a view field being amended

Additionally, Extender allows you to attach any number of *PYTHON 3* Scripts to a Sage 300 View are executed each time the view is accessed. Using *PYTHON 3* scripts for site/company specific customisations provides a flexible way of implementing site specific customisations, without having to compile the customisations and/or upgrade them for future versions of Sage 300.

## Extender Configurator Tutorials

Review examples to configure Sage 300 to log changes to records, send an email or create an Information Manager Note.

<b>Tutorial - Setup Extender to Log changes to A/R Customer Credit Limit</b> .....	<b>13</b>
<b>Tutorial : Make a field ReadOnly in Sage 300</b> .....	<b>17</b>
<b>Tutorial : Create a custom table in Sage 300</b> .....	<b>20</b>

### TUTORIAL - SETUP EXTENDER TO LOG CHANGES TO A/R CUSTOMER CREDIT LIMIT

A company wants to log all changes to the A/R Customer Credit Limit using Orchid Extender.

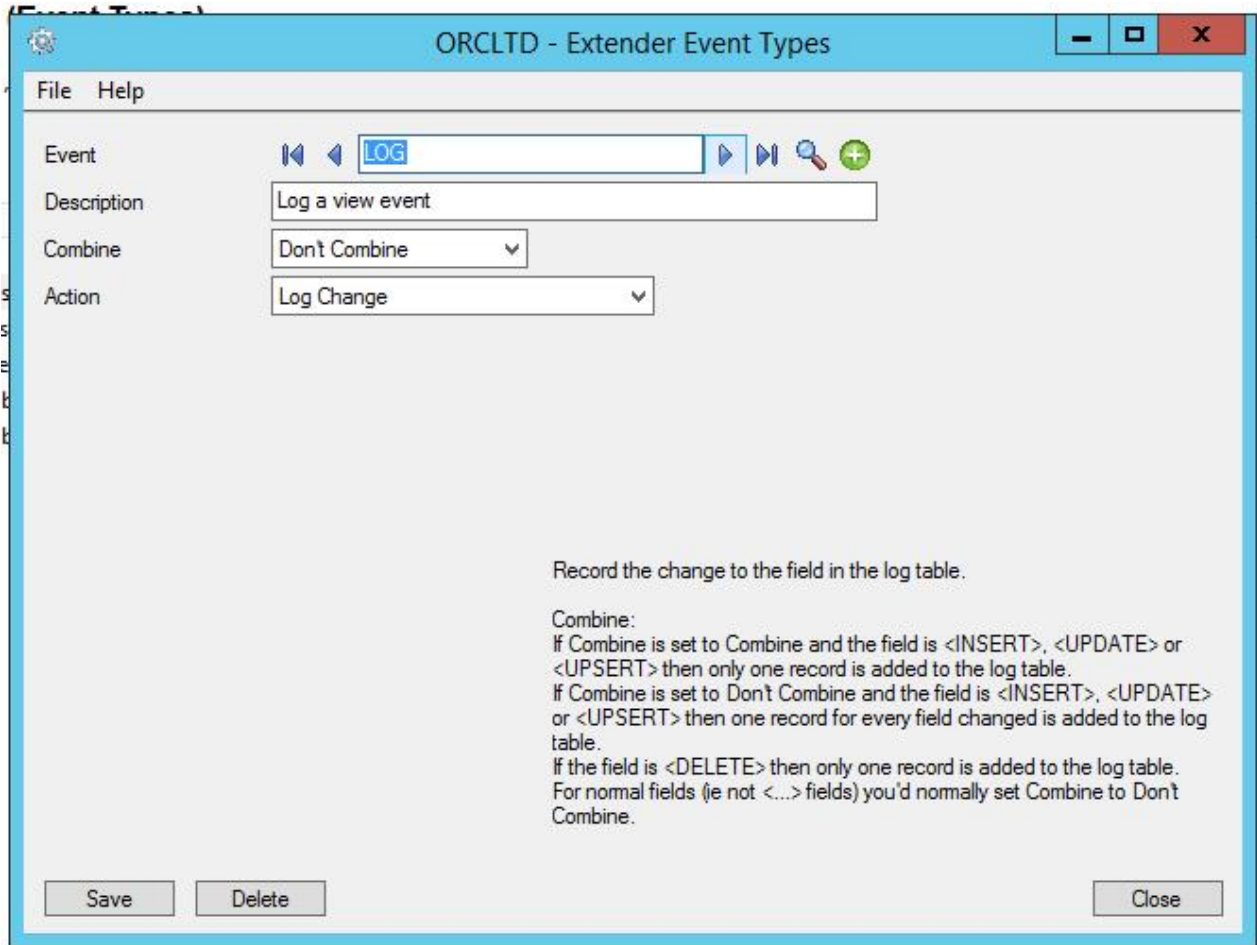
#### Extender Setup

**Requirement!** This functionality is available in Extender Levels Configurator, Customizer and Developer.

#### Create a "LOG" Event Type in Extender Setup / Event Types

Choose "Log Change" as the Action.

Choose "Don't Combine" so that the original and new values are logged.



Save the Event Type.


### Attach the LOG Event to the A/R Customer Credit Field in Extender Setup / View Events and Scripts.

Enter AR0024 as the View ID for A/R Customer.

Select **AMTCRLIMIT** as the Field Name and choose **LOG** as the Event Code.

#### Note:

If you have already configured Extender for the A/R Customer View, a list of events configured will be displayed.

If you don't know the View ID, you can click F6 or the "All Views Info" icon  to display a list of all Extender Views active in the database.

You can use Extender / Inquiries / View Info to view additional details on the Extender Views.



Save the View Event.

## Viewing Log Details

In A/R Customers, Update the credit limit for Customer 1200, Mr Ronald Black.

You can view the Extender log directly from the A/R Customer Screen or from the Extender / Inquiries / Log.

**Note:** If you update the customer credit limit by importing into Sage 300, from Sage CRM or other Third Party applications that use the Sage 300 Views and API, Extender Logging will also take place.

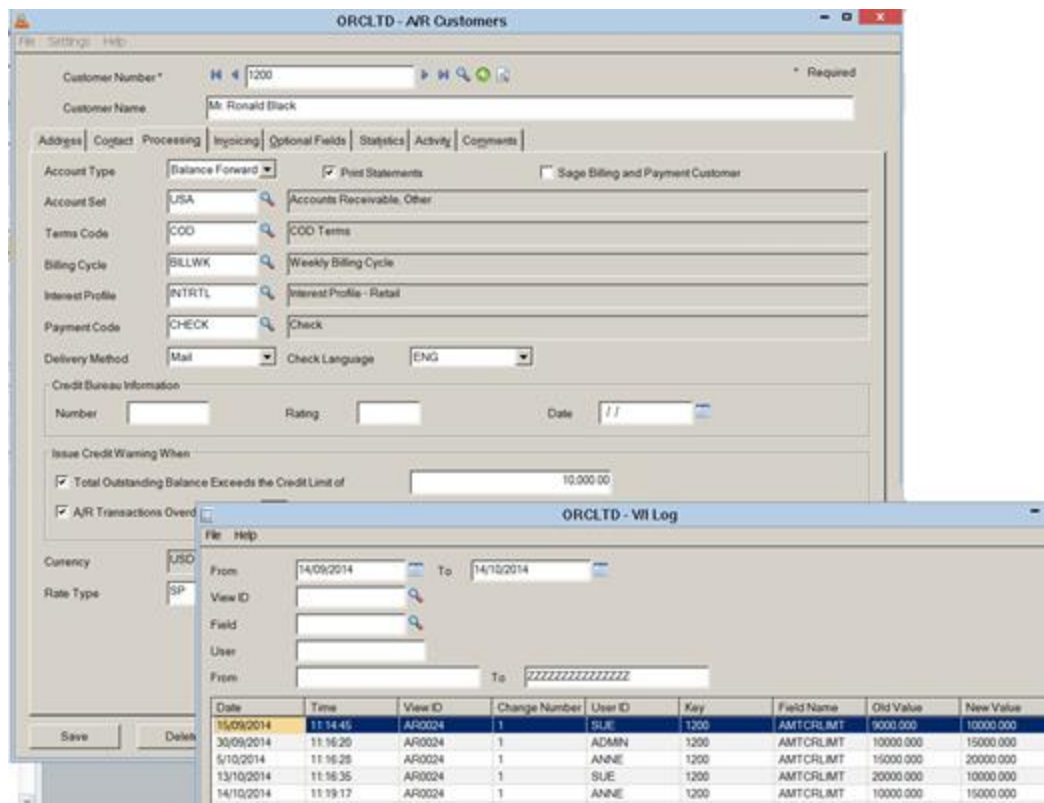
### From the AR Customer screen,

Highlight value in a text field, and type ` (back tick) and tab - The Extender Log for the selected customer will display (filtered by default for the current month. You can change the filter on the Extender Log Screen.

**Tip:**

You can view the Log for a particular view in the original screen. For example if you want to view the changes made to the Customer view from the Customer entry screen, highlight any text field and enter ` (back tick) and [tab] and the Extender Log will be displayed, filtering on the appropriate View. An example of a text field on the Customer screen on the processing tab is the Credit Bureau Information Rating field or the Credit Bureau Information Number field. Other examples are the Address fields on the Address tab.

`[tab] cannot be entered on a date, a number, a check box field or a lookup field with a mask on what can be typed in the field. If the text field already has information – for example the Customer name, you need to select all the text (highlight it), then type `[tab] – the VI Log will be displayed and the original text restored to the field.



If you are using Information Manager and have licences for Workflow Users, you can configure an icon on the Sage 300 screen to view the Logs.

For details, refer to Extender LOG- Notes/DML/Extender Tray on page 201.

**Extender Inquiries / Log**

**Tips:**

By clicking [Ctrl F] in any of the columns, you are able to filter the log contents by the column. You can apply a filter on multiple columns by first clicking [Ctrl] on the first column required and applying the



filter, and then by clicking [Ctrl] on the second column required and applying the filter. The current filter is shown along the bottom of the screen, and is saved per user per screen.

If the filter is not cleared prior to closing the screen, it will be remembered and re-applied the next time the same user opens the same screen.

## For More Details on Setting up Extender Configurator.

Event Types. on page 93

View Events, Scripts & WF on page 149

## TUTORIAL : MAKE A FIELD READONLY IN SAGE 300

We often get asked "How do I make a field in Sage 300 Read Only with Extender"?

You can download the AR Sample script to make the Credit Limit field read only for all users except Admin from the Resources area of the Orchid Website (Make AR Customer Credit Limit Read Only).

Save the script file.

Then in Extender Setup / View Events and Scripts, create a new entry for View ID AR0024 and attach the script to the view. (Use F6 to open Windows Explorer to upload the script into Sage 300).

## Extender Setup for AR Credit Limit

**Requirement!** This functionality is available in Sage 300 Levels Customizer and Developer. The tutorial assumes Extender is installed and activated in the Sage 300 database.

**Download a Sample Extender Script from the Orchid website (available to registered users only).**

**Tip:** Use Make AR Customer Credit Limit Read Only and Save it in a Temp directory.

## In Extender, go to Sage 300 > Setup > View Events and Scripts

**Attach the script to the A/R Customer View.**

Enter AR0024 as the View ID for A/R Customer.

On the Scripts Tab, insert a row and click F6 to open a browser.

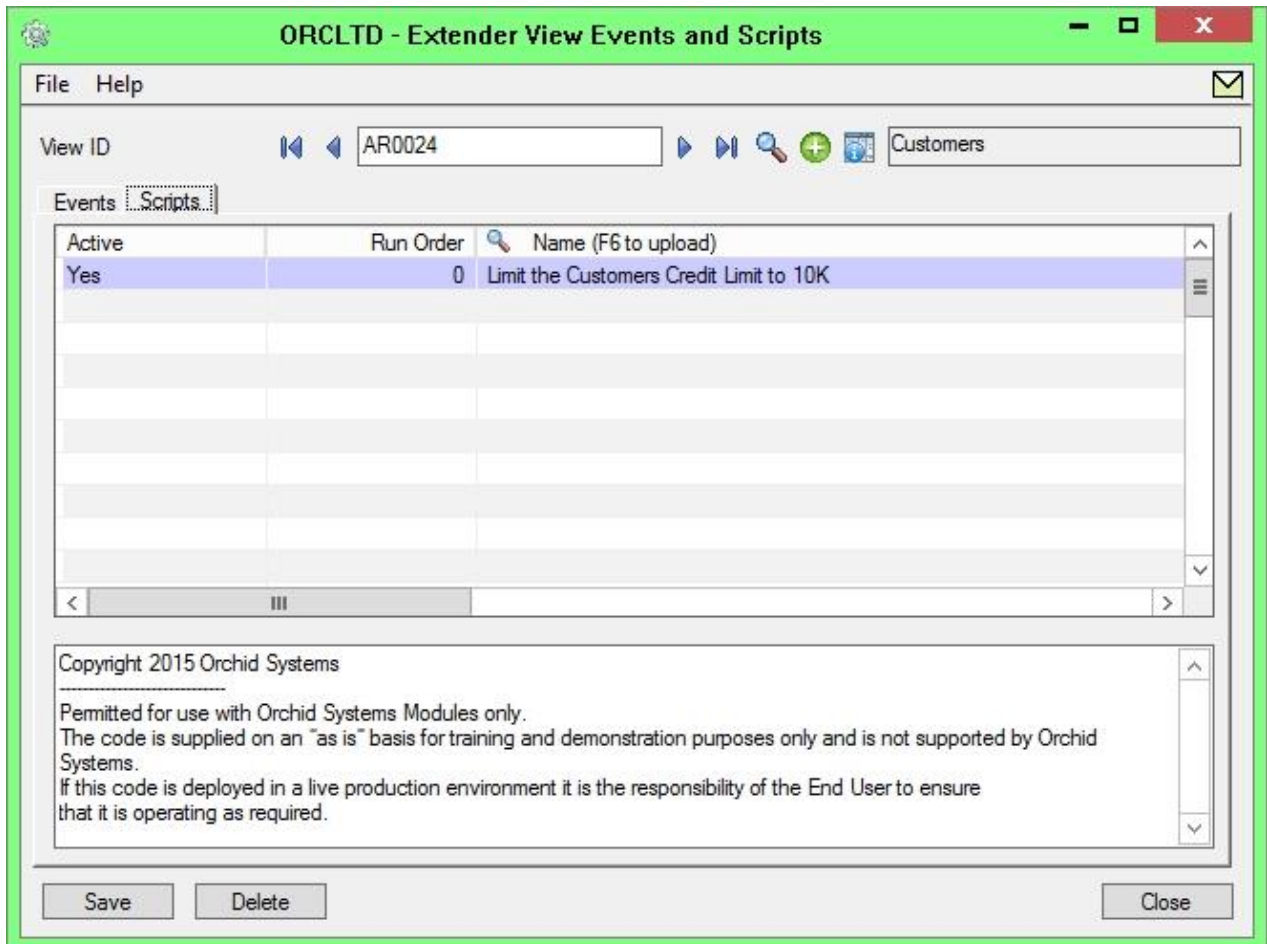
Navigate to the folder where you saved the script, select the script, click

**Note:**

If you have already configured Extender for the A/R Customer View, a list of events and scripts configured will be displayed.

If you don't know the View ID, you can click F6 to display a list of all Extender Views active in the database.

You can use Extender / Inquiries / View Info to view additional details on the Extender Views.



Save the View Event.

**Login as a Non Admin User.**

Restart the Sage Desktop, login as a non Admin user, you will notice that the AR Customer Credit Limit field is not editable.

**Important!** Important: Because Extender works at the view level, this validate will apply to Imports into Sage 300 and to external programs updating Sage 300 through the Views. So if you are making a field read only that should be updated through imports or other programs, make sure those programs use credentials with appropriate rights.

## Variation 1: Make AP Vendor credit limit read only

If you want to make the Credit Limit field on the AP Vendor screen, use Extender Inquiries / View Doc to check the AP Vendor Credit Limit field name (AMTCRLIMIT).

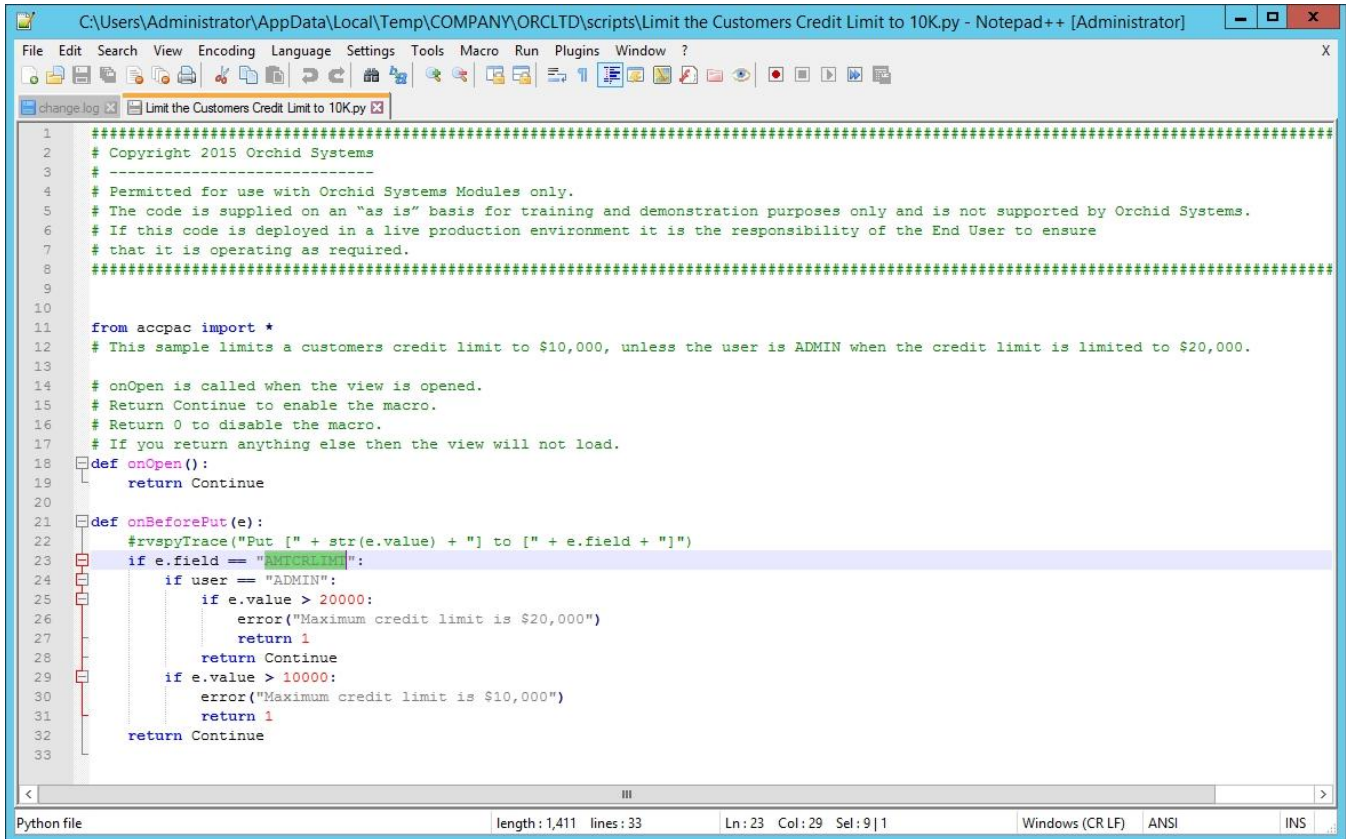
Save the AR Credit Limit script with a new name (it is suggested to use a separate script even though it is the same field name to avoid confusion as you may want to have different user validation on A/P and A/R).

in Extender Setup / View Events and Scripts, Attach the script to view AP0015 (AP Vendor view).

## Variation 2: Make EXTCOST read only on Sage 300 I/C Adjustment view

If you want to make a different field Read Only, for example EXTCOST in the Sage 300 I/C Adjustment view,

Open the Script in your favourite Text Editor and replace the credit limit field with the 'EXTCOST'.



```
1 #####
2 # Copyright 2015 Orchid Systems
3 # -----
4 # Permitted for use with Orchid Systems Modules only.
5 # The code is supplied on an "as is" basis for training and demonstration purposes only and is not supported by Orchid Systems.
6 # If this code is deployed in a live production environment it is the responsibility of the End User to ensure
7 # that it is operating as required.
8 #####
9
10
11 from accpac import *
12 # This sample limits a customers credit limit to $10,000, unless the user is ADMIN when the credit limit is limited to $20,000.
13
14 # onOpen is called when the view is opened.
15 # Return Continue to enable the macro.
16 # Return 0 to disable the macro.
17 # If you return anything else then the view will not load.
18 def onOpen():
19     return Continue
20
21 def onBeforePut(e):
22     #rvspyTrace("Put [" + str(e.value) + "] to [" + e.field + "]")
23     if e.field == "AMTCLIMIT":
24         if user == "ADMIN":
25             if e.value > 20000:
26                 error("Maximum credit limit is $20,000")
27                 return 1
28             return Continue
29         if e.value > 10000:
30             error("Maximum credit limit is $10,000")
31             return 1
32     return Continue
33
```

Save the script file.

Then in Extender Setup / View Events and Scripts, create a new entry for View ID IC0110 and attach the script to the view. (Use F6 to open Windows Explorer to upload the script).

### Note:

The script works, but note that Sage 300 I/C Adjustments expect a value in the Cost Adjustment (EXTCOST) field for Cost increase/Cost decrease script, so you probably need to adjust the script so that the field is only read only for certain adjustment types or remove some adjustment types options, depending on your requirements.

There is also a sample Extender script to default I/C Adjustment types, which might help if the extended cost validation is only for certain adjustment types. Default I/C Adjustment Type Sample Extender Script.

## TUTORIAL : CREATE A CUSTOM TABLE IN SAGE 300

You want to link Salesperson in Sage 300 to a Sales region group and report on Sales targets by region.

1. Create a table in Extender to define Sales regions and targets by region

2. Add a table in Extender to link Sage 300 sales person to a sales region (as you cannot attach optional fields to a Sage 300 sales person out of the box).
3. Enter data
4. Add the custom tables to a custom Crystal Report or an Info Explorer cube.

**Tips:** As the tables are in the Sage 300 data dictionary, you can develop the report in one database and deploy on another one and data is available for Dump and Load

## Create a table in Extender to define Sales regions and targets by region

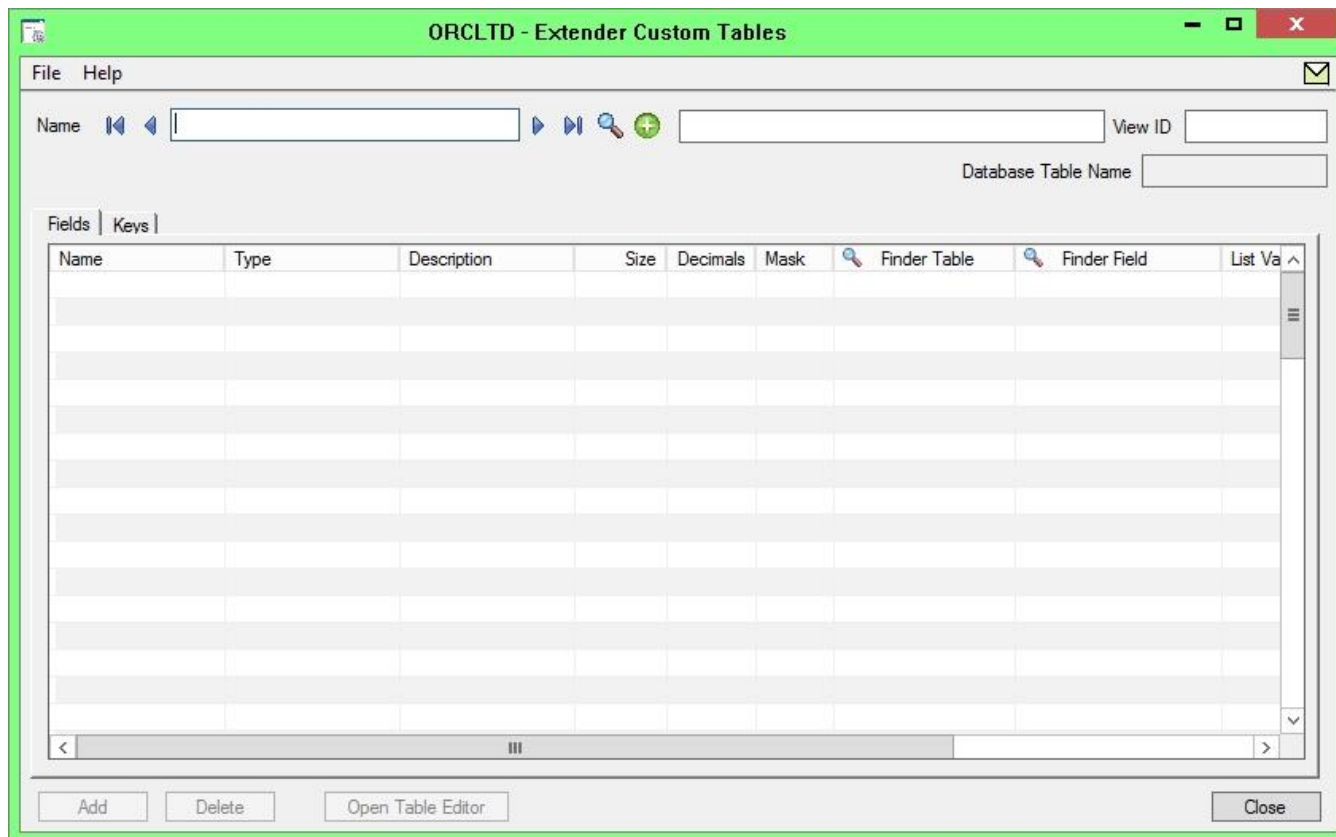
**Requirement!** This functionality is available in Sage 300 Level Developer. The tutorials assumes Extender is installed and activated in the Sage 300 database.

### **In Extender, go to Sage 300 > Setup > Custom Tables**

Type a Table Name and a Description.

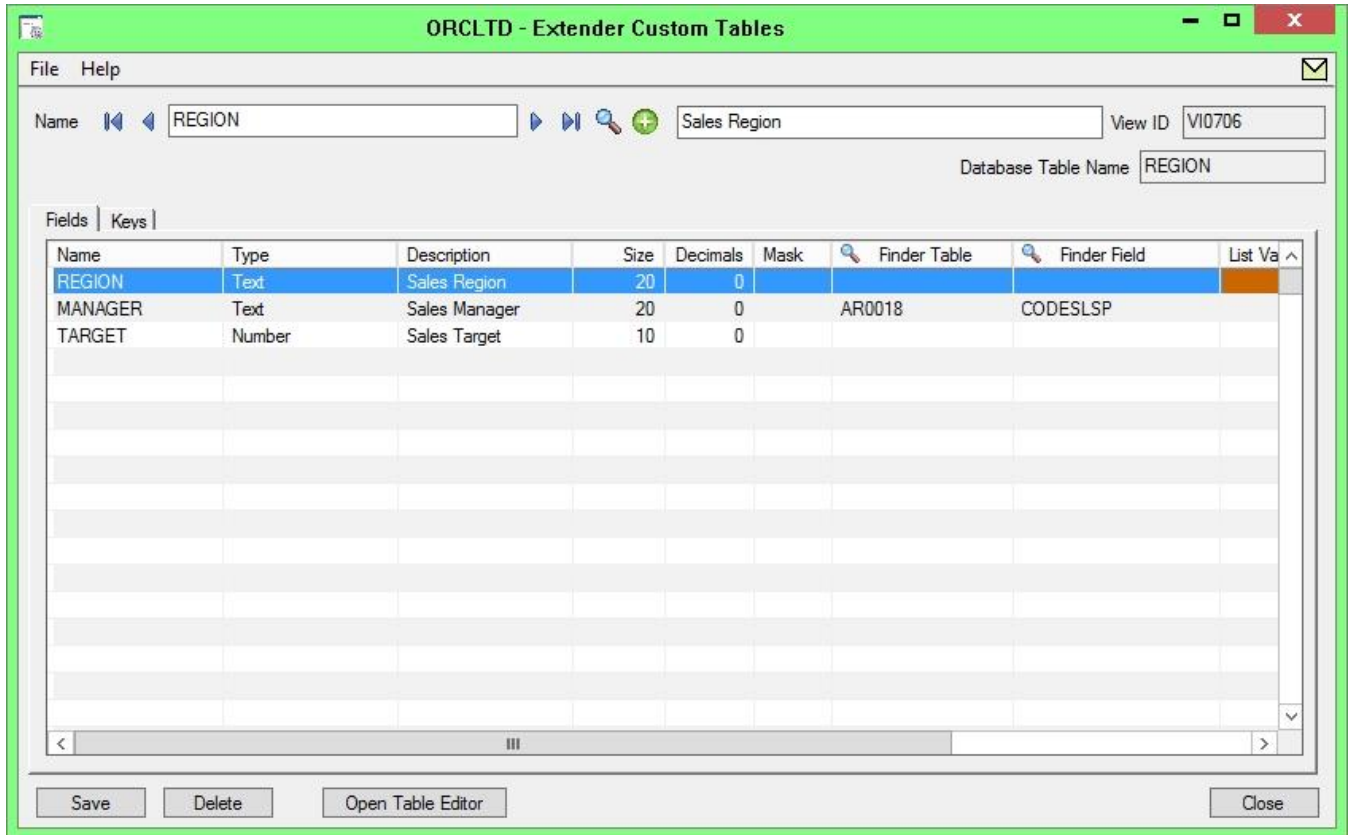
**Tip:** You can leave the View ID Blank, as Extender will give the table a unique ID

## Extender



Add the Fields you want to track.

See Custom Tables on page 104

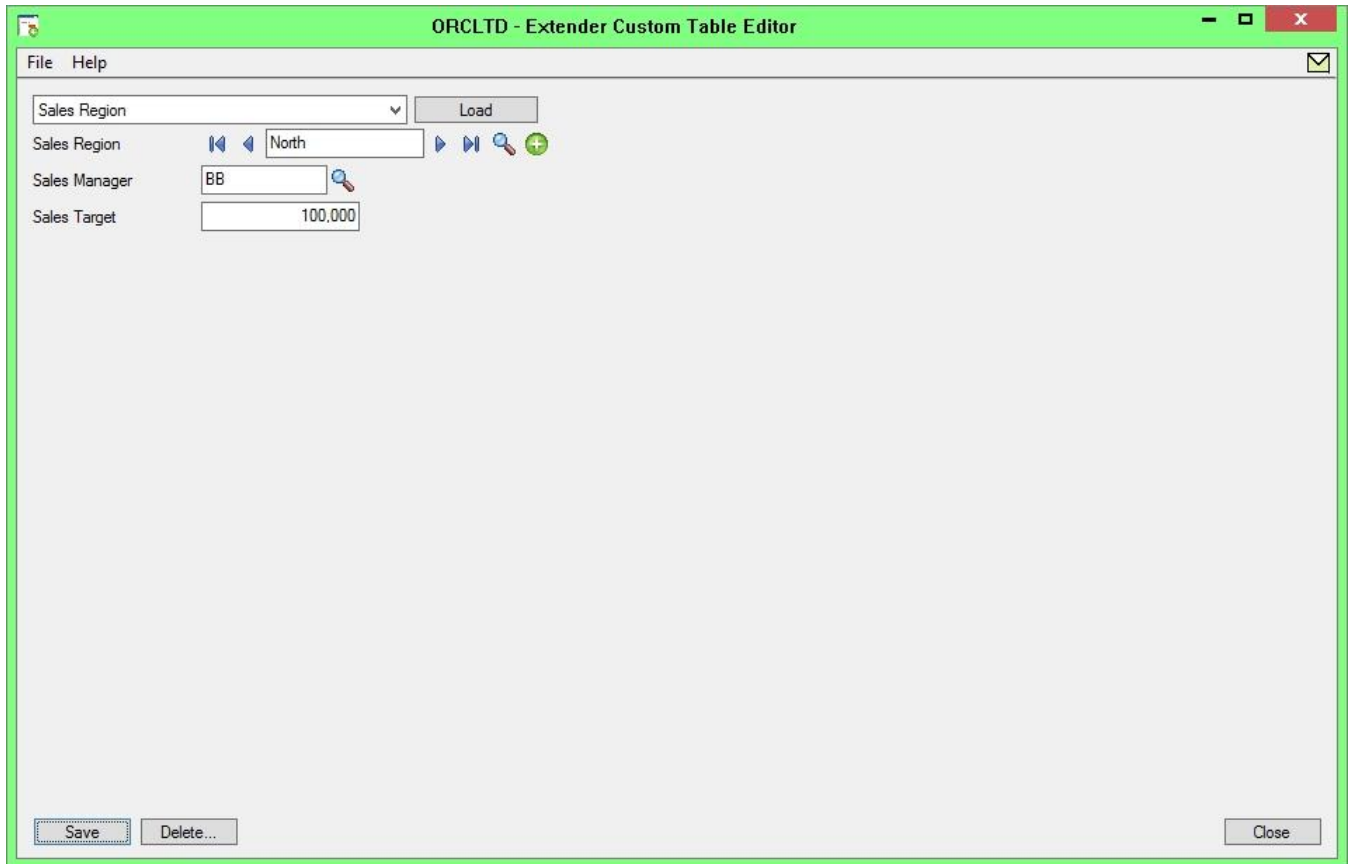


Define the key field/fields.





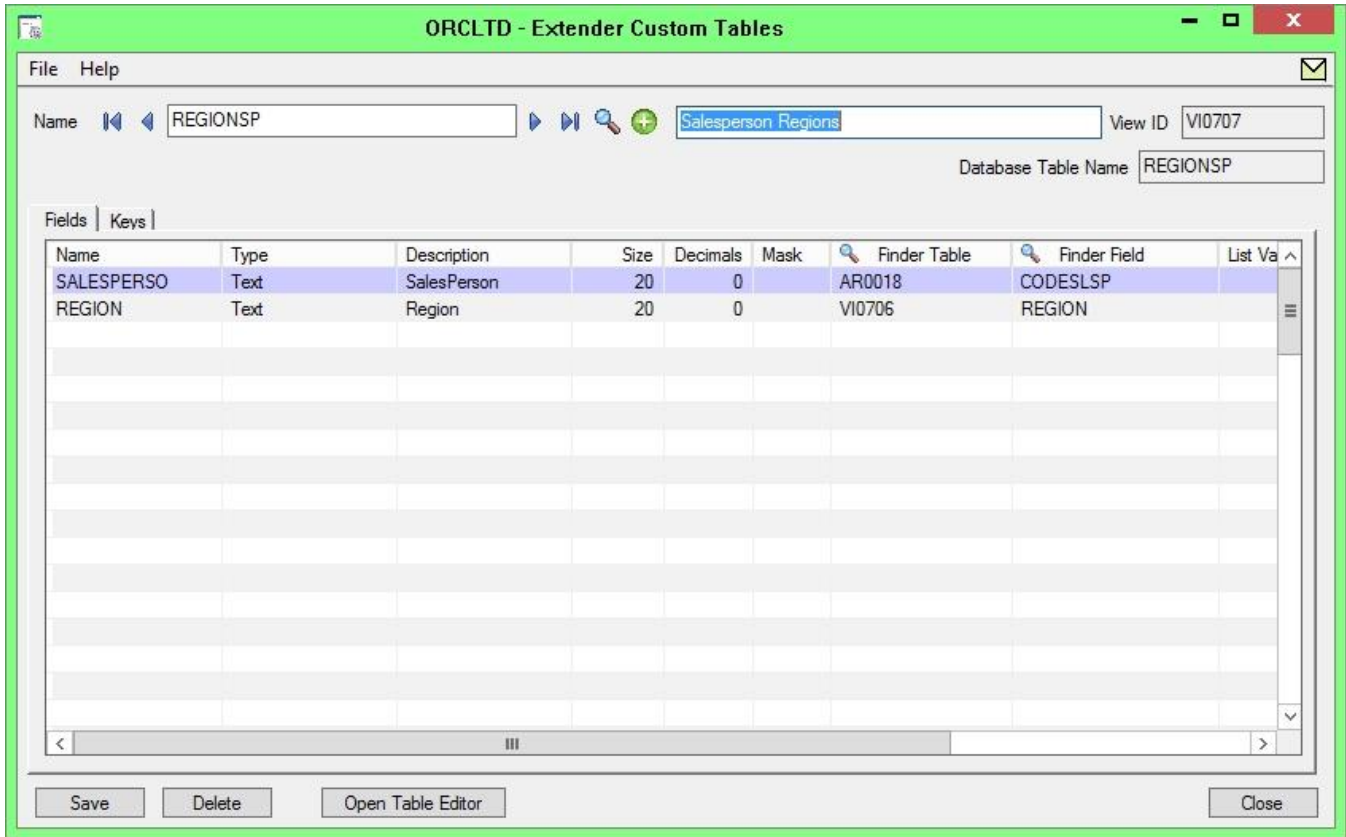
## Enter data in the Custom Table Editor



**Note:** If you have multiple key fields, you may want to build a custom screen in Python.

## Create a table to track Region by Salesperson

**Note:** The table created above can be added



## Use the data in custom reports

The data is now held within the Sage 300 database, so is available for use in custom reports, will be included in backups, database dump and loads. It can also be used in custom Extender Python scripts and If using Information Manager Notes, the data can be displayed in the Alert box next to Sage 300 screens.

The Database table name can be viewed in the Extender Custom Tables Screen.

## Extender Configurator Tutorials

Review examples to configure Sage 300 to log changes to records, send an email or create an Information Manager Note.

<b>A/R Credit Limit Approval</b> .....	<b>28</b>
<b>Customer On-Hold Alert and Approval</b> .....	<b>36</b>
<b>O/E Orders Approvals</b> .....	<b>42</b>
<b>A/P Payment Batch Approval</b> .....	<b>51</b>
<b>Vendor Alert Manual workflow</b> .....	<b>64</b>

**I/C Options Notification** .....

**69**

## A/R CREDIT LIMIT APPROVAL

### Overview

A company wants to configure workflow using Orchid Extender to control who can approve A/R Customer credit limits.

Users can approve up to \$10,000

Between \$10,000 and \$50,000, a user in the A/R Team must approve and the Workflow console must display the request in Yellow

Above \$50,000, Anne must approve. Credit Limit requests above \$50,000 must show in Red in the Console.

**Tip:** You can import the "Customer Credit Limit multi-level" Sample workflow.

### Sample files

Workflow Template example- You can import the file: [A/R Credit Limit approvals - Workflow template tutorial](#)

Go to Extender Setup > Workflow Templates > Import.

Continue the setup as per below.

Requires Extender PU12.00 or above

## EXTENDER SETUP KEY STEPS

This A/R Credit Limit workflow template is designed to be started automatically when the A/R Credit Limit field is updated in Sage 300. The workflow will restore the original credit limit until the request is approved.

1. Configure Workflow Users. Refer to Extender License and Workflow Users on page 129
2. Create User Group "ARAPPROVER" and add Sage 300 users that are in the A/R Team to approve credit limits up to \$50,000. (Workflow User Groups on page 97)
3. Configure SMTP Email settings in Extender Options (Extender Email Tab on page 86)
4. Add message templates (In the example workflow, 3 templates are used: WFARCUSTCLMT when the credit limit changes, WFARCRLIMTAPPR when

request is approved, WFARCLMTREJECT when request is rejected) (Message Templates on page 102)

5. Add Workflow colours : Urgent (colour = Red) for large credit limits, Yellow for pending requests, Approved (colour = Green) (Workflow Colours on page 96)
6. Create a "Workflow Template" in Extender Setup > Workflow Templates
7. To attach the workflow to the A/R Customer view, refer to Attach workflow to AR0024 {AMTCRLMT} Field on page 32
8. To configure workflow icons on screens, refer to Configure Information Manager on page 33

## Workflow template - Step by step guide

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

For details, refer to Workflow Templates - Screen Guide on page 132

The screenshot displays the 'ORCWF1 - Extender Workflow Templates' configuration interface. At the top, the 'Template ID' is 'Customer Credit Limit multi-level' and the 'Description' is 'Credit limit check -different approval users depending on requested amount'. Below this, there are control buttons for 'Active', 'Auto Delete instance when complete?', 'Can start manually?', and 'Can start multiple instances?'. The main area contains a table of steps:

Lin...	Step Name	Description	Entry Step
1	Check	Check new limit	Yes
2	Wait	Waiting for approval	No
3	Approve	Approve new credit limit	No
4	Reject	Reject new credit limit	No
5	Reassign	Reassign	No

Below the steps table is the 'Step Actions - Executed when a workflow enters this step' table:

Lin...	Action #	Action Name	Field	Operator <<=	Value	True Acti...	False Action #	Comment
1	10	Evaluate	{AMTCRLMT}	>=	{ARUSERLMT}	20	120	Limit set in the workflow values or the View Events and Scrip...
2	5	SetValue	CUSTOMER			10	10	Set the Customer Value for Drill down
3	20	Evaluate	{AMTCRLMT}	>=	{ARMGRLMT}	50	30	If greater than manager limit, approver = manager
4	30	Assign User	{ARUSERAPPROV}			40	40	Assign to AR Approver group
5	40	Assign Colour	Yellow			70	70	Credit limit colour for AR Approver
6	50	Assign User	{ARMGRAPPROV}			60	60	Assign to Manager user
7	60	Assign Colour	urgent			70	70	User Urgent colour on Console for large requests
8	70	Set Field	{AMTCRLMT}		{ORIGCRLMT}	80	110	Restore the old credit limit for now
9	80	Set Description	{NAMECUST} + {IDG...			90	90	Sets the description field, can use more than one field from S...
10	90	Set Status	On Hold			100	100	WF status = on hold
11	100	Send Email	WFARCLMT		susan prome... nathalie@orchid.systems	110	110	
12	110	Go To Step	Wait			0	0	
13	120	Set Status	Complete			125	0	WF instance = Approved
14	125	Assign Colour	Approved			130	0	
15	130	Complete				0	0	Complete wf, no approval required

On the right side, there is a 'Workflow Values' table:

Name	Value
ARMGRAPPROV	ANNE
ARMGRLMT	50000
ARUSERAPPROV	ARAPPROVER
ARUSERLMT	10000
CUSTOMER	
ORIGCRLMT	{ORIGINAL_AMTCRLMT}

## WORKFLOW CONFIGURATION

Template ID - Enter a descriptive name.

The name cannot be updated after it is created

**Can start manually:** set to No as the workflow will start whenever the Credit Limit changes and will be attached to the A/R Customer view.

**Auto Delete instance when complete:** No - while testing.

You can set it to Yes later- if there are too many records in the Console, as the workflow history is accessible in the Log.

**Can start multiple instances:** Yes - If you want the workflow to behave differently if there is an active pending workflow before a new one starts, use the "IfWorkflowExists" action.

**Warning!**

When you select "No" or "No with Message", if you update a field/View configured with the workflow template, and an existing workflow instance is active, **the workflow is not triggered**.

This may disable controls you are implementing with this workflow where this workflow has an active instance is active. USE WITH EXTREME CAUTION. Consider using the "IfWorkflowExists" action and "Can start multiple workflow" = Yes

**WORKFLOW STEPS**

**Add 5 steps** - The detailed actions for each steps will be configured below.

- **Check** - Entry Step: Compare the credit limit requested to the business limits and based on the result, determine what actions to take, is an approval required, is an alert or notification required?
- **Wait** - Record is waiting for approval.
- **Approve** - Approving User to confirm the amount approved, enter a comment and when the credit limit is updated in Sage, send an email confirmation to the user who started the workflow.
- **Reject** - Rejecting user to enter a comment.
- **Reassign** - this template uses a custom Reassign action so that the new user assigned can receive an email.

**PROGRESS-TO STEPS**

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

For A/R Credit Approval, the request can be Approved or Rejected.

- Select the Wait Step, add 2 steps that a user can select: Approve and Reject

**VALUES**

Values are used in the workflow and saved in the workflow history.

For A/R Credit Approval, the workflow will track the Customer ID to enable drill down, custom description fields and Approvers.

- Customer: to enable drilldown - Set in the first workflow step
- ORIGCRLMT: original credit limit - Set in the first workflow step

Values are also used as variables in the workflow actions. In this example, we have configured Values to store the Approver details.

- ARUSERLMT: (e.g. \$10,000) Below that amount, no approval is required
- ARMGRLMT: (e.g. \$50,000) Above that amount, a manager approval is required
- ARUSERAPPROV: ARAPPROVER, as defined in the Workflow User Groups above.  
User group that can approve up to a certain amount
- ARMGRAPPROV: Manager who can approve the larger credit limit requests

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements. In the A/R Customer Credit Limit approval, the most commonly used actions are configured.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## CHECK

**SetDrilldown:** Set the CUSTOMER value to the current customer to enable drilldown from the console

**Evaluate:** Used to compare the requested credit limit to the Amounts that require approval. If the Credit Limit is greater than \$10,000, go to the True action to evaluate if it is greater or not than \$50,000.

If it is not greater than \$10,000, go to the False action (complete the workflow as no approval is required).

**AssignUser:** Enter the appropriate user based on the amount

**AssignColour:** Enter the required colour based on the amount

**SetField:** Used to restore the original credit limit - This prevents the credit limit being saved

**Tip:** Make sure that the False action notifies the user that there was an issue preventing the update.

**SetDescription:** This will be displayed on the console. Use {NAMECUST}-{IDGRP} to show the Customer name and Group.

**SendEmail:** Choose a template and the Sage 300 user. The email address will be from the User profile in Sage 300.

**GoToStep:** Choose Wait step if approval is required so that users can Approve or Reject on the console.

## WAIT

This step has no action, as it is waiting for a User to progress the workflow.

## APPROVE

**AddParameter:** Add 2 fields:

- APPRCRLIMIT to confirm the Approved credit limit. Defaults to {TOVALUE}, the requested value.
- APPRCOMMENT: for approver to enter a comment

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SetField:** This action will save the credit limit entered on the screen. The value should be the parameter name as entered above {APPRCRLIMIT}.

{TOVALUE} is the originally requested credit limit. If you are not prompting the user to confirm the amount or enter a new one, you can use this to update the Credit Limit.

The True action can complete the workflow.

False Action: this means the Credit Limit wasn't updated (for example, the approver doesn't have rights to Sage 300). Make sure this goes back to the Wait step and doesn't complete the workflow.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**GoToStep:** Go back to Wait if the field update has not been successful.

## REJECT

**AddParameter:** Add 2 fields:

- REJECTREASON: for user to enter a comment / reason for rejection

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**Complete:** Completes the workflow. Will be deleted from the Console if "Auto delete" is set to Yes.

## Attach workflow to AR0024 {AMTCRLMT} Field

The workflow template is attached to the A/R Customer view (AR0024) so that the workflow starts automatically when the Credit Limit is updated.

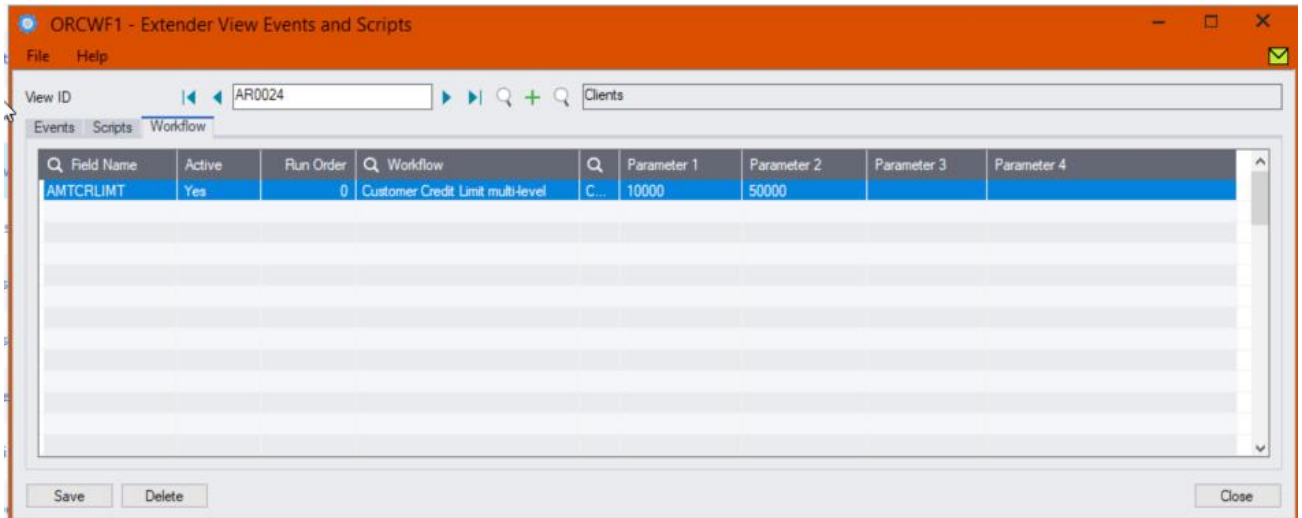
### DETAILED STEPS



Extender Setup > View Events and Scripts.

For detailed steps, refer to View Events, Scripts & WF on page 149

Select AR0024 view, on the Workflow Tab, select the Customer Credit Limit workflow and "Check" as the Entry step.



**Tip:**

You can also use up to 4 parameters configured in View Events and Scripts > Workflow Tab. Parameters need to be used in the Workflow template using SetValue.

Using Parameters in Workflow

## Configure Information Manager

Optionally, install and activate Information Manager

This is required if you want to add icons on relevant Sage 300 screens to view and progress workflow.

### CONFIGURE ICONS ON SAGE 300 A/R SCREEN

To view the workflow history and progress active workflow from the AR Customer screen, configure Information Manager , I/M Setup > Options > Notes/DML/Extender hotkey

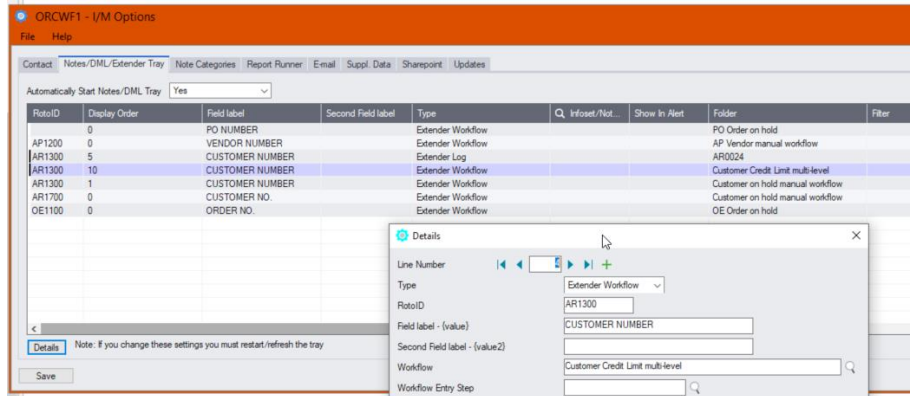
Extender Workflow- Notes/DML/Extender Tray

As the workflow cannot be started manually, do not select an Entry Step.

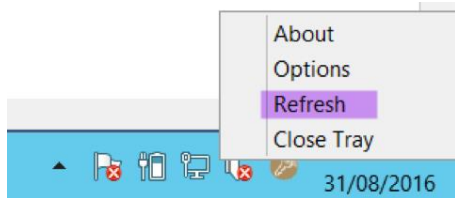
#### A/R Customer workflow on A/R Screens

If you have an A/R Credit Limit approval workflow, you can add the icons to selected screens:

- A/R Customer Screen- RotoID = AR1300 and Field Label = Customer Number
- A/R Customer Inquiry screen - RotoID = 1700, and field label = Customer No



Refresh the Tray icon if you have made any changes on the IM Setup>Options in the current session as the Tray icon reads the current setup when the company is first opened.



**Tip:** If you have multiple Tray icons, Close the Sage 300 desktop and re-open to refresh the configuration.

## testing Sage 300 workflow setup

The workflow is started when the A/R Customer credit limit is updated (by a user on a Sage 300 screen or by an import or a custom process using the Sage 300 Views).

Update the credit limit for a Customer in A/R - E.g. change the credit limit from \$10,000 to \$15,000

When you save the A/R Customer, the credit limit remains set to \$10,000.

### USING THE WORKFLOW CONSOLE

Go to Extender Console, notice the workflow instance record.

Click on Values Tab to see the details.

Use history to view the steps that the workflow has been following.

Log on as a Workflow user who can approve,

- click Approve on the console.
- Confirm the credit limit to approve and a comment
- Drill down to the AR Customer to check.

### USING TRAY ICONS

Log on as a user who can approve,

- Find the customer or drill down from the console
- Click on the Workflow icon, select Reject
- Enter a reason
- Confirm the email is sent to the user who started the workflow.

**Requirement!**

This functionality is available in Extender Levels Configurator and Developer.

This functionality requires Extender Developer.

To approve on the Remote form without logging to Sage 300 first, you need an active subscription to the Remote Action Service. You can then configure the workflow template to use Remote Action.

To use the Workflow console, configure the user as a "Workflow User". Refer to [Understanding Workflow Users](#) on page 127

To use the Tray Icon on the Sage 300 screens, you need to install Information Manager, configure the tray icons and configure the user as a "Workflow User".

## CUSTOMER ON-HOLD ALERT AND APPROVAL

### Overview

AR Team users need the ability to put a customer on hold and send an email to the primary sales person for the customer.

The company requires 2 different users to approve sequentially before the customer can be taken off-hold.

### Sample files

Workflow Template example- You can import the file: [Manual Workflow - Set a Customer On-Hold and email the sales person](#)

Go to Extender Setup > Workflow Templates > Import.

Continue the setup as per below.

Requires Extender PU12.00 or above

### Extender Setup key steps

To achieve the requirement, we will create a workflow template that can be manually started and configure an icon on the A/R Customer inquiry screen.

- Add email templates
- Create a "Workflow Template" in Extender Setup > Workflow Templates - Set Customer on hold and notify sales person.
- Add Workflow Users - Understanding Workflow Users on page 127
- Add Information Manager Configuration to start the Extender Workflow.

### Workflow template - Step by step guide

#### WORKFLOW CONFIGURATION

Template ID - Enter a descriptive name. The name cannot be updated after it is created

**Can start manually:** set to Yes

**Note:** You need to configure what screen the workflow can be started on in I/M Options > Notes/DML/Extender Tray setup.

**Auto Delete instance when complete:** Yes

**Can start multiple instances:** No with Message- to ensure the first request is completed before a new one starts.

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

For more details. Workflow Templates - Screen Guide on page 132

## **WORKFLOW STEPS**

**Add 6 steps** - The detailed actions for each steps will be configured below.

- **Set On Hold** : Entry Step. Assigns the workflow to Nathalie
- **Wait** : Record is waiting for approval.
- **Approve 1** : Assigns the workflow to Anne for second approval.
- **Waiting for 2nd Approval:** Record is waiting for final approval
- **Take Off hold** : 2nd Approver can take the customer off hold.
- **Reject** : Close the workflow and leave the customer on hold.

## **PROGRESS-TO STEPS**

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

In this example,

- Select the Wait Step, add 2 steps that a user can select: Approve 1 and Reject
- Select the "Waiting for 2nd approval" step and add 2 steps "Take off hold" and "Reject"

## **VALUES**

Values are used in the workflow and saved in the workflow history.

For Customer On Hold manual workflow, the workflow will track the Customer ID to enable drill down, custom description fields and Approvers.

- Customer: to enable drilldown - Set in the first workflow step

## **ACTIONS**

For each step, the template includes a series of actions to match the process flow requirements. In the A/R customer on hold manual workflow, some of the key actions are described in this tutorial.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## **SET ON HOLD**

**SetValue:** {VIEWID} - This is required for a manual workflow to attach the workflow to a Sage 300 View. View fields are now available in the workflow actions and in message templates.

**SetDrilldown:** Set the CUSTOMER value to the current customer to enable drilldown from the console

AddParameter and AskForParameters: Prompt user for a reason to store in the workflow values.

**AssignUser:** Enter the appropriate user based on the amount

**SetStatus:** Set the workflow status to "Customer on Hold"

**SetField :** Used to Set the customer on hold {SWHOLD} = 1

**Tip:** Make sure that the False action notifies the user that there was an issue preventing the update.

**SetDescription:** This will be displayed on the console. Use {NAMECUST}-{IDGRP} to show the Customer name and Group.

**SendEmail:** Choose a template and the email address to use

GoToStep: Choose Wait step if approval is required so that users can Approve or Reject on the console.

## WAIT AND WAITING FOR 2ND APPROVAL

The Wait steps have no action, as it is waiting for a User to progress the workflow.

## APPROVE/FIRST APPROVAL

This step doesn't take the Customer off hold, it stores the User who first approved and assigns to a second user.

**SetValue:** This action stores the User who approves - Value = APPROVER1, Field = {USER}

**AssignUser:** Enter the 2nd approver user. Could be a user group.

**SetStatus:** Enter a status meaningful for Workflow log and reports.

**GoToStep:** Go back to Wait if the field update has not been successful.

## OFF HOLD/2ND APPROVAL

**Evaluate:** If the logged on user is the same as the first Approver, Display an error and go back to Wait step.

If the logged on user is different from the first Approver, take the customer off hold.

**SetField:** This action will take the customer off hold. {SWHOLD} = 0

The True action can complete the workflow.

**False Action:** this means the On Hold Flag {SWHOLD} wasn't updated (for example, the approver doesn't have rights to Sage 300). Make sure this goes back to the Wait step and doesn't complete the workflow.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**SetStatus:** Enter a status meaningful for Workflow log and reports.

**GoToStep:** Go back to Wait if the field update has not been successful.

## **REJECT**

**SetStatus:** Rejected - Used on console and workflow history.

**AddParameter:** Add 2 fields:

- **REJECTREASON:** for user to enter a comment / reason for rejection

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**Complete:** Completes the workflow. Will be deleted from the Console if "Auto delete" is set to Yes.

## Attach workflow to AR Customer Inquiry screen

To start the workflow manually, you don't need to add it to Extender Setup > View Events and Scripts. Instead, you add the configuration in I/M Options > Notes/DML/Extender Tray setup.

**Requirement!** This requires to install and activate Information Manager. If you are only using Extender screen icons functionality, you can install the module without activation code.

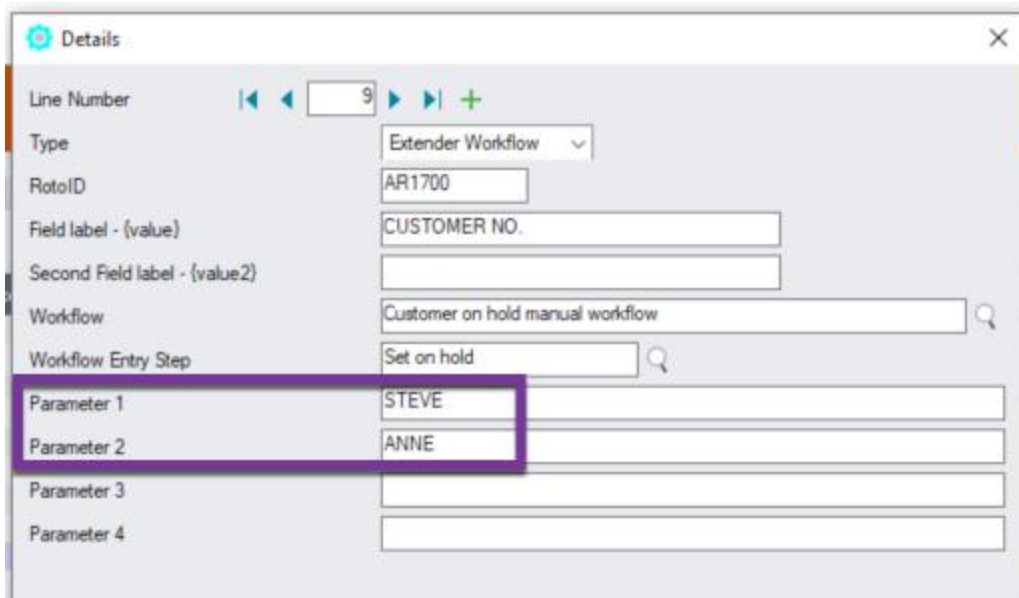
## Extender

Select RotoID AR1700 for Customer Inquiry.

Field Label: Customer No.

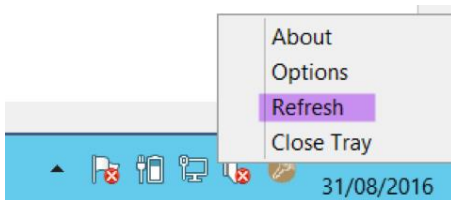
Select the workflow template and an Entry Step.

Enter Approver 1 and Approver 2 users in Parameters 1 and 2.



Line Number	9
Type	Extender Workflow
RotoID	AR1700
Field label - {value}	CUSTOMER NO.
Second Field label - {value2}	
Workflow	Customer on hold manual workflow
Workflow Entry Step	Set on hold
Parameter 1	STEVE
Parameter 2	ANNE
Parameter 3	
Parameter 4	

Refresh the Tray icon if you have made any changes on the IM Setup>Options in the current session as the Tray icon reads the current setup when the company is first opened.



**Tip:** If you have multiple Tray icons, Close the Sage 300 desktop and re-open to refresh the configuration.

## Using Extender workflow to set customer on hold

### Use Icon on AR Inquiry screen to put on hold

Find a customer with overdue invoices that you want to put on hold. Start the workflow on the Screen icon.

Enter a comment when prompted.

The customer is put on hold and the sales person receives an email with the custom reason.

When the first user has approved, the second user receives a notification and can run the final approval step.



## Viewing workflow history and logs

- When the workflow is complete, you can use Workflow Log to view past instances when the workflow was used to set the customer on hold.
- View Workflow Logs to see history.

### **Requirement!**

This functionality is available in Extender Levels Configurator, Customizer and Developer.

To use the Workflow console, users need to be configured as a Workflow User.

To configure the Tray Icon on the Sage 300 screens, you need to install Information Manager.

To use the icons, you need to configure the user as a Workflow User

## O/E ORDERS APPROVALS

### Overview

A company wants to configure workflow using Orchid Extender to approve orders placed by Retail Customers.

When an order is entered for a Retail customer, the order is immediately placed on hold and the customer service manager receives an email notification. A user in Accounts must approve the order to take it off hold.

When the order is approved, it is taken off hold automatically and the user who entered the order receives an email notification.

When the order is rejected, a comment is entered and the requester receives an email.

The same workflow is required when they need to take off-hold orders put on hold manually.

### Sample files

Workflow Template example- You can import the files:

Workflow template to attach to {INSERT} of an O/E Order: [OE Order Insert Workflow.xlsx](#)

Template to attach to {ONHOLD} view field: [OE Order on hold.xlsx](#)

Go to Extender Setup > Workflow Templates > Import.

Continue the setup as per below.

Requires Extender PU12.00 or above

### Extender Setup key steps

This Retail O/E Approval workflow template is designed to be started automatically when a new O/E Order is inserted for a Customer in the Retail (RTL) Customer Group. The workflow will set the order on hold automatically.

A separate workflow to control the process to take orders Off hold starts automatically. This process is also used for orders set on hold outside of the workflow.

In this tutorial, the customer group that requires approval is configured as a Parameter when attaching the workflow to the Sage O/E View.

The Approver who can take the order off hold is also configured when the workflow is attached to the Sage O/E Order view.

Add email templates "Order approved" and "Order rejected"

Configure Workflow colours: Orange to show New On-hold orders and Red for "rejected" orders.

Create a O/E Order approval Workflow and Order On hold workflow in Extender Setup > Workflow Templates.

## Workflow template - Step by step guide - OE New Retail orders on hold

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

Workflow Templates - Screen Guide on page 132

### **WORKFLOW CONFIGURATION**

Template ID - Enter a descriptive name.

The name cannot be updated after it is created

**Can start manually:** set to No as the workflow will start whenever an O/E order is inserted and will be attached to O/E Order view.

**Auto Delete instance when complete:** Yes - as the workflow history is available in Extender Inquiries.

You can set it to No while testing to view all Orders workflow on the console.

**Can start multiple instances:** Yes

### **WORKFLOW STEPS**

**Add 3 steps** - The detailed actions for each steps will be configured below.

- **Check** = Entry Step: If the Customer group = Retail, request approval and set the Order on hold flag to "on hold"
- **Error**= If the workflow has a critical error, such as the order cannot be set on hold, the workflow will wait for a manual intervention
- Complete if the workflow has had an error, can be manually completed.

### **PROGRESS-TO STEPS**

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

When the order is on hold, the O/E Offhold approval workflow will be used to manage the approval process.

The O/E Order Insert workflow can be manually progressed if it ends up in the Error step.

- Select the Error Step, add a step that a user can select: Complete

### **VALUES**

Values are used in the workflow and saved in the workflow history.

For O/E Order Approval, the workflow will track the Order Number and Customer ID to enable drill down and the Order total amount for reference under "Requested value" in the console.

- Customer and ORDERNO: to enable drilldown - Set in the first workflow step
- OrderAmount: set to the Order Total in the first step

Values are also used as variables in the workflow actions. In this example, we have configured Values to store the App

- WFCOMMENT : WFCOMMENT is used to set the default On hold reason. Set to "Retail Order set on hold by the workflow". Text can be updated in the Values section of the screen without updating the rest of the workflow actions.

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements. In the A/R Customer Credit Limit approval, the most commonly used actions are configured.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## CHECK

**SetDrilldown:** Set the CUSTOMER value to the current customer and the ORDERNO to the current Order to enable drilldown to customer and order from the console.

**SetDescription:** This will be displayed on the console. Use {CUSTOMER}-{BILNAME}-PO: {PONUMBER} to show the Customer number, name and the PO Number on the order.

**Evaluate:** Used to check if the order is a "Retail" order. Defined as an order for a customer in the RTL Customer Group. The customer group is configured as a parameter when the workflow is attached to the O/E Order view rather than hard coding it in the workflow.

If the Order customer group is the one configured in parameter 1 ({\$1}, then approval is required. If not, the False action is set to another action to update the status and complete the workflow, as no approval is required, so the order is not put on hold.

**AssignUser:** Select {\$2} as the approver is entered as Parameter 2 when the workflow is attached to the OE Order view.

**AssignColour:** Enter the required colour for the console.

**SetField:** The Order is set to "On Hold" so that the order can be saved, but not processed further until approved.

**Tip:** Make sure that the False action notifies the user that there was an issue preventing the update.

**SetField:** {HOLDREASON} is set to the value {WFCOMMENT}. You can update the description in the Values section of the workflow template.

**ShowUserMessage:** This is used to inform the user that the workflow has started and the order is on hold. Use in conjunction with Evaluate {PROGRAM} to ensure the message box is only displayed if using a Extender screen . If a custom program running on the server inserts order, you do not want any messages to show on the server.

**SendEmail:** Choose a template and the email address to use

**GoToStep:** Choose Wait step if approval is required so that users can Approve or Reject on the console.

## **ERROR**

This step has no action, as it is waiting for a User to progress the workflow.

Use Progress To Steps to configure what steps the user can start.

## Workflow template - Step by step guide - O/E orders on hold approval

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

Workflow Templates - Screen Guide on page 132

### **WORKFLOW CONFIGURATION**

Template ID - Enter a descriptive name.

The name cannot be updated after it is created

**Can start manually:** set to No as the workflow will start whenever the ONHOLD flag is updated and will be attached to O/E Order view, {ONHOLD} field.

**Auto Delete instance when complete:** Yes - as the workflow history is available in Extender Inquiries.

You can set it to No while testing to view all Orders workflow on the console.

**Can start multiple instances:** Yes

### **WORKFLOW STEPS**

**Add 4 steps** - The detailed actions for each steps will be configured below.

- **Check** = Entry Step: If the Customer group = Retail, request approval and set the Order on hold flag to "on hold"
- **Wait** = Record is waiting for approval.

- **Off-hold** = Order is approved and taken off hold
- **Reject** = Order remains on hold and requester receives an email.

## PROGRESS-TO STEPS

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

For O/E Order Approval, the request can be Approved (Order taken off hold) or Rejected (Order remains on hold and can be deleted manually)

- Select the Wait Step, add 2 steps that a user can select: Off-Hold and Reject

## VALUES

Values are used in the workflow and saved in the workflow history.

For O/E Order Approval, the workflow will track the Order Number and Customer ID to enable drill down and the Order total amount for reference.

- Customer and ORDERNO: to enable drilldown - Set in the first workflow step
- OrderAmount: set to the Order Total in the first step

Values are also used as variables in the workflow actions. In this example, we have configured Values to store the App

- WFCOMMENT : WFCOMMENT is used to set the default On hold reason. Set to "Retail Order set on hold by the workflow". Text can be updated in the Values section of the screen without updating the rest of the workflow actions.

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements. In the A/R Customer Credit Limit approval, the most commonly used actions are configured.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## CHECK

**SetDescription:** This will be displayed on the console. Use {CUSTOMER}-{BILNAME}-PO: {PONUMBER} to show the Customer number, name and the PO Number on the order.

**SetDrilldown:** Set the CUSTOMER value to the current customer and the ORDERNO to the current Order to enable drilldown to customer and order from the console.

**Evaluate:** if the user sets the order to "off hold", ({ONHOLD} value = false), go to an action that leaves the order on hold and notifies the user that the field can only be updated through the workflow.

**AssignUser:** Select {\$2} as the approver is entered as Parameter 2 when the workflow is attached to the OE Order view.

**AssignColour:** Enter the required colour for the console.

**SetField :** The Order is set to "On Hold" so that the order can be saved, but not processed further until approved.

**Tip:** Make sure that the False action notifies the user that there was an issue preventing the update.

**SetField:** {HOLDREASON} is set to the value {WFCOMMENT}. You can update the description in the Values section of the workflow template.

**SendEmail:** Choose a template and the email address to use

**GoToStep:** Choose Wait step if approval is required so that users can Approve or Reject on the console.

## **WAIT**

This step has no action, as it is waiting for a User to progress the workflow.

Use Progress To Steps to configure what steps the user can start.

## **OFF HOLD / APPROVE**

**SetField:** This action will set the ONHOLD flag to 0. The order will not be on hold anymore.

The True action can complete the workflow.

False Action: this means the Credit Limit wasn't updated (for example, the approver doesn't have rights to Sage 300). Make sure this goes back to the Wait step and doesn't complete the workflow.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

Optional, ShowUserMessage if the program is the OE1100 screen to notify the user that the order is off-hold.

**GoToStep:** Go back to Wait if the field update has not been successful.

## **REJECT**

**AddParameter:** Add a field:

- REJECTREASON: for user to enter a comment / reason for rejection

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**Complete:** Completes the workflow. Will be deleted from the Console if "Auto delete" is set to Yes.

Note: You could add another step to "inform customer" and complete the workflow only when this final step is performed.

## Attach workflow to OE0520 View

Add OE Order insert workflow to {INSERT} view operation. It will start when a new order is inserted.

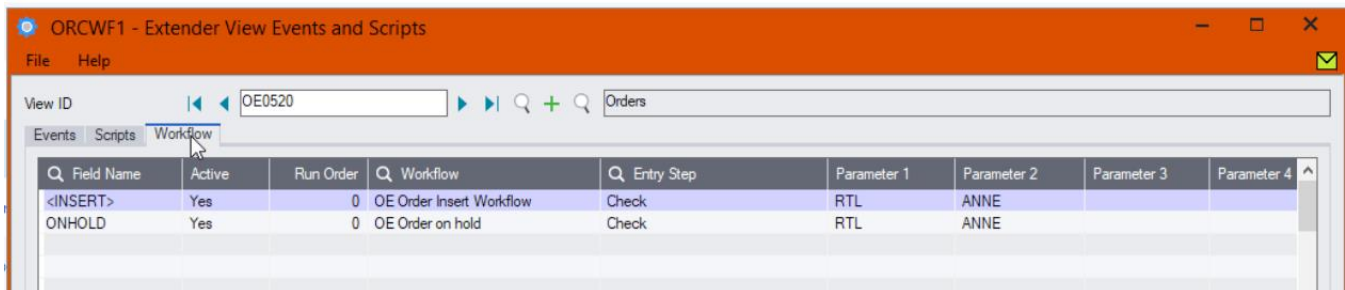
Add OE Order on hold workflow to the ONHOLD field. It will start whenever the Order on hold field is updated

**Note:** The ONHOLD workflow will start when the field is updated on the Sage 300 screen, through other programs using the O/E Order view, including when the field is updated in a separate workflow template.

In Extender Setup > View Events and Scripts, select the workflow and the entry step.

Parameter1 = Customer Group

Parameter2 = Approver User



For detailed steps, refer to View Events, Scripts & WF on page 149

## Configure Information Manager

If you want to configure icons on Sage 300 screens to progress the workflow and to view workflow history, you need to configure Information Manager.

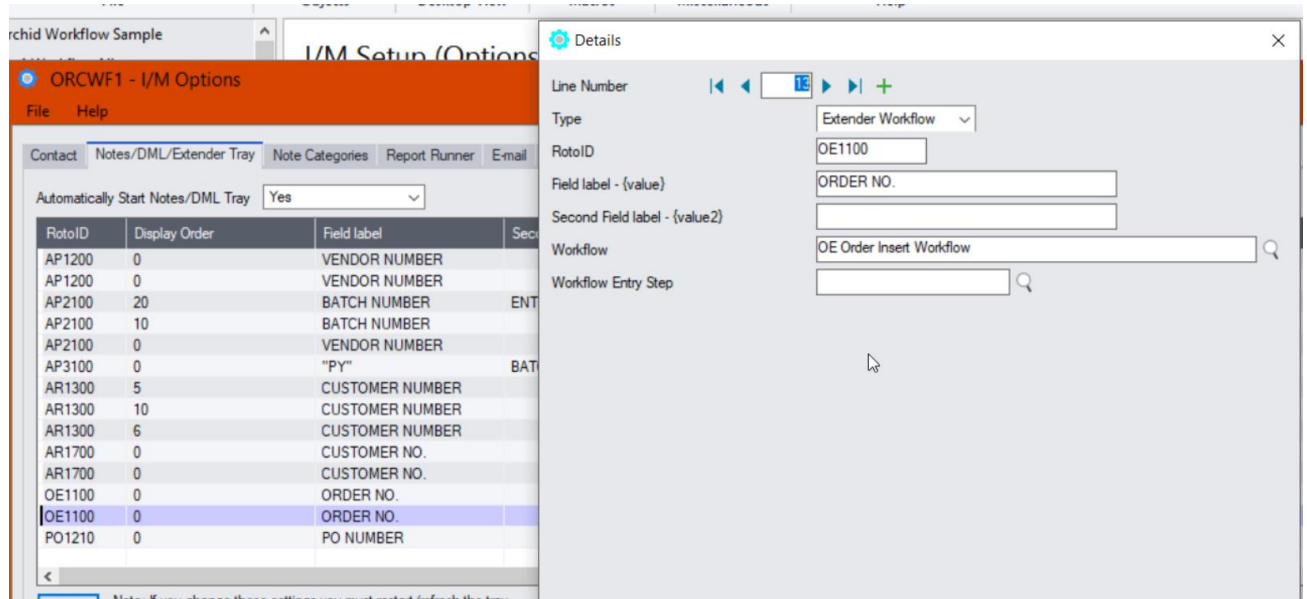
- Install and activate Information Manager for your version of Sage 300.
- Setup I/M Options for Extender Workflow. For details, Extender Workflow- Notes/DML/Extender Tray

### CONFIGURE ICONS ON SAGE 300 O/E SCREEN

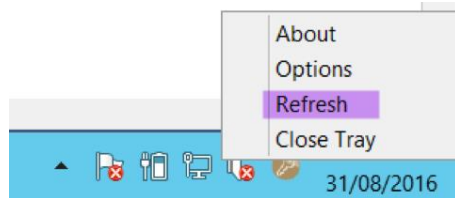


To view the workflow history and progress active workflow from the O/E Order screen, configure Information Manager , I/M Setup > Options > Notes/DML/Extender hotkey

As the workflow cannot be started manually, do not select an Entry Step.



Refresh the Tray icon if you have made any changes on the IM Setup>Options in the current session as the Tray icon reads the current setup when the company is first opened.



**Tip:** If you have multiple Tray icons, Close the Sage 300 desktop and re-open to refresh the configuration.

## Using Extender

Add orders for Retail Customers

Check that the Order is on Hold and OnHold Comment = Retail order set on hold by workflow

### Note:

If you add orders for non Retail Customers, the workflow will also be started on INSERT. The workflow goes to a Complete action, so will not be visible on the console if you select "Auto delete when complete". It will be in the workflow history.

If you only want to start the workflow in some conditions and don't want to see all orders in the workflow history log, you need a custom script that will start the workflow when certain conditions are met.

## USING THE WORKFLOW CONSOLE

Go to Extender Console, notice the workflow instance record.

Click on Values Tab to see the details.

Use history to view the steps that the workflow has been following.

Log on as a user who can approve,

- click "Off Hold" on the console to approve the order.
- Drill down to the O/E Order to check.

## USING TRAY ICONS

Log on as a user who can approve,

- Find the Order or drill down to the O/E Order from the console
- Click on the Workflow icon, select Off-Hold or Reject
- Enter a reason
- Confirm the email is sent to the user who started the workflow.

### Requirement!

This functionality is available in Extender Levels Configurator and Developer.

This functionality requires Extender Developer.

To approve on the Remote form without logging to Sage 300 first, you need an active subscription to the Remote Action Service. You can then configure the workflow template to use Remote Action.

To use the Workflow console, configure the user as a "Workflow User". Refer to Understanding Workflow Users on page 127

To use the Tray Icon on the Sage 300 screens, you need to install Information Manager, configure the tray icons and configure the user as a "Workflow User".

## A/P PAYMENT BATCH APPROVAL

### Overview

A company wants only certain users to approve A/P Payment Batches. They configure workflow using Orchid Extender to control who can set A/P Payment Batches to "ready to post".

This A/P Payment batch workflow template is designed to be started automatically when the A/P Payment batch status is updated in Sage 300.

When a user sets the batch to **Ready to post**, the workflow will reset the Batch status to **Check Creation in Progress (8)** until the request is approved. This ensures the batches cannot be modified while the workflow is in progress.

When the request is approved, the batch status is set to **Ready to Post** and the batch is posted automatically.

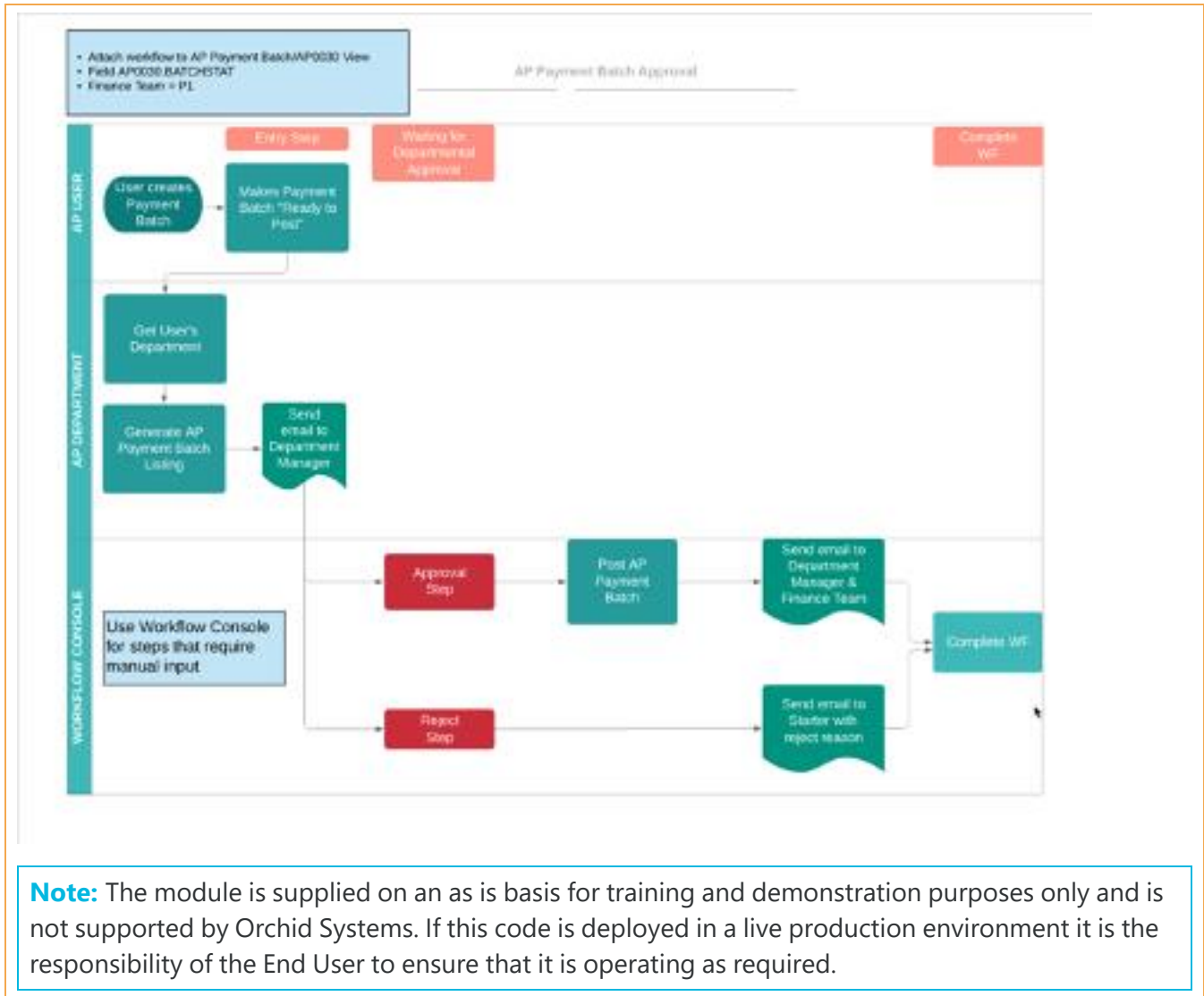
When the batch is rejected, the status is reset to **Open**.

The workflow updates the batch description to include **Submitted** or **Approved** to inform users.

### Sample files

You can import the "**A/P Payment Batch Approval**" sample module. It includes a workflow template and required message templates. The workflow template is attached to the AP Payment batch status field.

[AP Payment Batch Approval Module](#)



**Note:** The module is supplied on an as is basis for training and demonstration purposes only and is not supported by Orchid Systems. If this code is deployed in a live production environment it is the responsibility of the End User to ensure that it is operating as required.

## EXTENDER SETUP KEY STEPS

To start using the AP Payment approval module, you need to follow the steps below:

### Configure SMTP Email settings in Extender Options

This is required for the workflow to send emails to users, that an approval is required and when a batch is approved or rejected.

Refer to Extender Email Tab on page 86

### Configure Workflow Users

All Sage 300 users who need to approve batches on the workflow console need to be set as Workflow Users. Extender License and Workflow Users on page 129

Check Sage 300 users email addresses

## Create Workflow User Group

Create a workflow user group called APPAYMAPPROVER. You can add the required Sage 300 users to that group. Refer to Workflow User Groups on page 97 for details.

If you don't create a workflow user group, you can select a Sage 300 user as the approver. See Step 6 below.

## Add Workflow colours

The AP Payment batch approval uses 2 colours: URGENT if there are any errors, and ACCOUNTS for regular workflow records on the Console.

Extender

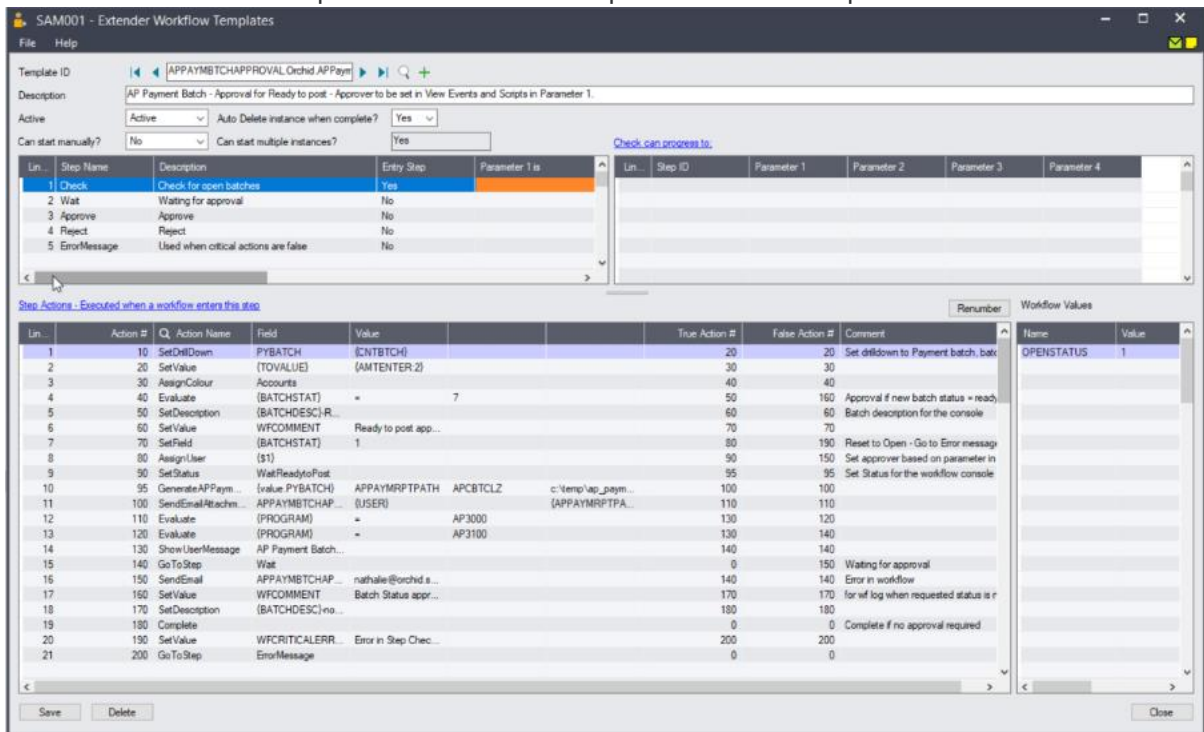
You can choose the colour you want for the console, as long as you create Workflow Colours with the same names. (Workflow Colours on page 96).

### Import the AP Payment Batch Approval.vi file

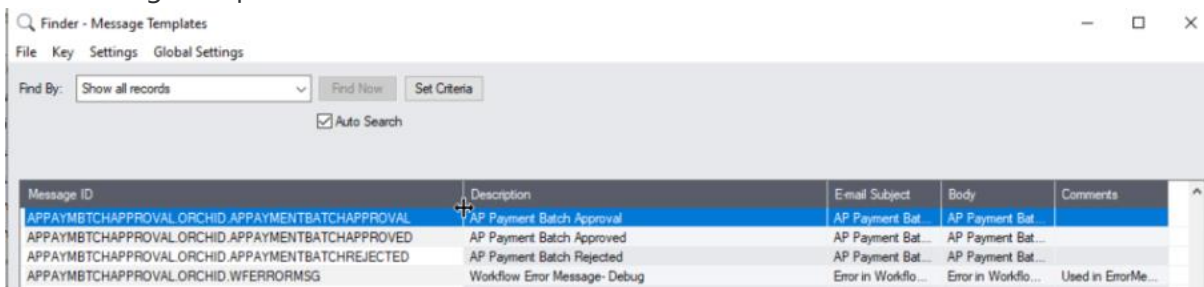
It will create a workflow template, message templates and link the workflow to the AP Payment batch view.

#### EXPAND TO VIEW DETAILED SCREENSHOTS

- Create a "Workflow Template" in Extender Setup > Workflow Templates



- Add message templates

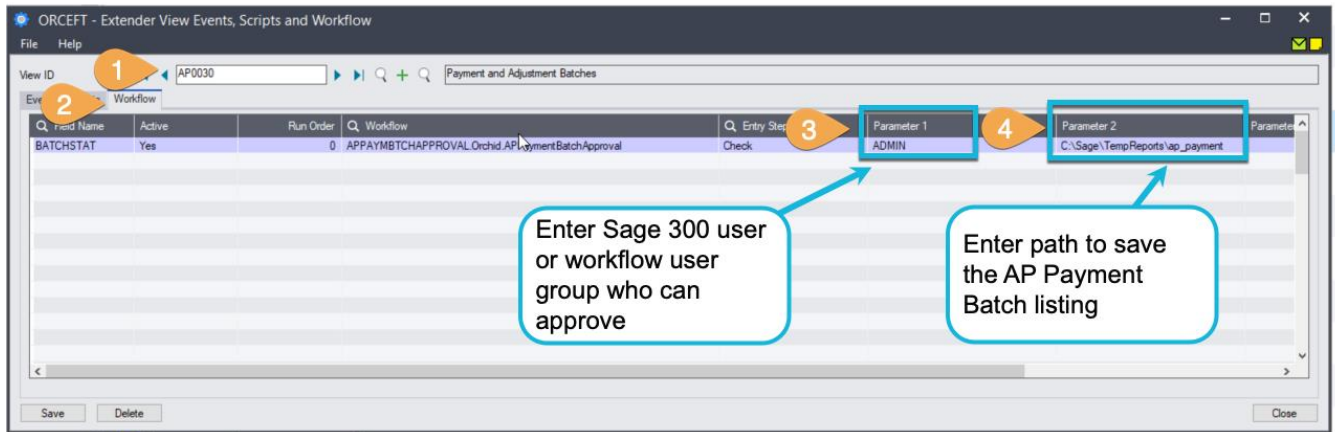


- To amend the message templates, refer to Message Templates on page 102
- Attach the Workflow template to the AP0030 > BATCHSTAT Field

### Configure the AP Payment approval module

In Extender Setup > View Events, Scripts and Workflow,

1. Select the AP0030 view.
2. On the Workflow Tab, set the required values for your company
3. In Parameter 1, enter the Sage 300 user or Workflow User Group (e.g. APPAYMAPPROVER created in Step 3) who can approve.
4. Set the path where to save the Batch listing Report in Parameter 2.



## Workflow template - Step by step guide

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

This tutorial highlights details about some important workflow actions. It is not a detailed training of each workflow action used in this template. For more details on workflow templates and actions, refer to For details, refer to Workflow Templates - Screen Guide on page 132.

### WORKFLOW CONFIGURATION

**Template ID** - The template name includes the Module ID for ease of deployment. The name cannot be updated after it is created

**Can start manually:** set to No as the workflow will start whenever the A/P Payment Batch status changes and will be attached to the A/P Payment Batch view.

**Auto Delete instance when complete:** Yes as the workflow history is accessible in the log.

**Can start multiple instances:** Yes - If you want the workflow to behave differently if there is an active pending workflow before a new one starts, use the "IfWorkflowExists" action.

### WORKFLOW STEPS

**Add 5 steps** - The main actions for each are described below:

- **Check** - Entry Step: This determine what branch the workflow should take based on the batch status that is updated and whether there is a pending workflow or not. It also sets some general values for use in the workflow console and logs. If the user tries to post the batch, the



status is reset to **Check creation in progress**

- **Wait** - Record is waiting for approval.
- **Approve** - This will set the Batch to "Ready to Post" and the batch will be posted
- **Reject** - Rejecting user to enter a comment. The batch status is reset to **Open**
- **ErrorMessage** - Used to demonstrate a suggested approach to cater for error handling in workflow, for example if Sage security settings prevent a user from completing a workflow action.

## PROGRESS-TO STEPS

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

For A/P Batch approval, the request can be Approved or Rejected.

- Select the Wait Step, add 2 steps that a user can select: Approve and Reject
- Select the ErrorMessage Step, add 2 steps so that the Admin user can Approve or Reject.

## VALUES

Values are used in the workflow and saved in the workflow history.

For A/P Batch Approval, the workflow will track the Batch Number to enable drill down

- **BATCHNO**: to enable drilldown - Set in the first workflow step
- **APPAYMRPTPATH**: stores the filepath and filename of the batch listing PDF so that it can be attached to an email.

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## CHECK

**SetDrilldown**: Set the CNTBTCH value to the current Batch Number to enable drilldown from the console

**Evaluate**: If the requested Batch Status is 7 / Ready to Post, Approval is required. If not 7, go to a step that sets a WFCOMMENT Value, Sets description and then complete the workflow immediately.

**AssignUser**: Enter the appropriate user who can set A/P Payment batches to Ready to Post

**AssignColour**: Enter the required colour for the workflow console.



**GenerateAPPaymBatchListing:** This action prints the AP Batch listing report to PDF. The file is saved into the path configured in Parameter 4, the filepath and file name are stored in a workflow value defined in Parameter 2.

**Tip:** To modify the report used, copy the default APCBTCLZ.rpt file, update the report as required and change the Report name configured in Parameter 3. The new report must have the same parameters as the default batch listing report.

The screenshot shows the 'Step Action' configuration window. The fields are as follows:

Field	Value
Line Number	15
Action #	150
Action Name	GenerateAPPaymentBatchListing
Workflow value with AP F	{value.PYBATCH}
Workflow value name to s	APPAYMRPTPATH
Report name	APCBTCLZ
Path to save the report	C:\Sage\TempReports\ap_payment
True Action #	160
False Action #	160
Comment	

Buttons: Save, Delete, Close. A 'Help' link is also visible.

**SetField:** Used to restore the A/P Payment batch status to **Check creation in progress** until approved. - This prevents the batch from being posted and updated while a workflow is pending.

It is also used to update the Batch Description to **Submitted-Original Batch Description** so users can quickly scan the batch listing and view submitted and approved batches.

**Tip:** Make sure that the False action notifies the user that there was an issue preventing the update. If SetField is false, next action is SetValue to update the WFCRITICALERROR value, and then go to ErrorMessage Step.

**SetDescription:** This will be displayed on the console. Use {BATCHDESC} to show the batch description.

**SendEmail:** Choose a template and the User / User group or email address to use

**GoToStep:** Choose Wait step if approval is required so that users can Approve or Reject on the console.

**Complete:** Action to complete the workflow, Selected If Evaluate is false, Action = Complete

**Tip:** If you want to send email notification to the approver, create a message template and add a SendEmail action.

## WAIT

This step has no action, as it is waiting for a User to progress the workflow.

## APPROVE

**AddParameter:** Optionally add a field if you want the user to enter a comment:

- APPRCOMMENT: for approver to enter a comment

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SetField:** This action will set the Batch status to 7, Ready to post.

The True action can complete the workflow.

False Action: this means the batch status wasn't updated (for example, the approver doesn't have rights to Sage 300). Make sure this goes back to the Wait step and doesn't complete the workflow. False Action could be "SendEmail" to an Admin user and then go back to "Wait" step.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**GoToStep:** Go back to Wait if the field update has not been successful.

## REJECT

**AddParameter:** Add a field:

- REJECTREASON: for user to enter a comment / reason for rejection

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**SetField:** This action will set the Batch status to 1, Open.

**SendEmailToStarter:** Select a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

**Complete:** Completes the workflow. Will be deleted from the Console if "Auto delete" is set to Yes.

If a user tries to set the batch to "Ready to post" again, a new workflow will start.

## ERRORMESSAGE

**SendEmail:** Select a User and a template. The action will use the email address in the Sage 300 user profile of the user who started the workflow.

Selected template to include {WFCRITICALERROR} value. Value updated in the workflow with details of the error.

## testing Extender workflow setup

The workflow starts when the A/P Payment Batch Status is updated (by a user on a Sage 300 screen or by an import or a custom process using the Sage 300 Views).

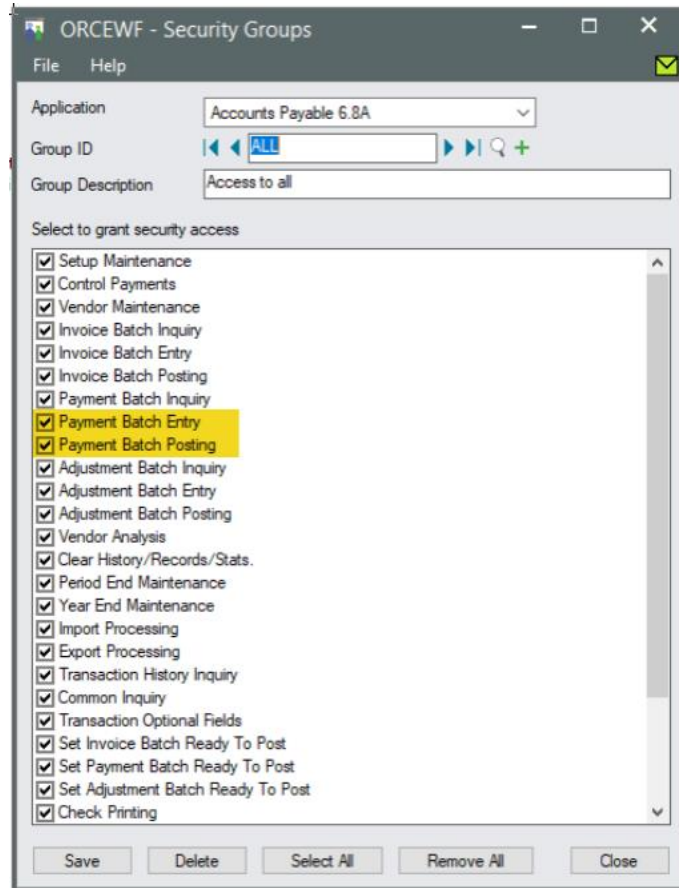
### **Start the workflow**

Log on to Sage 300 and set an A/P Payment batch to "Ready to Post".

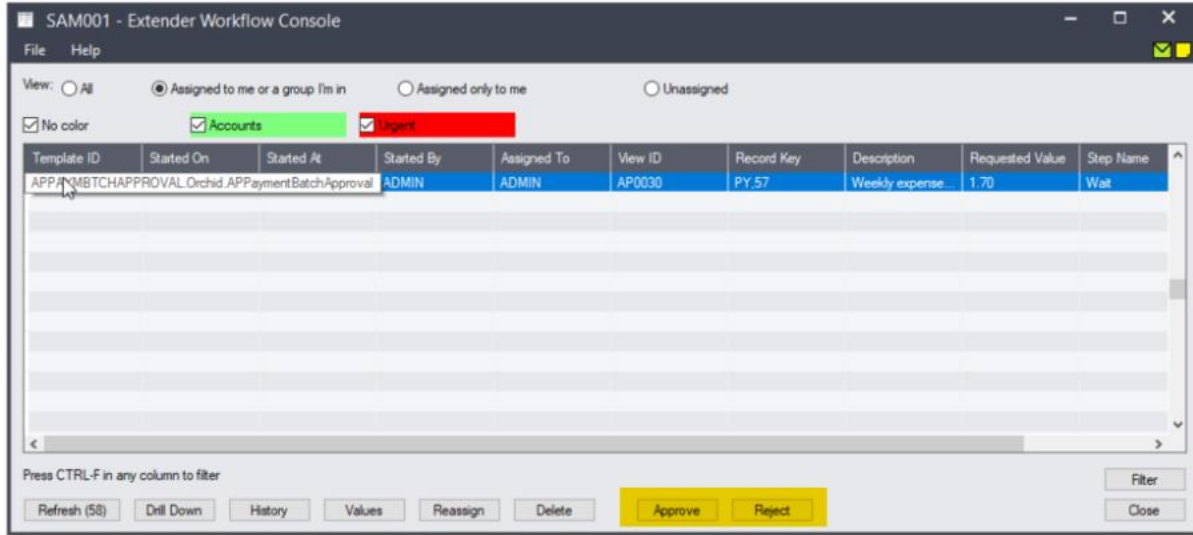
The workflow is started and the batch status is reset to "Check creation in progress".

### **Approve or Reject the A/P Payment Batch**

1. Logon to Sage 300 as a user who can approve
  - a. User needs to be set as a workflow user (in Extender License screen)
  - b. User needs rights to post an AP Payment batch in Sage 300



2. Go to Extender Workflow > Console, notice the workflow instance record.
3. Click on Values Tab to see the details.
4. Use history to view the steps that the workflow has been following.
5. Click Approve on the Workflow Console -
  - a. This will post the batch and
  - b. Send an email to the user who requested the approval.
6. View the Extender Inquiries > Workflow Details Log
  - a. Review the history of the batch being set to "Ready to Post" and approved.
  - b. Drilldown to the AP Payment batch to check that the batch is posted
7. Create another batch and repeat steps. Choose Reject on the console.
  - a. This sets the batch to Open again.
  - b. Amend the batch and set Ready to Post again.
  - c. Approve the batch on the console.
  - d. Review the Workflow Logs in Extender Inquiries



Repeat the steps

## Optionally, Configure Information Manager

If you want to configure icons on Sage 300 screens to progress the workflow and to view workflow history, you need to configure Information Manager.

- Install and activate Information Manager for your version of Sage 300.
- Setup I/M Options for Extender Workflow. For details, Extender Workflow- Notes/DML/Extender Tray

### CONFIGURE ICONS ON SAGE 300 A/P BATCH SCREEN

To view the workflow history and progress active workflow from the AP Payment /screen, configure Information Manager , I/M Setup > Options > Notes/DML/Extender hotkey

As the workflow cannot be started manually, do not select an Entry Step.

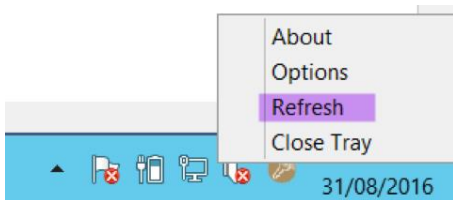
#### A/P Payment Batch workflow on A/P Payment batch screen

The A/P Payment batch view has a multi-part key, including the Batch Type and the Batch Number. The workflow key is set to PY,Batch number, so the Information Manager configuration needs to include 2 fields as shown below.

Field 1 should be set to "PY" (with quotes) and field 2 set to BATCH NUMBER.

Line Number	5
Type	Extender Workflow
RotoID	AP3100
Field label - {value}	"PY"
Second Field label - {value2}	BATCH NUMBER
Workflow	AP Payment Batch Ready to post
Workflow Entry Step	

Refresh the Tray icon if you have made any changes on the IM Setup>Options in the current session as the Tray icon reads the current setup when the company is first opened.



**Tip:** If you have multiple Tray icons, Close the Sage 300 desktop and re-open to refresh the configuration.

## USING TRAY ICONS

Log on as a user who can approve and is configured as a Workflow User,

- Find the A/P Payment Batch or drill down from the console
- Click on the Workflow icon, select Reject
- Enter a reason
- Confirm the email is sent to the user who started the workflow.

## Software Required

### Requirement!

This functionality is available in Extender Levels Configurator and Developer.

To use the Workflow console, configure the user as a "Workflow User". Refer to Understanding Workflow Users on page 127

To use the Tray Icon on the Sage 300 screens, you need to install Information Manager, configure the tray icons and configure the user as a "Workflow User".

## Using with Remote Action Service

If you want to use the Remote Action module to approve records outside of Sage 300, you need to download and install the Remote Action Module on the Orchid website through your Sage 300 partner.

You can then use the AP Approval Extender module below.

[AP Payment Batch Approval Module with Remote Action](#)

## VENDOR ALERT MANUAL WORKFLOW

### Overview

Purchasing team needs the ability to send alerts to Operations team about certain vendors.

In some cases, they just want to send an email notification. In other examples, they would like to track that the operations team has seen the alert on the console.

### Sample files

Workflow Export - You can import the files:

For a workflow that sends an alert, updates the workflow history and completes the workflow in one step: [AP Vendor manual alert-one step.xlsx](#)

if you need the assigned user to confirm they have seen the notification on the workflow console, use [AP Vendor manual workflow.xlsx](#)

Requires Extender PU12.00 or above

### Extender Setup key steps

To achieve the requirement, we will create a workflow template that can be manually started and configure an icon on the A/P Vendor screen.

- Add Workflow Users - Understanding Workflow Users on page 127
- Create a "Workflow Template" in Extender Setup > Workflow Templates : Vendor manual alert
- Add Information Manager Configuration to start the Extender Workflow.

### Workflow template - Step by step guide

#### WORKFLOW CONFIGURATION

Template ID - Enter a descriptive name. The name cannot be updated after it is created - This tutorial refers to a one-step workflow.

**Can start manually:** set to Yes

**Note:** You need to configure what screen the workflow can be started on in I/M Options > Notes/DML/Extender Tray setup.

**Auto Delete instance when complete:** Yes



**Can start multiple instances:** No with Message- to ensure the first request is completed before a new one starts.

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

For more details. Workflow Templates - Screen Guide on page 132

## WORKFLOW STEPS

**Add 1 step** - The detailed actions for each steps will be configured below.

- **Send Comment:** Entry Step. This steps also completes the workflow.

**Note:** If you want the assigned user to confirm that they have seen the alert, create another 2 steps, "Wait" and "Complete".

## PROGRESS-TO STEPS

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

In this example, if you are doing a 2-step alert workflow, where the user needs to complete the workflow,

- Select the Send Info Step, add the "Complete" step as a Progress-to step.

## VALUES

Values are used in the workflow and saved in the workflow history.

For Vendor Alert manual workflow, the workflow will track the Vendor ID to enable drill down, custom description fields and Approvers.

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements. In the A/R customer on hold manual workflow, some of the key actions are described in this tutorial.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

## REQUEST INFO

**AddParameter:** Add required fields:

- VENDORDELAY- text(size=100) - User can enter comment
- AssignedUSER - user type - when using the workflow, prompt to select the user to assign the workflow / send the alert to.

**AskForParameters:** always required after AddParameter to display the popup screen and wait for user to enter Input.

**GoToStep:** Go back to Wait if the field update has not been successful.

**SetValue:** {VIEWID} - AP0015 for A/P Vendor This is required for a manual workflow to attach the workflow to a Sage 300 View. View fields are now available in the workflow actions and in message templates.

**SetDrilldown:** Set the VENDOR value to the current Vendor {VENDORID} to enable drilldown from the console

**AssignUser:** Choose the {AssignedUSER} parameter name defined above.

- Or you can enter the appropriate user If you want to hardcode the user.
- If you can create a user group called APAPPROVER, you can select that group.

**SetStatus:** Set the workflow status to "VendorAlert"

**SetDescription:** This will be displayed on the console. Use {VENDNAME} to show the vendor name.

**SendEmail:** Choose a template and the email address/user / user group to use -

- In this example, use {CURUSER} to email the user assigned to the workflow.
- Or you can email the workflow user group created APAPPROVER.

**Final Action:**

- Complete: Set the final action to "Complete" if you want to complete the workflow in one step.
- GoToStep: Choose Wait step if you want the assigned user to confirm they have seen the alert.

**Note:** If you want the assigned user to confirm that they have seen the alert, create another 2 steps, "Wait" and "Complete".

## WAIT

The Wait steps have no action, as it is waiting for a User to progress the workflow.

## COMPLETE

**Complete** Completes the workflow. Will be deleted from the Console if "Auto delete" is set to Yes.

## Attach workflow to AP Vendor screen

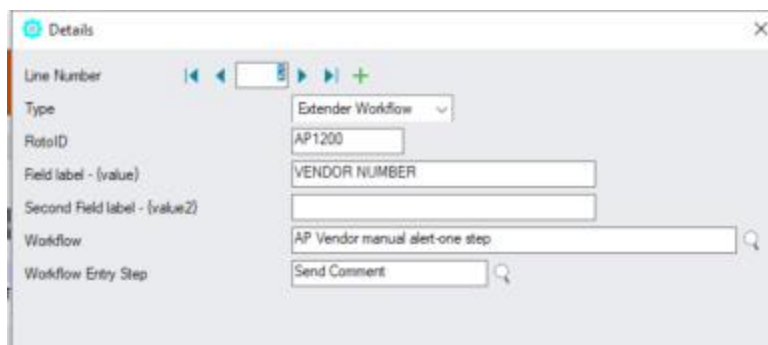
To start the workflow manually, you don't need to add it to Extender Setup > View Events and Scripts. Instead, you add the configuration in I/M Options > Notes/DML/Extender Tray setup.

If you want to configure icons on Sage 300 screens to progress the workflow and to view workflow history, you need to configure Information Manager.

- Install and activate Information Manager for your version of Sage 300.
- Setup I/M Options for Extender Workflow. For details, Extender Workflow- Notes/DML/Extender Tray

Select RotoID AP1200 for A/P Vendor.

Field Label: Vendor Number.



Line Number	<< < > >> +
Type	Extender Workflow
RotoID	AP1200
Field label - (value)	VENDOR NUMBER
Second Field label - (value2)	
Workflow	AP Vendor manual alert-one step
Workflow Entry Step	Send Comment

## Using Extender workflow to start the AP Vendor manual workflow

### Use Icon on A/P Vendor screen to send an alert

Enter a comment when prompted.

The assigned user receives a notification and can complete the workflow in the console, confirming they have seen the notification.

### Viewing workflow history and logs

- When the workflow is complete, you can use Workflow Log to view past instances when the workflow was used to send detailed comment about a customer.
- View Workflow Logs to see history.

#### Requirement!

This functionality is available in Extender Levels Configurator, Customizer and Developer.

To use the Workflow console, users need to be configured as a Workflow User.

To configure the Tray Icon on the Sage 300 screens, you need to install Information Manager.

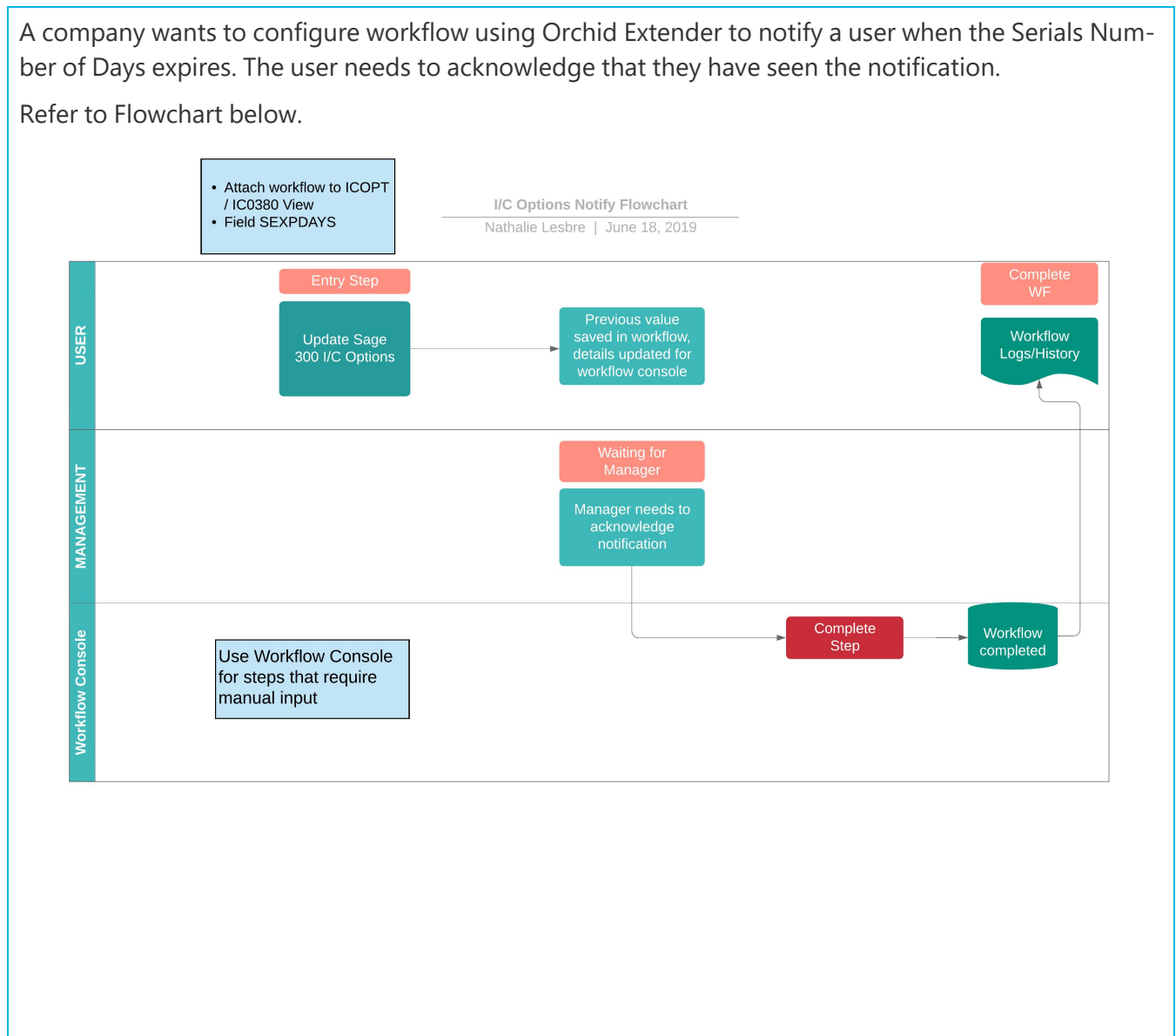
To use the icons, you need to configure the user as a Workflow User

## I/C OPTIONS NOTIFICATION

### Overview

A company wants to configure workflow using Orchid Extender to notify a user when the Serial Number of Days expires. The user needs to acknowledge that they have seen the notification.

Refer to Flowchart below.



### Sample files

Workflow Export - You can import the file: [I/C Option workflow.xlsx](#)

Requires Extender PU12.00 or above

## EXTENDER SETUP KEY STEPS

This I/C Option workflow template is designed to be started automatically when the Serials-Days to Expiry is updated in Sage 300. This workflow doesn't require approval of the change. It notifies a user, who needs to complete the workflow to acknowledge they have seen the notification.

- Create a "Workflow Template" in Extender Setup > Workflow Templates

## Workflow template - Step by step guide

It is recommended to add the main steps as defined on the process flowchart first, and then configure the detailed actions for each step.

For details, refer to Workflow Templates - Screen Guide on page 132

Lin...	Step Name	Description	Entry Step
1	Start	Start workflow to notify user	Yes
2	Wait	Wait to clear notification	No
3	Complete	Complete workflow	No

Lin...	Action #	Action Name	Value	True Action #	False Action #	Comment
1	10	SetDescription	Serials Days to Expire	20	20	Description for the console and logs
2	20	SetStatus	Notified	30	30	
3	30	AssignUser	(\$1)	40	40	Waiting for assigned user to confirm they have seen the notifica
4	40	GoToStep	Wait	0	0	

Name	Value
FROMNBDA5EXP	(ORIGINAL_SEXPDA5)

## WORKFLOW CONFIGURATION

**Template ID** - Enter a descriptive name.

The name cannot be updated after it is created

**Can start manually:** set to No as the workflow will start whenever the field changes and will be attached to the I/C Options view.

**Auto Delete instance when complete:** Yes, as the workflow history is accessible in the Log.

**Can start multiple instances:** Yes - If you want the workflow to behave differently if there is an active pending workflow before a new one starts, use the "IfWorkflowExists" action.

## WORKFLOW STEPS

**Add 3 steps** - The detailed actions for each steps will be configured below.

- **Start**- Entry Step. This will start the workflow whenever the field the workflow is attached to is updated.
- **Wait** - Record is waiting for workflow to be completed.
- **Complete**- User to complete the workflow

## PROGRESS-TO STEPS

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

For I/C Options, the user can complete the workflow, confirming that they have seen the notification of the change. .

- Select the Wait Step, add 1 step that a user can select: Complete

## VALUES

Values are used in the workflow and saved in the workflow history.

For I/C Option notification workflow, the original value is tracked in the workflow.

## ACTIONS

For each step, the template includes a series of actions to match the process flow requirements.

For a list of actions included with ExtenderConfigurator, refer to Configurator Actions on page 179

### START

**SetDescription:** Set the description based on the field you are notifying.

**SetStatus:** Type an appropriate Status, will be used on the console and the workflow logs.  
e.g. Notified

**AssignUser:** Set to {\$1} - The user will be configured as a parameter when the workflow is attached to I/C Options View.

**AssignColour:** Enter the required colour (optional)

**SendEmail:** Choose a template and the Sage 300 user. The email address will be from the User profile in Sage 300.

**GoToStep:** Choose Wait step to wait for the user to complete the workflow and clear the notification.

### WAIT

This step has no action, as it is waiting for a User to progress the workflow.

**COMPLETE**

**SetStatus:** Enter a relevant description to indicate the user has seen the notification.

**Complete:** Complete workflow.

## Attach workflow to IC0380 {SEXPDAYS} Field

The workflow template is attached to the I/C Options (IC0380) so that the workflow starts automatically when the "Serials-Days to Expiry" field is updated.

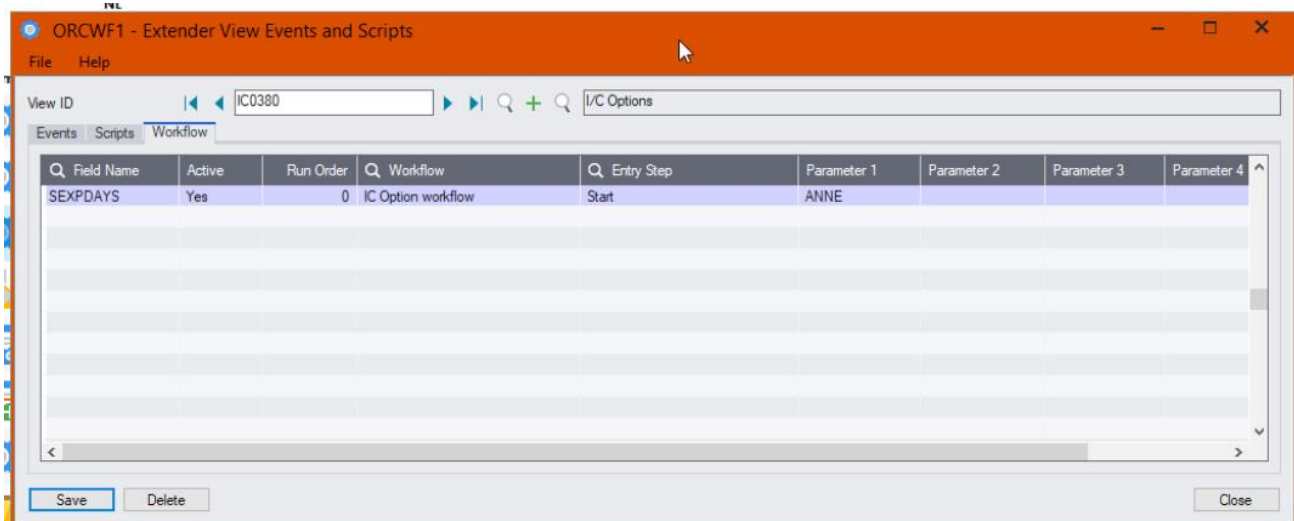
**DETAILED STEPS**

Extender Setup > View Events and Scripts.

For detailed steps, refer to View Events, Scripts & WF on page 149

Select IC0380 view, on the Workflow Tab, select {SEXPDAYS} the I/C Options Workflow and "Start" as the Entry step.

Enter the name of the Sage 300 User to notify in Parameter 1.

**Tip:**

You can also use up to 4 parameters configured in View Events and Scripts > Workflow Tab. Parameters need to be used in the Workflow template using SetValue.

Using Parameters in Workflow

## Configure Information Manager

Optionally, you can configure the Information Manager tray to display Extender buttons on relevant Sage 300 screens.

Refer to: Extender Workflow- Notes/DML/Extender Tray



## Testing Sage 300 workflow setup

The workflow is started when the I/C Options > Serials-Days to Expiry field is updated (by a user on a Sage 300 screen or by an import or a custom process using the Sage 300 Views).

**Important!** You need to close the Information Manager Tray to update I/C Options.

### **USING THE WORKFLOW CONSOLE**

Go to Extender Console, notice the workflow instance record.

Click on Values Tab to see the details.

Use history to view the steps that the workflow has been following.

Log on as a user who can approve,

- click Approve on the console.
- Confirm the credit limit to approve and a comment
- Drill down to the AR Customer to check.

### **Requirement!**

This functionality is available in Extender Levels Configurator and Developer.

This functionality requires Extender Developer.

To use the Workflow console, configure the user as a "Workflow User". Refer to Understanding Workflow Users on page 127

To use the Tray Icon on the Sage 300 screens, you need to install Information Manager, configure the tray icons and configure the user as a "Workflow User".

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## Getting Started with Extender

Depending on what you are trying to do with Extender, the Getting Started step may differ.

**Example:** You can review the Extender tutorials for specific examples using Extender to log Extender changes or configure workflow on Extender records. Refer to [Extender Configurator Tutorials](#) on page 26 and [Extender Workflow Tutorials](#)

**Note:** Extender is available in different editions with different functionality. Refer to [Orchid Website Extender Overview](#) for further details.

## CONFIGURE EXTENDER

- [Create Event types which you want to attach to Sage 300 Views and View Fields](#)
- [Attach scripts and events to Views/View Fields](#)
- [Configure Workflow Templates - Screen Guide](#) on page 132
- [Attach Workflows to View Events, Scripts & WF](#) on page 149
- [Use the Logs screen to review the logs maintained by Extender](#)
- Use View Info to familiarise yourself with the Sage 300 Views and View fields - [See Extender View Info](#) on page 174

## GETTING STARTED FOR DEVELOPERS

This documentation helps developers and technical consultants get started with Extender, It is not a fully developed training course in Python nor the Sage 300 development environment. Refer to the technical info section for Extender Developer Training.

## FINDING HELP AND DOCUMENTATION

You can find information about setting up and using Extender in the Sage 300 help and in the product documentation included with this release.

Online help is available on [Orchid Resources - Online Help](#). It includes the F1 help available from the Sage 300 screens, as well as links to training material and getting started guides.

**Note:** For technical support, contact your Sage business partner.

## CONTEXT-SENSITIVE HELP

Sage 300 features context-sensitive help that you can use to quickly open and view articles and information directly from Sage 300 screens.

On the Sage 300 Desktop, press F1 to view help for the current screen.

On Sage 300 Web Screens, click the help menu at the top of the screen to see help articles and resources related to your current task.

## PRODUCT DOCUMENTATION

Extender includes guides in printable PDF format related to installation and setup. These guides are available in the Docs folder on the Sage 300 server.

Training guides are available on the Orchid website :

<https://www.orchid.systems/resources/training>

Browse to the folder where Sage 300 is installed:

**\DOCS\XXA\VIXXA\ and select the document or file you want to print.**

**Example:** Docs\71A\VI71A for Version 2024

For details on general Sage 300 functionality, such as using Menu items, Finders, Working with Data entry Grids, please refer to Sage 300 documentation.

## EXTENDER VIEW INFO

When this screen first opens, the program will scan for all the currently installed and activated modules in the open company and show them in the left hand window. A program group per active module will be created.

### Open details for a view

Click on the plus sign (+) beside the relevant program group, a list of all the views will be displayed, sorted in view ID order.

Double click on the required view, the list of available view fields will be displayed in the right hand window.

You can also right click on it and select Open in New Window, or Export the selected view to a Text file.

### Use view details

If you want to copy this text, right click or press Ctrl-C.

This is useful to copy and paste the field names to Extender setup screens or scripts.

- Any one of these views can be included in the View Events and Scripts screen.
- Any one of the view fields will be available for use in the attached *PYTHON 3* scripts that are written for this view.
- Fields can be included in message templates and Extender workflow templates.

**Tip:** You can press F5 to open a finder for the selected view and see the records in the database.

## Shortcuts to Find views and fields

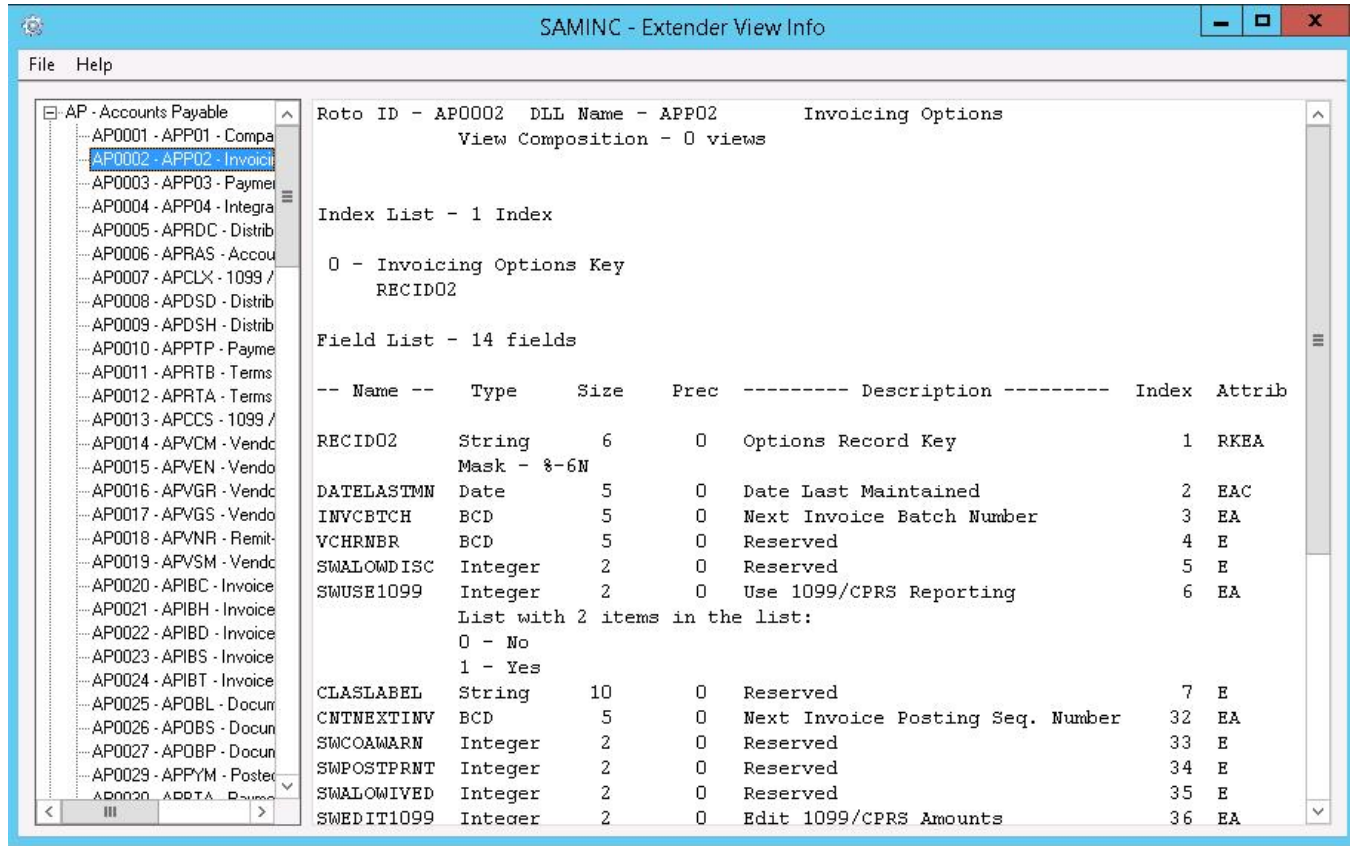
Using the **Find** field at the bottom of the screen, you can enter:

!rotoID - open specified view, e.g. !IC0310, !ICITEM will open the I/C Item view

!!rotoID - open specified view in a new window

#text - find specified text in current view

text - find specified text in current view, or find a view with that text in the name



### ATTRIB COLUMN LEGEND

- R = Required
- K = Key field
- E = editable
- A = enabled
- C = calculated field
- T = type changes
- P = presentation list/mask changes
- X = editable changes

## PYTHON 3 SCRIPT WITH SAGE 300 VIEWS - DOCUMENTATION

Orchid has implemented PYTHON 3 scripting around the Sage 300 Views and Sage 300 desktop screens, so site specific business logic can be implemented using PYTHON 3 scripting and applied to Sage 300 core and 3rd Party Views (if they are developed in the Sage 300 SDK) – when records are inserted, updated and deleted.

In the VIXXA folder of the directory where Sage 300 is installed, Developers can find details on what is required to use PYTHON 3 with some of the main Sage 300 Views. The accpac.py file includes the available functions.

Detailed documentation of the Sage 300 functions made available in Extender can be found in the VIXXA\Doc folder. Open any of the HTML files in your browser to navigate through the Extender functionality.

**Extender**

- Email
- ErrorStack
- Finder
- Globals
- Modules
- OpenFileDialog
- SaveFileDialog
- Script Parameters
- UI
- UIButton
- UIComboBox
- UIContainer
- UIDataSource
- UIField
- UIGrid
- UIObject
- UITabStrip
- UITextBox
- View
- View Subclassing

## Extender Documentation

### Table of Contents

- **Class Email**
  - **void setTo(string addr)**
  - **void setCC(string addr)**
  - **void setSubject(string subject)**
  - **void setText(string text)**
  - **void setHtml(string text)**
  - **void attach(string fileName, string mimeType)**
  - **int send()**
  - **bool load(string msgID)**
  - **void replace(string fieldPrefix, View value)**
  - **void replace(string field, string value)**

## Class Email

Lets you send email using the SMTP server configured in VE Setup.

### **void setTo(string addr)**

Sets the To address.

### **void setCC(string addr)**

Sets the CC address.

**Tip:** Open all the files in Notepad++ to enable searching

## GET STARTED WITH PYTHON 3 SCRIPT

Python is a dynamic programming language that is freely available and easy to learn.

Orchid has implemented PYTHON 3 scripting around the Sage 300 Views and Sage 300 desktop screens, so site specific business logic can be implemented using PYTHON 3 scripting and applied to Sage 300 core and 3rd Party Views (if they are developed in the Sage 300 SDK) – when records are inserted, updated and deleted.

### Useful Resources

Google “PYTHON 3 Tutorials” and you will find many sites. Some useful ones are

<https://wiki.python.org/moin/BeginnersGuide>

<https://www.python.org/about/gettingstarted>

[http://www.python-course.eu/Python3\\_course.php](http://www.python-course.eu/Python3_course.php)

### Sample scripts

Sample PYTHON 3 scripts from Orchid are installed in the VIXXA\Scripts folder of the directory where Sage 300 is installed.

### Importing Python libraries/packages in a script

Some Python libraries are installed with the Extender install. You can then import them in an Extender script.

If you want to use a Python library that is not installed with the Extender install, you can add the following line `#@ pip(libraryname)` to the script that requires the library.

### How does it work?

Behind the scenes, the first time a user runs a script, if the library isn't installed on the machine, Extender downloads the scripts from the database as they are cached for performance reasons. If a script includes `@pip`, Extender also downloads the required Python packages in the user's temp directory, `%LOCALAPPDATA%\COMPANY\{orgid}\scripts\python388\site-packages` folder. (or `python` folder if you use the Python 3.4 version).

To do this, Extender runs `@pip` and `python.exe`, which displays the cmd prompt pop-up the first time a user runs the screen. This should only happen once for each network user.

If you delete the files in that folder, they will be downloaded again next time the script runs.

**Tip:** This feature applies to all scripts, including screen scripts.

**Example:**

If you need to use the requests library, add a comment line `#@ pip(libraryname)`

Install library

```
#@ pip(requests)
```

**Note:**

Some packages are not compatible with Extender, for example numpy and pandas won't work in Extender scripts.

The issue is that numpy does not work with sub-interpreters correctly (see <https://lists.archive.carbon60.com/python/dev/1406603>). There is nothing Extender can do about that .

## Troubleshooting using Online debugging tool

You can use [https://www.onlinegdb.com/online\\_python\\_debugger](https://www.onlinegdb.com/online_python_debugger) to help troubleshoot scripts. It helps identify Python related issues (but it's not specific to Sage 300).

This is particularly useful when you get an error loading a script in Extender Setup > Scripts.

Select the script with an error in your preferred Text Editor, Copy to the clipboard and Paste in the Python Editor. If the script has a syntax error, such as wrong indentation, it will point to the line with the error.

Even with a valid script, you will see errors relating to the accpac.py - You can ignore such errors.

## See Also

Tips to get started with Extender scripts

Getting Started with Extender on page 75

## Setting Up Extender

You use the icons in the Extender Setup folder to:

- Specify company and processing options for Extender. (Choose Options on page 84)
- Setup Extender Adding Security on page 122 in Sage 300 Administrative Services.
- Create and amend Event Types to be applied to required Views and Events. (Choose Event Types. on page 93)
- Configure Workflow Templates - Screen Guide on page 132
- Apply Event Types , PYTHON scripts and Workflow to the required Sage 300 Views. (Choose View Events, Scripts & WF on page 149)



- Create and amend site specific Message Templates to be used in Workflow templates and Event Types which Send E-mails or Create I/M Notes.

Refer to: Message Templates on page 102

## EXTENDER LICENSE SCREEN

To start using Extender, you need a valid serial number and license file.

If you don't have a valid license for Extender, you only see the License screen.

### License screen

You use the Extender license screen to enter serial number and activation code.

#### When to use:

- After a new installation or an upgrade to a newer version of Sage 300.
- After a subscription renewal, enter the activation code with the new expiry date.
- View the components of the Orchid module you are licensed for.

#### How to use:

- Enter the license details, click the **Add** button to create the license file.
- Restart the Sage desktop to enable the new license.

### Workflow Users

You also use the Extender license screen to maintain Extender Workflow users.

For details, refer to Extender License and Workflow Users on page 129

### 30-day Trial Licence

If you don't have an activation code for Extender, you can create a 30-day trial license.

In the License screen, enter a serial number for the module, Sage 300 version and edition you are running.

Click the Add button. This create a 30-day trial license.

**Tip:** If you install a 30-day trial, enter a valid activation code before the trial expiry date to continue using the application.

## Extender license screen details

ORCEFT - Extender License

File Help

Company: Orchid Business Systems

Serial Number (NFR): 1069012-00012

Activation Code:

Your licence includes 0 Workflow Users and 0 Workflow Anywhere Users.

[Workflow Users work with Orchid Information Manager. Click for more info.](#)

Import Users from Prior Version

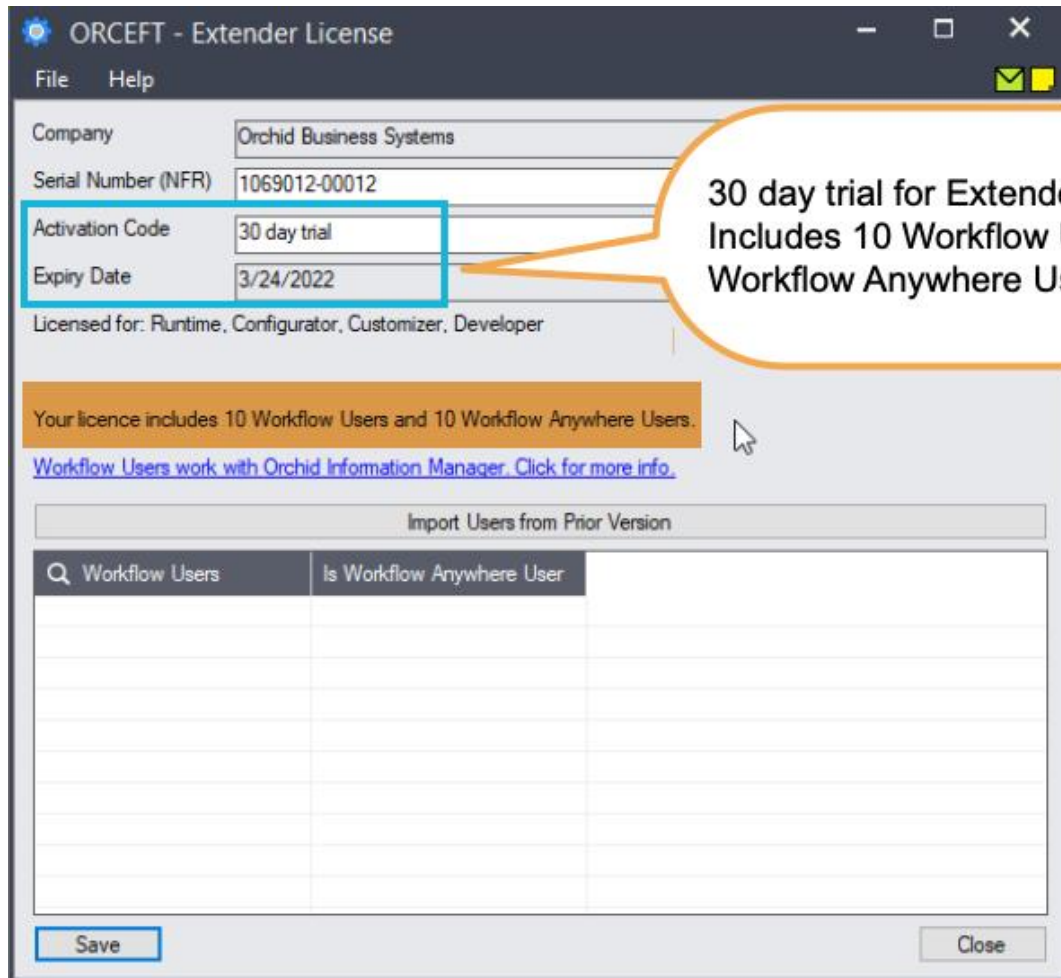
Workflow Users	Is Workflow Anywhere User
----------------	---------------------------

Save Close

Enter Serial Number for your Sage 300 Version and Edition

1

2



## Subscription Licenses Expiry Date

You can check the subscription expiry date and enter a new activation code after a subscription renewal is processed.

Subscription licenses have an expiry date. To continue using Extender, you will need to renew the subscription and enter a new Activation code in the module License screen before the expiry date.

Contact your Sage 300 Business Partner for details.

**Note:** In the four weeks before the expiry date, users receive a warning message when logging into Sage 300 (weekly for the first three weeks and daily in the last week). If you don't renew before the expiry date, the software will become read-only.

## Extender and Orchid modules web screens

Web screens for Orchid modules rely on Extender for ease of deployment and maintenance. To run the Orchid Module web screens, you need to install and activate Extender, even if you don't have a license for Extender.

Without a license, you will not have access to Extender functionality, you can only run the web screens for the modules that you are entitled. For details on web screens, refer to [Installing EFT Web Screens](#).

## Troubleshooting Activation Code

When saving the license information, the following problems may be encountered:

**Activation code Invalid** – verify the registered company name (displayed during installation) and serial number entered match the details supplied to Orchid Systems when an activation code was requested.

**Invalid serial number** – the entered serial number is not valid for this product, Sage 300 version and edition.

**Important!** If the Sage 300 Version or Edition change, a new Serial Number and activation code must be requested from Orchid Systems.

If the company name registered with Sage changes, a new Activation Code must be requested from Orchid Systems.

Refer to detailed troubleshooting tips in [Troubleshooting Activation Code](#),

## Activation code and available functionality

Depending on the components you are licensed to use, some features described here may not be available for you to use. Some functionality of Extender is only active if you have purchased the required module component.

The license screen displays what components of the Extender module are included in the activation code.

## OPTIONS

Use this form to setup Extender Options to log user sign in and configure SMTP server details to email from Extender

### Options Tab

#### **Log User Sign in : Yes or No.**

Select Yes if you want Extender to create a log entry for each user as they log into the Sage 300 company. The date and time, user id and Machine address where the user logged in from is recorded in the log.

Select No if you do not want to log the log-in activity.

## Python Version

By default, Extender is now configured to use Python 3.8.8.

Refer to Python version for details.

## Email Tab: enter Email server details

For details, refer to Extender Email Tab on the next page

**Email Server** : `smtp.domain.com:587` Enter the details of the SMTP Server you want to email from. The default port is generally port 587 with TLS.

**Tip:** You can specify a port number after filling in the email server details. After the email server name, enter " :xx" i.e. colon xx where xx is the port number required. Example: `smtp.domain.com:587`

**Email User** and **Email Password**: Enter a correct combination of Email user and password

**Note:** If using multi-factor authentication and App password, enter the App password you create in the Email Password field. Refer to Using Orchid Modules with Office365 and Multi-Factor Authentication

**Email Comes From**: Enter the email address to be used when sending email.

**Note:** Depending on the SMTP server you use, this address may need to match the one you enter in the Username field, or may not work unless you set up an email alias. Consult your SMTP server documentation for details about sending email.

## Updates Tab

### NOTIFY ME WHEN THERE ARE NEW UPDATES IN EXTENDER

Users can now "subscribe" to notifications of updates.

#### **By Default, this option is not selected for end-user serial numbers**

The check is stored in the registry and it applies to this Windows user on this computer.

If selected, when starting Sage it will check if there are product updates available for Extender

If there is a new update, and the user hasn't previously been notified of it, then the Options screen will open automatically on the Updates tab and display details of the new updates.

**Tip:** The “administrator” or “super user” or “owner” of Sage 300 should have this option turned on. All other users should have it turned off.

## CHECK FOR UPDATES AND SUPPORT REQUESTS

You can use "**Check for Updates**" button to view the list of new features and fixes.

To facilitate support, please include the Version and Product Updates you are running when reporting any issues.

Updates are available to be downloaded from the partner area of the [Orchid website Product downloads](#).

## EXTENDER EMAIL TAB

The Email tab lets you define your email server. When you fill in the email option on the Extender Options, it will email directly to your email server using the selected service. Since October 2022, in the latest product updates for Sage 300 versions 2020 and above, you can email documents using 2 methods, SMTP or Microsoft Graph.

### Email Service

SMTP (Simple Mail Transfer Protocol). You can use your own SMTP server, or an SMTP service.

**Example:** SMTP Email Examples on page 88

Microsoft Graph. This service sends email via Microsoft Office 365. It is generally used when SMTP Basic authentication is not enabled in Office 365.

Refer to Office 365 and Microsoft Graph

If you don't fill in the SMTP Details, Extender cannot send emails.

### Email Field details

Select the Service you want to use to email:

#### Basic Authentication SMTP:

**Email Server:** smtp.domain.com:587 Enter the details of the SMTP Server you want to email from. The default port is generally port 587 with TLS.

**Tip:** You can specify a port number after filling in the email server details. After the email server name, enter " :xx" i.e. colon xx where xx is the port number required. Example: smtp.domain.com:587

**Email User and Email Password:** Enter a correct combination of Email user and password

**Note:** If using multi-factor authentication and App password, enter the App password you create in the Email Password field. Refer to Using Orchid Modules with Office365 and Multi-Factor Authentication

**Email Comes From:** Enter the email address to be used when sending email.

**Note:** Depending on the SMTP server you use, this address may need to match the one you enter in the Username field, or may not work unless you set up an email alias. Consult your SMTP server documentation for details about sending email.

## Microsoft Graph:

This service sends email via Microsoft Office 365 where basic authentication is not enabled to use SMTP. Refer to Office 365 and Microsoft Graph

**Tenant ID.** Enter the tenant ID (alternatively called the directory ID) from your Microsoft 365 account.

**Client ID.** Enter the client ID (alternatively called the application ID) from your Microsoft 365 account.

**Client Secret.** Enter the client secret from your Microsoft 365 account.

**Tip:** This is actually the secret **value**, not the one called Secret ID. It is the one that you only see once when you first create the client secret.

**From Email Address.** Enter the email address to be used when sending email.

## Examples

Refer to the examples below for detailed settings with commonly used mail providers, such as Office 365 and Gmail.

**Example:** SMTP Email Examples on the next page

## Test Email Configuration

You can use the "Send Test Email..." to check your email settings. You will be prompted to enter an email address to send the test email to.

**Tip:** Test sending to an email address in the same domain as your SMTP Server and one outside of your domain.

**Tip:** CC doesn't work when testing. Even if you configure a CC address in the Email Tab,, the test email is only sent to the email address you enter when testing.

## Troubleshooting Sending emails

Email Troubleshooting on page 91

## SMTP Email Examples

### Email with Office 365

#### Using Office 365 and MFA

Although Orchid modules don't support 2-step authentication directly, you don't need to turn off MFA to use email using SMTP or DML with SharePoint integration. If you enable MFA, you can use it for all applications that support it.

To use Office 365 to email from Orchid modules and to use Document Management Link and SharePoint integration, users need to create an APP password for use in the Orchid module, as supported by Microsoft.

For details, refer to Using Orchid Modules with Office365 and Multi-Factor Authentication

#### Configure Email when using Office 365

When using Office 365 to email, basic SMTP authentication is disabled by default and you need to use Microsoft Graph as the email service.

Refer to Office 365 and Microsoft Graph



**Note:**

The details below are left in the documentation if your Office 365 setup supports basic SMTP Authentication and App Passwords.

**Email Server** -> smtp.office365.com:587

**Email User** -> username@samplecompany.com

**Email Password** -> Enter Password

If using Multi-factor Authentication and App Password, enter the App password.

For details, see Using Orchid Modules with Office365 and Multi-Factor Authentication

**Encryption: TLS****TLS Version**

You don't select a specific TLS version. Orchid uses the .Net SmtpClient class to send emails. The SMTP Client uses the protocol configured on the operating system, based on the .NET version installed.

The email function supports Ssl3, Tls1.0, Tls1.1, Tls1.2 and Tls1.3.

Microsoft has recently stopped support for TLS1.0 and TLS1.1. Support for TLS 1.2 was added to Orchid modules in April 2020 and applies to Sage 300 versions 2018 and above.

**Important!** If you have any issues emailing, please ensure you download and install the latest product update for your Sage 300 version.

**Useful Links**

Here is a link to Microsoft documentation on how to allow applications to send email via Office365.  
<http://technet.microsoft.com/en-us/library/dn554323.aspx>

**Using Gmail**

Since May 2022, you cannot disable 2-step authentication in the Gmail settings and you need to use App Password.

Email Server: smtp.gmail.com:587

Email User: username@gmail.com

Email Password: App password you create for the user emailing.

Encryption: TLS

ORCLTD - EFT Options

File Help

A/R | A/P | Primary Bank | Email | Default Advice | Global FSN | Updates

E-mail Server: TLS:smtp.gmail.com:587

E-mail User: stacysim@gmail.com

E-mail Password: \*\*\*\*\*

Encryption: TLS

E-mail Comes From: stacysim@gmail.com

CC:

BCC:

**Note:** In some older versions of Orchid modules, for Google mail to be setup in Outlook/other email application/device (as recipient in CC/BCC), the Google email setting has to have the option of enable POP/IMAP ticked.

When using any other email that has Transport Layer Security (TLS) encryption along with SMTP, you can prefix the email server field with "TLS:".

For eg. TLS:securemail.server.net

## Using SendGrid

### IF USING SENDGRID

Orchid module Email configuration using SendGrid:

Email Server -> smtp:sendgrid.net:587

Email User -> apikey

Email Password -> Enter Password

Encryption: TLS

E-Email Comes From -> the email address associated with the Sendgrid account

Here is a link to SendGrid documentation on integrating with the SMTP API

[Sendgrid: integrating-with-the-smtp-api](#)

Here is a link on How to send email using the SMTP Relay

[SendGrid smtp guide](#)

## Using Hotmail

### **CONFIGURE EMAIL WHEN USING HOTMAIL OR MICROSOFT OUTLOOK.COM**

Email Server -> smtp.live.com:587

Email User -> username@hotmail.com

Email Password -> Enter Password

Encryption: TLS

## Email Troubleshooting

### **Failure sending mail**

If you get the error message "Failure sending mail" – check that you have entered the correct details in

- The E-mail server field
- The correct combination of email user/password/comes from fields. The combination and number of these fields that are required depends on the configuration of the email server
- The correct encryption method is selected

#### **Port**

- If the default port for email (25) is not in use, ensure the port is included in the Email server field separated by a semi-colon (:). For example smtp.office365.com:587 if port "587" is being used for e-mail.

#### **Legacy Authentication**

If you are using MFA and App password in Office 365, but are still receiving errors when testing the SMTP email, ensure that Legacy Authentication is not blocked. Refer to Office365 and Legacy Authentication.

#### **TLS Version**

You don't select a specific TLS version. Orchid uses the .Net Smtplib class to send emails. The SMTP Client uses the protocol configured on the operating system, based on the .NET version installed.

The email function supports Ssl3, Tls1.0, Tls1.1, Tls1.2 and Tls1.3.

Microsoft has recently stopped support for TLS1.0 and TLS1.1. Support for TLS 1.2 was added to Orchid modules in April 2020 and applies to Sage 300 versions 2018 and above.

**Important!** If you have any issues emailing, please ensure you download and install the latest product update for your Sage 300 version.

## You get the message “E-mail sent”, but no email is received,

In many cases, there is almost no delay the “E-mail sent” message being displayed on the screen after clicking “Send Test E-mail”

- Ensure the virus checker and firewall on all machines where e-mails are to be sent from. They must be set to exclude “..\EL6xA\sendmail.exe”
- If you get a File missing error, check that the anti-virus is not deeming the sendmail.exe a virus threat.
- SMTP Server may include configuration to expect a valid client certificate from the server- /workstations where Sage is installed. Once the certificate is installed on the client, emails can be sent.

You are able to send emails to internal email accounts, but not to external email accounts, the most likely cause is that your email server requires a valid username /password for sending to external addresses and the details entered are not correct.

**Note:** Check your email server to see if it requires a username/password. Some require it to be blank, for some it does not matter.

**Note:** Some email servers will allow you to log on as a certain user and send email as anyone, others will only allow you to send email as the logged on user. So if you log on as "Joe", but try to send as admin@testdomain, some email servers won't allow it.

## Exceeding email limit error -

This applies to EFT Processing only.

If you are getting errors relating to "exceeding limits" when sending email remittance advice, you can configure the options to Number of emails per minutes or Number of emails per session to match the requirements of your email server.

EFT Options Screen Guide

## Process Scheduler emailing tips

When using Process Scheduler with Extender or Report Runner, the Process Scheduler email settings are only used if the Schedule is configured to send emails on success or failure.

The Run Information Manager Step uses the SMTP Email configured in Information Manager a> Report Runner and the Run Extender Script action uses the SMTP email configured in Extender.

When using Process Scheduler to email Reports configured in Report Runner, check the email configuration in Information Manager, not just Process Scheduler.

When using Process Scheduler to run Extender scripts that send emails, check the email configuration in Extender Options, not just Process Scheduler.

## UPDATES TAB

Use the Options > Updates Tab to see details about product updates available. Also includes a list of new features and fixes since the initial release.

### **NOTIFY ME WHEN THERE ARE NEW UPDATES IN ORCHID MODULE**

Users can now "subscribe" to notifications of updates.

#### **By Default, this option is not selected for end-user serial numbers**

The check is stored in the registry and it applies to this Windows user on this computer.

If selected, when starting Sage it will check if there are product updates available for Orchid Module

If there is a new update, and the user hasn't previously been notified of it, then the Options screen will open automatically on the Updates tab and display details of the new updates.

**Tip:** The "administrator" or "super user" or "owner" of Sage 300 should have this option turned on. All other users should have it turned off.

### **CHECK FOR UPDATES AND SUPPORT REQUESTS**

You can use "**Check for Updates**" button to view the list of new features and fixes.

To facilitate support, please include the Version and Product Updates you are running when reporting any issues.

Updates are available to be downloaded from the partner area of the [Orchid website Product downloads](#).

## EVENT TYPES.

The Event Types form lets you:

- Create events that can be attached to changes to Views or View Field values.
- Events can either
  - Log changes done to a View or a View fields
  - Run a program
  - Send an email

- Create an Information Manager Note

**Requirement!** Orchid Information Manager Notes needs to be activated in the database.

### Next Steps:

See View Events, Scripts & WF on page 149

**Note:** Each event is identified in the background with a unique 16-character Event Type ID code.

## EVENT TYPES - FIELD LIST

### EVENT

Enter up to 16 characters to identify this event type.

### DESCRIPTION

Enter up to 30 characters for a description to allow you to easily identify this event.

### COMBINE

If the event is to be attached to multiple view fields in one view, then select one of :

- Combine : to have only one event being triggered if more than one view field changes at the same time.
- Don't Combine: to have the same number of events being triggered as the number of view fields that are changed at the same time.

**Important!** If you want to track the "Before" and "After" value, select Don't Combine.

**Example:** if you send an email to the accounts department if the customer credit limit is changed or when the customer terms is changed and both fields are changed at the same time – you will have two emails being sent if you choose not to combine events. If you choose to combine events, one email will be sent.

### ACTION

Select the type of action to be associated with this event.

Depending on the Action, the following fields will be made available

- Log Change :No additional fields will appear
- Run Program : call a nominated program if the view field is changed. For this Action you need to define the following :
  - Command : use the find icon to browse to find the program to be run when this Event is triggered
  - Working folder : browse to find the working folder for the program specified in "Command" field above
- Send Email : create and send an email if the view field is changed. For this Action you need to define the following :
  - Email To : specify the Email address(es) separated by semi-colon ";" if more than one to whom the Email must be sent when this event is triggered
  - Email CC : specify the Email address(es) separated by semi-colon ";" if more than one to whom the Email must be cc'd when this event is triggered.
  - Email Message ID : use the finder to select the existing Message Template to be Emailed when this event is triggered
- Create I/M Note : create an Information Manager Note if the view field is changed. For his Action you need to also define the following
  - Note Type : use the finder to select the existing Information Manager Note Type to be created/updated when this event is triggered.
  - Key : Specify the View Field ID in braces "{xxx}" for the key field for the View to which the event is attached. For Example: if you are creating or amending an IM Note for customers, the Key Field would be defined as follows {IDCUST}
  - Note Template : use the finder to select the existing Message Template to be Created/updated when this event is triggered.

**E-MAIL TO**

Only visible for Send Email action. Complete with the email address of the required email recipient for the email to be sent when the action is triggered

**E-MAIL CC**

Only visible for Send Email action. Complete with the email address of the required cc recipient for the email to be sent when the action is triggered

**E-MAIL MESSAGE ID**

Only visible for Send Email action. Select the required email message id for the email to be sent when the action is triggered

### NOTIFY USER OF EMAIL SENT

Set to Yes if you want an on-screen notification when an email is sent.

Select No if you want to send the email in the background without a notification.

### NOTE TYPE

Only visible for Create I/M Note action. Select the required I/M Note type for the note to be updated/created when the action is triggered

### KEY

Only visible for Create I/M Note action. Enter the key field for the I/M Note. This should be the key field in curly brackets (Braces {}) for the view to which the action will be attached. For example, when creating an IM Note for the AR0024 View – the Customer View, the key field should be {IDCUST}

### NOTE TEMPLATE

Only visible for Create I/M Note action. Select the required I/M Note Email Message template for the I/M Note to be created or updated

## WORKFLOW COLOURS

This screen allows you to assign RGB codes to Colour Names which can be used in your workflow.

On the workflow console, a workflow instance will be coloured based on the COLOR value in the workflow instance. The "AssignColour" workflow action allows you to assign a colour to a workflow instance as part of the workflow.

**Note:** You can filter by up to 5 colors on the workflow console, but you can create as many colors as required.

### STEPS

- Enter a Colour Name.
- Click in the colour column to select the colour



**Tip:** Use a name that represents where you will use the colour (e.g. urgent), rather than just Red or Blue. This makes ongoing maintenance if you want to change the colour of Urgent tasks, you can change the "Urgent" colour rather than update all the Red colour.

## WORKFLOW USER GROUPS

Use this icon to create groups of users who can be assigned tasks in the workflow.

In the console, you can view all tasks that you are assigned to and tasks assigned to a group that you are a part of.

**Note:** If you have Security rights to view all Workflow, you will also see workflow instances assigned to all other users.

### TO CREATE A GROUP:

- Enter a name and a Description
- Insert rows in the detail grid to select Users.
- Users need to be configured in Sage 300 first and should have the security rights in Sage 300 to perform the tasks required in the workflow.

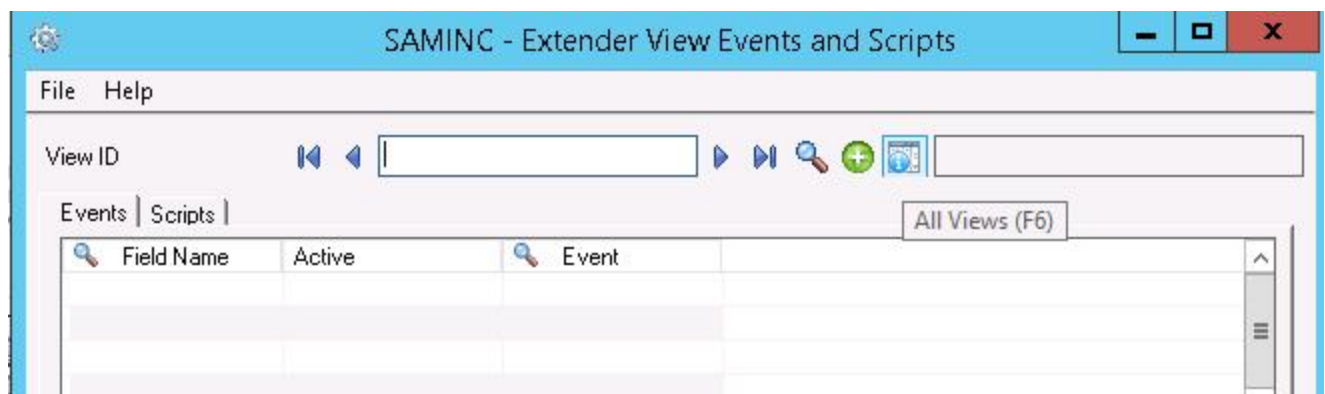
**Example:** In a workflow to Approve A/R Credit Limit, create a user group "ARAPPROVER", add Sage 300 users to the group. The users in the Approver group need to have rights to Accounts Receivable, Customer Maintenance and Edit Credit Limit.

## VIEW EVENTS, SCRIPTS & WF

Use this form to add Extender events, custom scripts and workflows to Extender views and fields.

### Select a Sage 300 View to be configured with Extender.

By clicking on the "All Views" info icon (or use F6 key) , you can select the appropriate view from the list of available views, active in your Sage 300 database.



## Fields and Controls

### REMEMBER ORIGINAL VALUES FOR:

You can determine what fields Extender need to track the original value for. This is particular useful for email messages.

- Leave blank if you don't need the original value in the Script, workflow or email messages.
- You can enter the field names you need. For example, if you only need the original value for the Description and the name, "DESC,NAMECUST"
- Use \* if you want Extender to make the original value available for all fields. This is useful if you use the original values in a script, in email messages or in a workflow, but you don't want to list all the fields you need in advance.

**Note:** On some views that have many columns and that are opened many times, e.g. the OE Shipment Header and OE Shipment detail view, using \* may have an impact on performance.

### Tip:

You can also add code in the script to determine what fields the script needs the original value. Refer to Scripts-AdvancedTips\*

## Events Tab

On the Events tab, you can attach an Event Type to an Extender View operation and/or View field/fields.

**Requirement!** The Events Tab is available if using Extender Levels Configurator, Customizer or Developer

### FIELD NAME

Select the appropriate view field from the list of available view fields. All view fields will be available, including the following standard operations of a Extender view

- Delete : when a view record is deleted
- Insert : when a view record is inserted
- Update : when a view record is updated
- Update and Insert <UPSERT>: when a view record is updated or inserted

### ACTIVE

Set to No if you want to Deactivate an Event temporarily without deleting it.

### EVENT CODE

Select the appropriate Event Code from the list of available Event Types. on page 93

#### Important!

If you need to log the Before and After Value, you need to make sure the event type you select has been configured as "Don't Combine".

If you select the View Operation {INSERT}, {UPDATE} or {UPSERT}, the Before and After values will be available if the event is configured as "Don't Combine". One record will be added to the LOG or emailed for each field that is changed.

For the "Delete" action, only one record will be logged.

Refer to Event Types. on page 93

## Scripts Tab

On the Scripts tab, you select the Python script to be run when the selected view is being updated. Multiple scripts can be selected, and are run in the order specified.

**Requirement!** The Scripts Tab is only available if using Extender Levels Customizer or Developer

### ACTIVE

You can activate or deactivate a specific script without deleting it from the View

### RUN ORDER

If multiple scripts have been defined, you can select the order in which they run by entering a number associated with each script. A script associated with Run Order 1 will run before a script associated with Run Order 2 etc.

### FILE NAME (F9 TO EDIT)

If you are uploading a new script, click F6 to browse and find the .PY file to attach to this view. When selected the script will be

- Copied to the associated COMPANY directory, and this is where the ".PY" file will be invoked from
- Imported into the database

If you are attaching a script which already exists in the database, click F9 to find the existing script, and associate with the current view.

If you want to edit an existing script, click F9

**STATUS**

Shows blank or "Checked Out" if currently checked out. In order to check out a script for amendment, you can right hand mouse button on the script row, and select Check Out. Once checked out you can open (to edit the script), and upload (to replace the existing script with the amended script).

**CHECKED OUT BY**

User id who currently has the script checked out

**Tip:** Once you have uploaded a Script and it is active against a view, you can "check out" the script to make changes to the script, to test the script while leaving the original script active. Once you "check in" the script, the existing script will be replaced with the new script.

**PARAMETER 1..PARAMETER 4**

Your scripts can contain up to 4 parameters.

You can access the parameters in the Python script with the global variables Parameter1, Parameter2, Parameter3, Parameter4.

**Note:** The first few rows of the highlighted script will be shown to assist with the commenting and verification of the attached scripts.

**Tip:** To check out, open, upload or Undo Checkout, right hand mouse button on the required script and select the required action.

**Important!**

If you need to amend a script after it is attached to a view, you need to check it out, open it to make the changes, save the script and check it in to enable the changes.

If the script is amended on a separate machine, you need to re-import the PYTHON script

When PYTHON scripts are attached to a view they are

1. Imported into the associated database, so the script will dump and load with the database
2. Copied to the Company directory, where the PYTHON script is run - If you edit the script directly in this directory, your changes might get overwritten.

OCX Scripts do not need to be added to a Sage 300 View. The script name matches the Sage 300 screen Roto ID to indicate that the script is enabled.

## Workflow Tab

On the Workflows tab, you can attach a Workflow Template to a Extender View operation and/or View field/fields. The workflow will start automatically when the view is used in Sage 300.

You can use F9 to open the Workflow Template screen from the Screen.

### FIELDS AND CONTROLS

**Requirement!** The WorkflowTab is available if using Extender Levels Configurator, Customizer or Developer. If using Configurator, you can only use pre-configured actions in the workflow template.

#### FIELD NAME

Select the appropriate view field from the list of available view fields. All view fields will be available, including the following standard operations of a Extender view

This allows you to attach a Workflow Template to

- Any field. If a field has an Active Workflow Template, the new value entered will be stored in "{NEWVALUE}" and the original value reset before the record is saved. This new value will be available in the workflow
- Insert/Update/Delete. The record will be saved and then the workflow will be started.
  - Delete : when a view record is deleted
  - Insert : when a view record is inserted
  - Update : when a view record is updated
  - Update and Insert <UPSERT>: when a view record is updated or inserted

#### ACTIVE

Set to No if you want to Deactivate an Event temporarily without deleting it.

#### WORKFLOW

Select the appropriate Workflow from the list of available workflow templates. Workflow Templates - Screen Guide on page 132

#### ENTRY STEP

Select the step that will be run when the field changes / view operation completes.

#### PARAMETER 1 TO 4

You can pass up to 4 parameters to the workflow.

To use the parameter value in the workflow, use the SetValue action. You can use {\$1}, {\$2}, {\$3}, {\$4} to set the value to a field.

For details and examples, Using Parameters in Workflow on page 189

### Important!

Workflow is only available for flat views: Master files (e.g. A/R Customers), Transaction Header views (e.g. O/E Header) or Batch Header view (e.g. A/P Invoice batch)

**Tip:** View Events and Scripts can be exported and imported using the File Menu.

- If you select **Export**, then only the current View configuration will be exported. The export includes the attached events and scripts.
- If you select **Export All**, then all the current View configurations will be exported. The export includes the attached events and scripts for all configured views. The export format is proprietary, and cannot be changed.

**Note:** Different options are available depending on the level of Extender you are running.

## MESSAGE TEMPLATES

Message templates can be used in Extender Events (Send Email and Create Information Manager Note), Scripts and Workflow Templates.

You select an Email Message ID when you configure Extender Events (for details, View Events, Scripts & WF on page 149) and on the Workflow Template Action setup (when using a SendEmail action) (for details, Workflow Templates - Screen Guide on page 132).

**Tip:** Message templates can be exported and imported to save time re-keying similar messages

## Message Templates Field List

### MESSAGE ID

A message ID is a unique code of up to 16 characters that identifies a message template.

### DESCRIPTION

Enter a description of up to 60 characters for the message template.

### EMAIL SUBJECT

Enter a subject line for the email message. If creating a template for I/M Notes, leave the Subject blank.

### **EMAIL/NOTE BODY**

Enter the body of the message/note template. The body of the message/note template can be as long as you need it to be. Variables can be inserted in the message template. See below.

### **COMMENT**

Enter a comment up to 250 characters for the message template.

## Message Variables

You can add variables to the subject line and body of your email message and/or to the contents of your I/M Note. For more information, see [Message Template Variables](#)

## Attachments

You can include standard attachments to message templates used in Extender scripts and workflow actions.

### **To configure:**

- Insert a row
- Browse to select files to attach to the email.
- Repeat for all files you want to attach to the email.

**Tip:** Use UNC Path and ensure that all users who email can access the folders.

### **How it works:**

- When you load the message template in a script, Extender adds the attachments configured in the template automatically.
- You can also attach files dynamically to the email in a script using `email.attach("filename")`

#### Email and attachments

```
e = Email()
e.load("template name") # ← adds any attachments from the email template
e.attach("filename") #← also add this file dynamically in the script
```

## Using HTML messages

Email templates are sent as HTML if they contain "<html>" and "</html>" Tags.

- To add a line, you must use <BR> or include <p>my text</p> around each line.
- If copying your existing text email templates, make sure you add <BR> wherever a new line is required.
- To add a logo to the email message, use a hyperlink with an image source file to include a link to a logo saved on your website or another accessible site.

### Insert an image / logo example

```
<p><a title="Orchid Systems Events" href="https://www.orchid.systems/events"></a></p>
```

- Orchid module doesn't include an HTML Editor, so we suggest you use an online editor (e.g. <https://html-online.com/editor/>) then paste the HTML code into the Extender Email editor.

## CUSTOM TABLES

Using Custom Tables, you can create tables within the Sage 300 company database. These tables will be accessible via view calls, will be in the Sage 300 dictionary and the table will dump and load with the associated company. These tables will automatically be upgraded when a newer version of Extender is loaded

**Tip:** If you create a table and subsequently add a new field, the new field will be added to the dictionary and the existing data preserved.

Enter a unique Table name and table description.

Extender will give a unique View ID to the table.

All custom tables require at least one key.

### Notes:

If using a Module, ensure that the table name is entered as [MODULEID].TableName. Extender will save the Database Table Name with the names to the right of the "full stop".

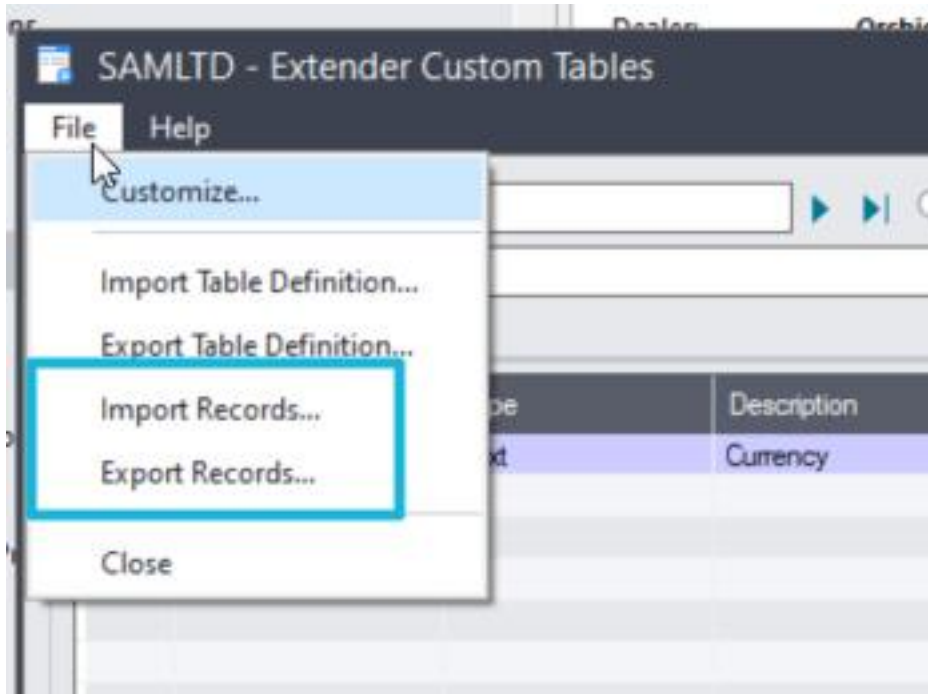
In an Extender Python script, you can refer to the table by the Database Table Name or the View ID.

## Import/Export

Use the File menu to Export / Import the Table definition.

You can also export records from and import records into the custom table.



**Tips:**

Use the Custom Table Editor to enter a few records, then export Records from the File menu. Add and Update data in the spreadsheet. Use File > Import Records to import into the custom table.

## Custom Tables Field list

### CUSTOM TABLES FIELDS FIELD LIST

**NAME :**

Enter the field name.

**TYPE:**

Select the field type. One of Text, Date, Time, Number, Integer (16 bit), Integer (32 bit), Boolean.

To mask the value of a TEXT field in the custom table editor, set the List Values to "PASSWORD"

**DESCRIPTION:**

Enter the custom table description. This is used in the Custom Table Editor to select which table to maintain.

It is also used when exporting and importing records in the custom table.

**SIZE**

Enter the size (length) of the field. Required for Text and Number fields only.

**DECIMALS:**

Enter the number of decimals required. Required for Number only.

**MASK:**

If you want to automatically apply a mask to the field, enter the mask required.

**Example:**

%-12C means 12 characters, capitalised, left aligned

%12C means 12 characters, capitalised, right aligned (field will start with spaces).

Refer to the Sage 300 SDK guide for guidelines on entering the mask.

**FINDER TABLE**

If you require the Custom Table Screen painter to add a finder to a field, then enter or select the View id for the finder. For example, if you want a finder on the AR Customer view, enter AR0024

**FINDER FIELD**

Select or type the field which will be returned from the finder once a record is selected. This applies to fields setup with a Finder table.

For example, if you want a finder on the AR Customer view and when selected, the AR Customer ID is returned, enter {IDCUST} in the Finder Field

**FINDER FILTER**

Type a filter string if you want the custom table editor to restrict the records shown in the finder. This applies to fields setup with a Finder table.

**Examples:**

IDGRP="RTL" - This will show only customers where the Customer Group is "RTL".

IDCUST="{FIELDNAME}", where FIELDNAME is the field you want to filter by. FIELDNAME is another field on the custom table.

If you have a custom table with 3 fields IDCUST and IDCUSTSHPT. IDCUST has a finder on the AR0024 ARCUS table and IDCUSTSHPT has a finder on the AR0023 / AR Ship To table. You might want to filter the Ship-To Finder by the customer selected in the IDCUST fields.

You would configure the IDCUSTSHPT field as per the screenshot below

Field

Line Number

Name IDCUSTSHPT

Type Text

Description Customer Ship-To

Size 6 Decimals 0

Mask %-6C

Finder Table AR0023

Finder Field IDCUSTSHPT

Finder Filter IDCUST={IDCUST}

Description Field NAMELOCN

List Values:

Value	Description
-------	-------------

Comments DESC=NAMELOCN;FILTER='IDCUST = {IDCUST}':

Save Delete Close

### DESCRIPTION FIELD

Select / Enter the field which will be displayed next to the Finder Field once a record is selected. This applies to fields setup with a Finder table.

For example, if you want a finder on the AR Customer view, and you want to display the customer name next to the Customer ID, Select NAMECUST as the description field.

### LIST VALUES E.G. '0=INACTIVE;1=ACTIVE'

If you require the Custom Table Screen Painter to build a drop down list box for a field, then enter the list of required drop down field values and descriptions separated by semi-colons(;) .

**Important!** The field value has to be an integer (16 bit) or Integer (32 bit) for this to be available.

The structure of the field value should be 1=abcd, where

1 is the field value and Abcd is the displayed drop down value

Use ; (semi-colon) to separate list values. Required for all list values except the last one

On the F9 Zoom / Details View, you can add/update the list of values. Insert a new row to add a new value.

**Example:**

Example, the Drop down

Active

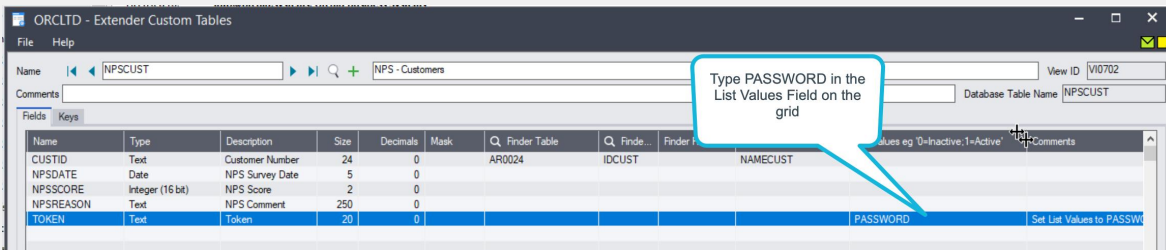
Inactive

Would be entered as 2=Pending;1=Active;0=Inactive

**Tip:**

Masking field values:

Create a field of type TEXT, and set the **List Values** field to PASSWORD



Custom Tables Keys Field List

**FIELD LIST**

**NUMBER:**

Enter the key number

**NAME:**

Enter the key name

**DUPLICATES ARE:**

Select one of "Allowed" or "Not Allowed" depending if duplicate key values are allowed or not.

**FIELD 1 .. FIELD 10:**

Select up to 10 fields from the table to be included in the key.

## Table design consideration

Rule 1: The primary key of your custom table must start with the first field in your custom table. That is the convention and design that Sage views/tables follow.

Rule 2: If the primary key includes multiple fields, the fields must be consecutive in the Table setup.

Rule 3: If you have only one key in the table, the key can be Duplicates Allowed or Duplicates Are Not Allowed.

If you have more than one key in the table, the primary key must be "Duplicates Are Not Allowed" and must start with the first field in your table. Your secondary, third, or fourth keys do not have to start with the first field, and they can be both Duplicates Allowed or Duplicates Not Allowed.

## CUSTOM TABLES EDITOR

Select the required Custom Table for which you want to enter/update data and click "Load" to load all the fields from the Custom Table onto the screen.

All the fields will be listed in order.

After entering data, click "Add" to create a new record in the Custom Table

Existing records can be "Saved" or "Deleted" as required.

.

If a Description field is configured for Finder Table fields, the description will be displayed next to the finder field.

if a Filter Field is defined in the Custom Table, the finder will restrict the records shown based on the filter entered.

This applies to fields setup with a Finder table.

For details on creating a custom table, refer to Custom Tables on page 104

## EXTENDER SCRIPTS

Orchid has implemented PYTHON 3 scripting around the Sage 300 Views and Sage 300 desktop screens, so site specific business logic can be implemented using PYTHON 3 scripting and applied to Sage 300 core and 3rd Party Views (if they are developed in the Sage 300 SDK) – when records are inserted, updated and deleted.

There are four main types of scripts:

- View scripts , attached to a specific view field or view operation such as Insert or Update
- UI Scripts - to open a screen on the Sage 300 desktop. Such scripts can be used to maintain Sage 300 core data, records in Extender custom tables, or gather input to trigger a process.
- Screen scripts subclass Sage 300 OCX screens and are used to add buttons, hide / add fields, to Sage 300 screens.
- Workflow Action scripts

## How to use the Script List

The Scripts screen lists all scripts which have been uploaded to the current company. The script name, Status(Active/Inactive) and Checked In/Out status will be shown, together with the first few comment rows of the currently selected script for verification. You can also see if the script is Viewable and Has a password.

You can upload new scripts from this screen or create new ones.

### **Tip:**

#### **Insert a new row and type a script name to create a new script.**

When you create a new script, you get a different default script based on the script name.

- If your script has ".WORKFLOW." in the name, you get the workflow sample script.
- If your script is subclassing a UI (ie it has a .XXYYYY. in the name) then you get a ui subclass sample script.
- If your script has ".UI." in the name, or ends ".UI", then you get a sample ui script
- Otherwise you get a sample view script.

You can also right-hand-mouse-button on any script and

- View the script
- Check out the script
- Undo the checkout of a script
- Select an Editor
- Add the script to the Sage 300 Desktop.

## Add a Script to the Sage desktop

Select a script, right-click on the script and select "Add the script to the desktop"

This option brings up the tree of the existing menu, and allows you to select which branch the script must be placed.

**Note:** To create new folders in the tree, use the **Insert** key on your keyboard, enter a name and select the new folder. Extender cannot add a script to a folder created using the Sage New Folder menu.

## Delete a script from the desktop

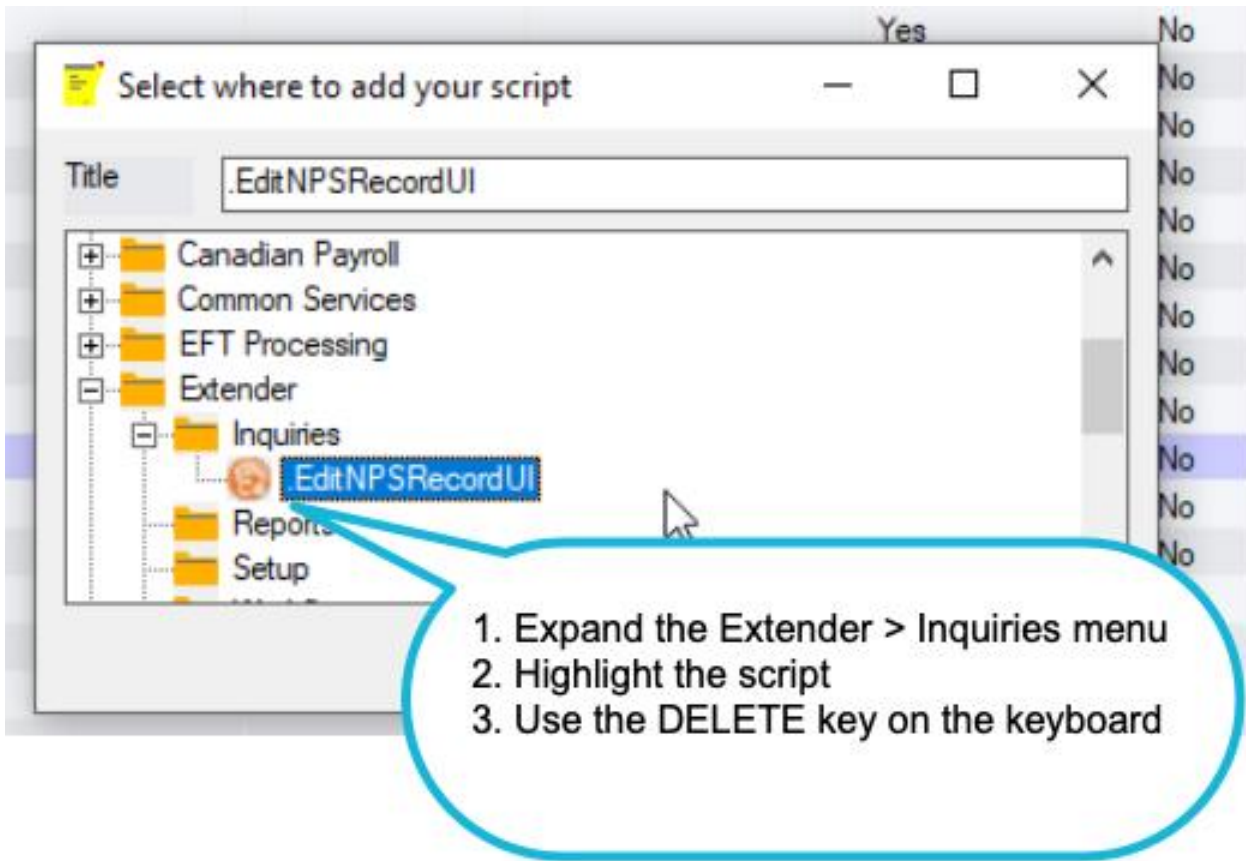
In Extender Setup > Scripts, as a user with Extender Admin rights, select the script, right click on it, and choose "Add to desktop".

Find the script in the Sage 300 menu where it was added.

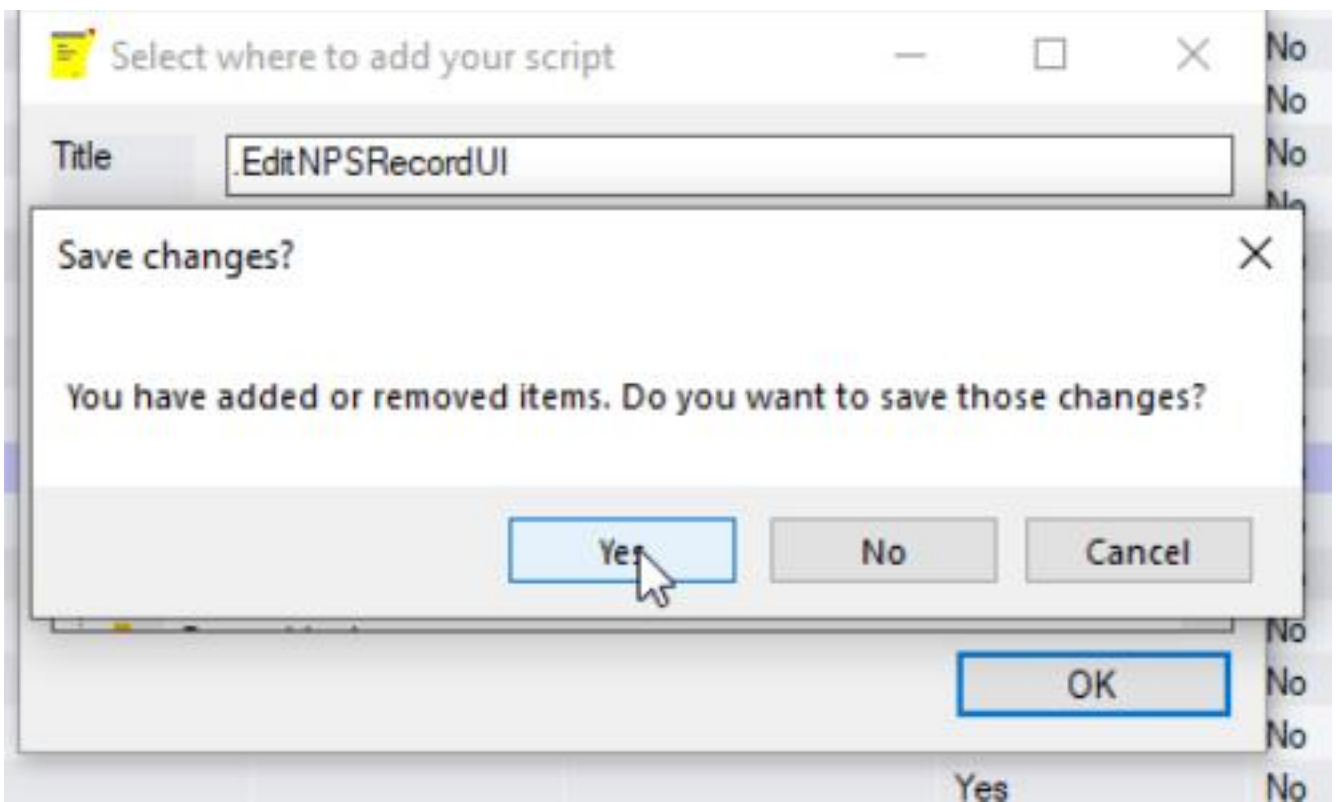
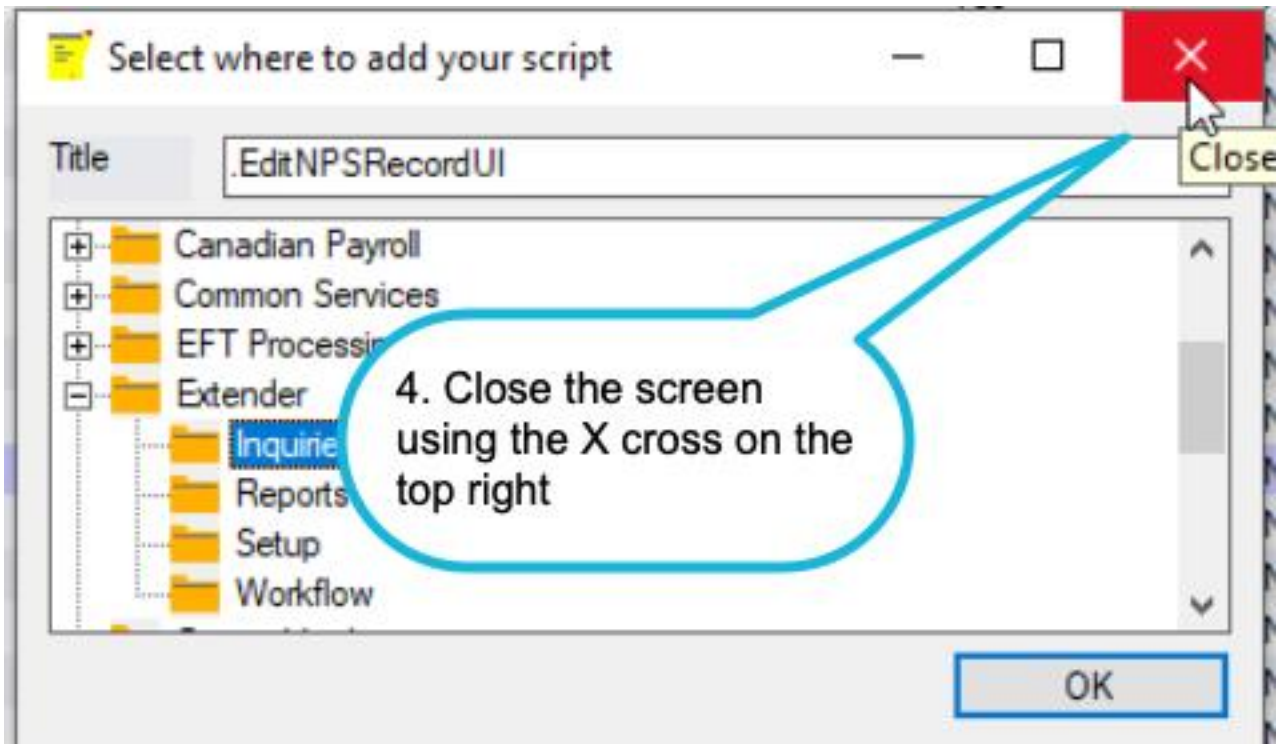
In the example screenshot, the script was added to the Extender > Inquiries menu, you need to find the script in that menu.

Then use the DELETE key on the keyboard.

To save, there is a little trick... You need to use the X cross on the top right and Save the changes. Restart the Sage desktop. The script should be removed for all users.







**Note:** This doesn't delete the script, it just removes it from the Sage 300 desktop for all users.

## Viewing and editing scripts

With Extender PU6 and above, you can hide and/or password protect scripts.

Scripts can have two optional lines in them:

```
#! password=xxx
```

```
#! viewable=true or #!viewable=false
```

### Tip:

On the Scripts screen, if you double click on the Password column, you are prompted to add / remove a password.

If you double click on the "viewable" column, you are prompted to add/remove a password.

If you have a password set then by default, the script is not viewable unless you add the viewable=true line. You can't checkout the script unless you know the password, and the script is not stored as plain text on the disk.

When you choose Edit, you will be prompted to enter the password. Scripts can be edited without re-entering the password until you close the Custom Scripts screen.

### EXAMPLES

The script below can be viewed without the password, but you need to password to check it out and edit it.

```
_Workflow_TestScriptViewableOnly.py
1  # Instructions for your script go here
2  ## P1 Parameter1Name -- You can name up to 4 parameters that can be configured in the workflow template.
3  ## P2 Parameter2Name -- The name cannot have spaces in it.
4  ## P3 Parameter3Name
5  ## P4 Parameter4Name
6  #! viewable=true
7  #! password=xxx
8
9  from accpac import *
10
11 # This function returns 0 (success) or 1 (failure). The return value is used to determine which action to run next in the workflow.
12 def workflow(e): # e is workflowArgs (see accpac.py)
13     return 0
14
```

The HidingScript example cannot be viewed or edited without the password. If you right click on it and choose "View", you get a message "This file is not viewable."

```
_Workflow_TestHidingscript.py
1 # Instructions for your script go here
2 ## P1 Parameter1Name -- You can name up to 4 parameters that can be configured in the workflow template.
3 ## P2 Parameter2Name -- The name cannot have spaces in it.
4 ## P3 Parameter3Name
5 ## P4 Parameter4Name
6 #! viewable=false
7 #! password=xxx
8
9 from accpac import *
10
11 # This function returns 0 (success) or 1 (failure). The return value is used to determine which action to run next in the workflow.
12 def workflow(e): # e is workflowArgs (see accpac.py)
13     return 0
14
```

## How to apply an OCX Screen script

With Extender PU4 and above, you can also add scripts to Sage 300 Desktop screens (OCXs).

### USE Screen scripts to:

- Add tabs, fields, buttons and finders to the Sage 300 desktop screens
- Hide/Remove tabs, fields, buttons and finders on a Sage 300 desktop screen
- Change finders and buttons on a Sage 300 desktop screen
- Interact with the underlying datasources. (Previously scripts only operated at the View level, and therefore were not always reflected on the screen.)

**Example:** You can add row to an order and refresh the grid to view the row, or interact with optional fields.

### Writing a OCX screen script name:

Name of a screen script (OCX script)

- Must contain the RotolD of the required screen, surrounded by a full stop and
- Must have the RotolD on the first line of a script, following a hash (comment) marker (#OE1100 for an Order Entry Screen script).
- The combinations below are all valid, where RotolD is the ID of the Sage screen, for example AR1300 for the AR Customer Screen.

{rotolD}

{anytext}.{rotolD}

{anytext}.{rotolD}.{anytext}

{rotolD}.{anytext}

**Tip:** If the script is called OE1100\_myscript, it is not active as a screen script.

**Example:****Script Name**

For Scripts without a module name:

```
OE1100.NewScript.py
```

If you are deploying your OCX script as part of module, and the module name is "Orchid.MyModule", then the OCX script would be called:

```
Orchid.MyModule.OE1100.NewScript.py
```

**The first line of the script must be:**

```
# OE1100
```

**Tip:**

To disable a screen script,

Edit the script and add at least 2 comment characters.

Disable a OCX Screen script

```
### OE1100  
# such a screen script is disabled.
```

## Workflow Action scripts

An action is a Python script that is stored in the database just like regular user scripts.

Configurator includes a number of predefined actions. For details, refer to Configurator Actions on page 179

A workflow script can have up to 4 parameters passed to the script from the workflow template.

At the top of the script, add a new comment line, starting with ## then add P1 and the name you want to give the parameter. The name will appear in the Workflow Template, Action Grid and F9 zoom screen.

For details on setting up Workflow templates, refer to Workflow Templates - Screen Guide on page 132.

```
# P1 Parameter1Name You can name up to 4 parameters that can be configured in the workflow template.
```

```
# P2 Parameter2Name
```

```
# P3 Parameter3Name
```

```
# P4 Parameter4Name
```

**Example:**

Look at the Workflow.Evaluate script:

```
#Instructions for your script go here
```

```
## P1 Field
```

```
## P2 Operator < <= > >= <> = # you can use either <> or !=, and also = or ==
```

```
## P3 Value
```

The field names when using the Evaluate action will show as

Field, "Operator < <= > >= <> =" and Value

## Resources

Get Started with Python 3 Script on page 79

## EXTENDER MODULES

The Extender Modules enables you to create a Module – which associates Custom Tables, Events, View Events and scripts into a single module which can be exported/imported in a single file for ease of deployment.

### How to use

You use the Modules screen to import an Extender module developed by your Sage 300 partner or exported from a development database. You can also create new Extender modules if you are configuring Extender.

### Create a module

You make the association between the Events, Scripts, View Events and scripts by the use of a unique ID (module name).

**Tip:** It is suggested to use your company name in the Module ID for ease of maintenance.

All Events, Scripts and Tables to be included in the Module must be named as follows :

```
[ModuleID].[TableName], [ModuleID].[ScriptName], [ModuleID].[EventName]
```

### Components of an Extender module

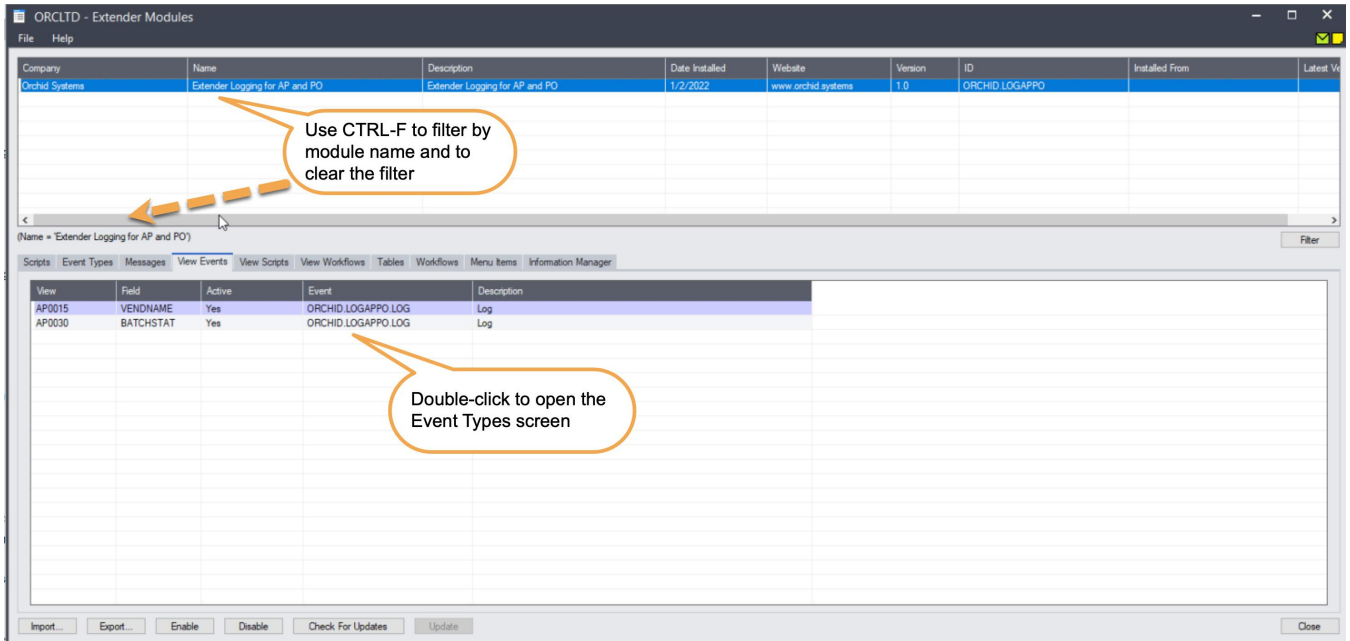
You can view all the components of a module in the panel below the list of modules. You can double click on the individual component to open the relevant screen for checking and editing.:

Extender

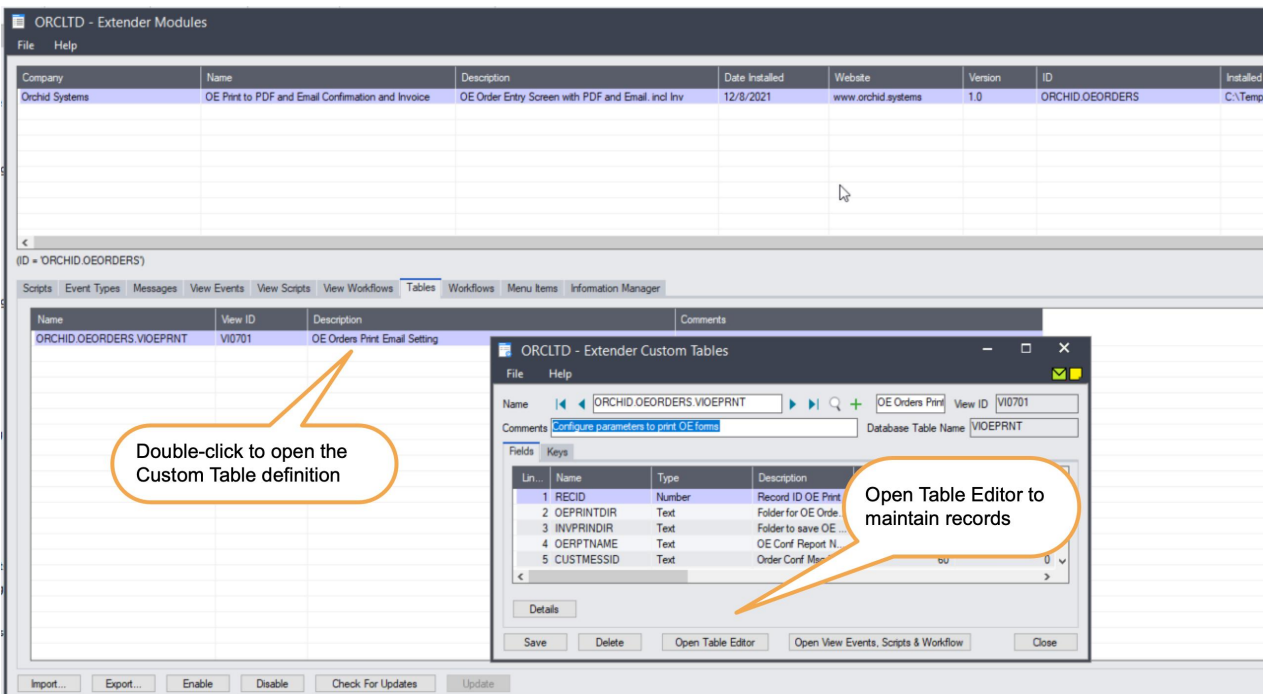
For example, double-click

the Event to open the Event Screen, the Message Templates to open the email template, the custom table to view the table definition and open the custom table editor.

**Tip:** If you have a long list of modules, you can use CTRL-F to filter by module ID or module name



Double-click on the Table name to view and edit the Extender Custom Table definition. You can also open the Table Editor to maintain records.



In Extender Scripts, you can right click on a script that displays a screen to edit records and choose "Add to Desktop". This adds a menu item to the Sage 300 classic desktop.

In the Modules > Menu Items Tab, you can view where the shortcuts have been added.

The screenshot shows the 'ORCLTD - Extender Modules' application window. It features a menu bar with 'File' and 'Help'. Below is a table listing various modules with columns for Company, Name, Description, and Date Installed. The 'Menu Items' tab is selected, showing a table with columns for Parent, Type, Title, and Script. A callout bubble points to a row in the 'Menu Items' table with the text: "Use Menu Items to view where scripts have been added to the Sage desktop".

Company	Name	Description	Date Installed
Orchid Systems/GoalTech	Encrypt EFT Files with Gnu Privacy Guard	Encrypt EFT files with Gnu Privacy Guard	2/2/2022
Orchid Systems	Demo - Autopopulate AR Item Opt Fields	Autopopulate AR Item Optional Fields	10/20/2021
Orchid Systems	EFT	EFT	10/20/2021
Orchid Systems	Sample Email	Sample Email	10/20/2021
Orchid Systems	Extender Logging for AP and PO	Extender Logging for AP and PO	1/2/2022
Orchid Systems	Orchid NPS	Orchid - Store NPS and display in note	10/20/2021
Orchid Systems	Orchid Note - Customer Sales	Orchid Note to display Customer Sales	10/20/2021
Orchid Systems	Orchid Note - Customer and Item Sales	Orchid Note to display Sales by Customer and Item	10/20/2021
Orchid Systems	OE Print to PDF and Email Confirmation and Invoice	OE Order Entry Screen with PDF and Email. incl Inv	12/8/2021

Parent	Type	Title	Script
AR9004	Script	ARItemOptFldEdit	ORCHID_ARAU...OPTFLD_ARITEMOPTFLDEDIT

## Field List and controls

To create a new module, use the INSERT key to add a new Row and enter the Module details.

## Detailed Field Description

### COMPANY

Enter the development company name (e.g. Orchid)

### NAME

Enter the Module name (e.g. CommentTemplates)

### DESCRIPTION

Enter the Module description (e.g. Comment Templates associated with the Item, copied to the OE Order Detail when the item is added to the order)

### DATE INSTALLED



The date created/imported will be displayed

## WEBSITE

Enter the company website

## VERSION

Enter the Module Version

## ID

Enter the Module ID. You can include a Company Code to ensure the Module ID is unique.

**Important!** The module ID must be used to name the Events, Scripts and Tables to be included in the module.

## INSTALLED FROM

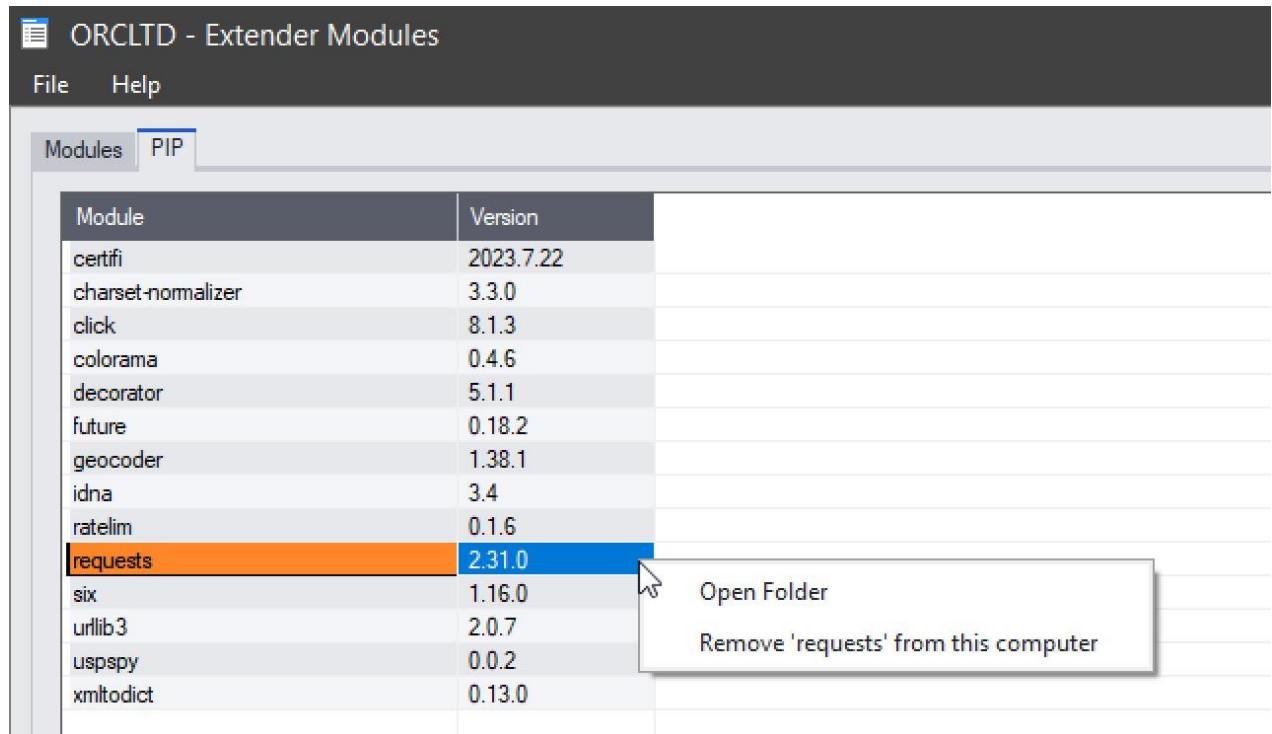
This is populated automatically the first time you import a module file. Use Check for updates to highlight modules with a different version in the installed from folder.

## Python packages

The PIP Tab on the Modules lists all the Python packages Extender has installed as a result of @pip lines in scripts.

- When pip is run it now records a log file in the site\_packages\.. folder - right click on the PIP grid and select 'Open folder' - go up one level and the log files will be there.
- If you right click on a module on the PIP page you can select 'Remove '{xxx}' from this computer'. It will delete the pip module and the next time a script is run, it will reinstall the missing pip modules.





**Note:** If you delete %shareddata%/Company/%orgid%/excache.ver then ALL workstations will recheck pip modules. This can be used to download the latest version of the package.

## Enable/Disable

The buttons applies to view scripts configured in View Events, Scripts and Workflow only. It sets the Active flag to No.

if you need to disable a screen script, refer to the Scripts topic. Writing a OCX screen script name: on page 115

## Export modules

Use the **Export** button to export Extender configuration to a file saved on a network folder. This will create a file with a .VI extension, including all the components named with the module ID.

You can then import the file into another database.

## Import modules

Use the **Import** button to import an Extender module saved on a network folder. This will create and update all the components included in the module. It is recommended to restart the Sage desktop after importing a module.

**Note:** It doesn't delete any components. If you need to delete some events or scripts, you need to do this manually.

## Check for Updates

### Updating Modules

On the Extender Setup > Modules screen, you can "Check for Updates". If there is a file with a newer version in the "Installed from" folder, the module is highlighted.

Select the module and select "Update"

**Example:** Check for updates, select the Workflow module and Update. The latest file is imported automatically from the VI69A folder.

## Examples

You can use the link below for an example of an Extender Module.

Comment Templates Module Example

**Tip:** The Modules screen is written using a Python script and can be used as starting point to create a custom screen that displays Sage 300 records in a grid. Look at the VI1011.py file in the VI69A folder of your Sage 300 installation.

## ADDING SECURITY

If your Sage 300 system requires user passwords and security profiles, you need to create Security Groups and assign user security to Extender. All other setup options can only be run by the ADMIN user.

For information on activating security and setting up security groups, refer to the System Manager online Help (choose the Help menu on the Sage 300 desktop) or review the chapter, "Setting Up Security," in the System Manager Administrator Guide (or the System Manager Setup Guide if you are using Sage 300 Standard).

### Assigning Extender security

Using the Security Groups form in the Administrative Services folder, you can assign the following security tasks to Extender.

<i>Security Group</i>	<i>Description</i>
View Logs	Can view logs populated by Extender
Edit Scripts	Can Edit and Run Extender scripts using VI1001 and VI1008.
Run Scripts	Can Run scripts from the Extender Setup screens.

	<b>Note:</b> You don't need to give Run Scripts Security rights for Extender View or UI scripts to be active.
Access Modules Screens	Can import and export modules
Access Setup Screens	<p>Access to all setup screens, including Custom Tables and configuring Email Messages.</p> <p><b>Note:</b> This includes the following Security Groups: Access Modules Screens, Configure Events and Run Scripts - To Edit Scripts, you need to select the "Edit scripts" group too.</p>
Configure Events	Can attach existing events to View and view fields.
View Custom Table records	<p>Can access Extender's Custom Table Editor to view records in all custom tables.</p> <p><b>Note:</b> You don't need access to the Custom Table Editor for a script to use the custom table values in an Extender script or an Information Manager Note.</p>
Edit Custom Table Records	<p>Can access Extender's Custom table Editor to view, add, edit and delete records in all custom tables.</p> <p>This security group only controls access to Extender's Custom Table Editor This doesn't control the rights to View/Add/Edit or Delete records in the custom tables. If you are using a custom script to maintain custom table records, you need to make sure that only the relevant users have access to the custom script.</p>
View All Workflows	User can view all workflow instances in the Console (whether they are assigned to it or not).
Modify All Workflows	<p>User can reassign workflows. This is required to use the default Reassign Action or the Delete button on the Workflow Console, even if the workflow is assigned to the user.</p> <p>User can progress all workflows, even when not assigned to a workflow.</p>
View Workflow Logs	User can view the workflow logs for all workflows using Workflow Inquiry screens.
Configure Workflow	Configure Workflow templates in Extender Setup. you have read/write access to Workflow Templates, User Groups, Workflow Colours, Message Templates

## Extender security and workflow users

**Note:**

A Workflow User license is required for each user who needs to access Extender Workflow functionality:

- Extender Workflow Console: The console lets users monitor workflow instances, drill down for detail, and progress workflows that have been assigned to them.
- Start or progress Extender Workflow using the Icons on Sage 300 screens.
- View workflow history using configured icons on Sage 300 screens.
- Access Extender Audit Logs via icons configured on Sage 300 screens to view the detailed history of logged records.

## Custom Table Security

If you need more granular security on custom tables, where some users can view records in certain custom tables, and edit in other tables, for example, you cannot use the default Custom Table Editor. You would need to write a custom script that controls who can view/add/edit/delete records in the various tables.

# Setting Up Extender Workflow

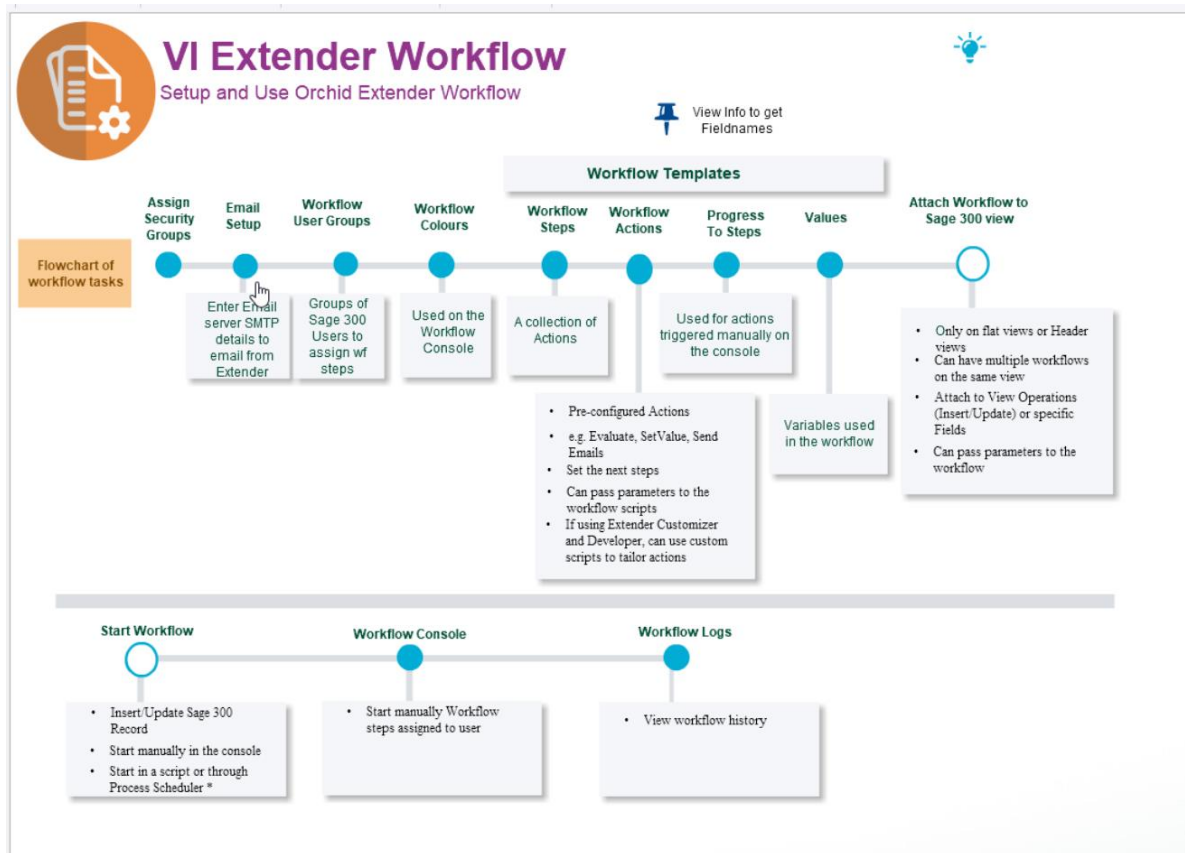
Workflows can be configured to approve new records, approve field changes in Sage 300 or start automatically a series of actions to alert users when something happens in Sage 300.

## BEFORE YOU START

**Step 1:** Draw a diagram of the workflow you require.

**Step 2:** Assign the Visual Process Flow to follow the key steps.

Refer to Assigning Visual Process Flows



## SETUP WORKFLOW IN EXTENDER

Step 1. Use the icons in the Extender Setup folder to configure workflow:

Step 2. Setup Extender Adding Security on page 122 in Sage 300 Administrative Services.

Step 3. Configure Workflow Users.

Refer to Extender License and Workflow Users on page 129

Step 4. If you want the workflow to send emails,

- Configure Extender emails . Refer to Options on page 84
- Configure Message Templates.

Step 5. Create Workflow User Groups

Step 6. Configure Workflow colors

Step 7. Add Workflow Templates

Workflow Templates - Screen Guide on page 132

## APPLY WORKFLOW TO THE REQUIRED SAGE 300 VIEWS.

In most cases, the workflow is configured to start automatically when a record is updated in Sage 300.

Refer to View Events, Scripts & WF on page 149

A workflow can be started automatically

- when a view field is updated – you attach the workflow template to a View field.
- the insert/update/upsert/delete operation on a Sage 300 view - the workflow template is attached to a view operation.
- by a Python script run on the Sage 300 desktop or attached to a Sage view.
- by a Python script run using Process Scheduler.

## A workflow can be started manually

You can start a workflow manually from an icon on a Sage 300 screen.

The logged-on user has to be configured as a Workflow User. For details refer to Understanding Workflow Users below,

You configure which screens can start workflow in Information Manager Setup > I/M Options.

Refer to Extender Workflow- Notes/DML/Extender Tray .

## OPTIONALLY, ADD ICONS TO SAGE 300 SCREENS

You can configure Information Manager to add icons to Sage 300 screens to progress workflow and view workflow history.

Configure Information Manager to enable Workflow icons on Sage 300 screens

- Install and Activate Information Manager
- In I/M Options, Notes/DML/Extender Tray, add configuration rows to add workflow icons to Sage 300 screens
- Refresh the Tray

## UNDERSTANDING WORKFLOW USERS

### Setup Workflow Users

Log in to Sage 300 as ADMIN and use the Extender Setup > Licences screen to view/add/delete users.

For details on using the screen, refer to Extender License and Workflow Users on page 129

### When do you need workflow users

A Workflow User license is required for each user who needs to access Extender Workflow functionality:

- Extender Workflow Console: The console lets users monitor workflow instances, drill down for detail, and progress workflows that have been assigned to them.
- Start or progress Extender Workflow using the Icons on Sage 300 screens.
- View workflow history using configured icons on Sage 300 screens.
- Access Extender Audit Logs via icons configured on Sage 300 screens to view the detailed history of logged records.

**Requirement!** To use the Extender icons on the screens, you need to install and activate Information Manager. If you are not using other functionality in Information Manager, you don't need activation details.

**Note:**

Workflow Users also have access to Email SmartLink: E.g. so a participant in a workflow can be easily emailed a link to a relevant Sage 300 record.

### IF USING REMOTE ACTION SERVICE

A Workflow User license is required for users to progress the workflow through Remote Action Service.

This functionality to use a one-time link in a notification email to progress a workflow without needing to be logged in to Sage 300 requires an additional subscription to Remote Action Service.

**Note:** Workflow Users do not need to use a Sage 300 license if their only interaction with Extender Workflow will be via the Remote Action Service.

For details, refer to Remote Action Service : Progress Extender Workflow remotely on page 209

### IF USING WORKFLOW ANYWHERE

Workflow Anywhere provides an Extender Workflow Console for your mobile device.

To use the Workflow Anywhere App, a user needs a Workflow User license and a Workflow Anywhere User license. A Sage 300 license is required when the user refreshes the data on the App or progresses the workflow.

For details, refer to Workflow Anywhere Overview

## Workflow template and Workflow Users

When you assign a workflow to a user who is not configured as a Workflow User, the AssignUser workflow action returns an error. The next action is configured in the False Action # field in the Workflow Template.

Make sure the Workflow Template notifies an Admin user and proceeds with the rest of the workflow actions.

**Tip:** You can add a Workflow Action to assign the workflow to ADMIN if the first AssignUser action returns False



## How do Workflow Users work?

### **WORKFLOW USERS are NAMED user licenses:**

- Each Workflow User license is allocated to a specific, named user.
- Named users, up to the number of current Workflow User licences, are assigned in Extender Setup.
- If you are using multiple Sage 300 databases, Named users are shared across all databases where Extender is activated.

**Note:** A Workflow User license is not required to trigger an automatic Workflow (e.g. by updating a record in Sage 300)

## EXTENDER LICENSE AND WORKFLOW USERS

Use the Licence form to review the Serial Number and Activation Code which has been applied to this installation.

For details on the Extender License screen, refer to Extender License Screen on page 81.

**Note:** For details on workflow users functionality and licensing, refer to Understanding Workflow Users on page 127

## Maintain Workflow Users

Use Extender License Screen to Insert a row for each Sage 300 user that needs to progress the workflow or view outstanding workflow records.

**Tip:** Use the INS key on your keyboard to insert a new row

**Note:** You can enter users up to the number of workflow users you are licensed for. If you enter additional users, you will receive a "Too many users" error and your changes are not saved.

### **IF USING WORKFLOW ANYWHERE MOBILE APP**

Select Yes in the "Is Workflow Anywhere" column.

**Tip:** Use the space bar to toggle between Yes and Blank

## Upgrade Steps for Workflow Users

When upgrading from one Sage 300 version to another, make sure the previous version license is in the Sage 300 Shared Data folder configured for the new version. When you activate Extender to upgrade it, the users will be imported into the new version automatically.

You can also use the **"Import users from prior version"** button.

**Note:** If the new license includes fewer users, the first x users will be imported, up to the number in the current license.

### Example:

If upgrading from Sage 300 version 2024 to Sage 300 version 2023

1. Copy the VI70A.lic file to the Shared Data folder if upgrading to a new server.
2. Activate Extender v2024. This will update the VI71A.lic file with the previously configured users
3. If the VI70A.lic file is not available when activating, you can copy the file after upgrading and use the Import Users from Prior Version button.

## WORKFLOW TEMPLATES

Workflows can be configured to approve new records, approve field changes in Sage 300 or start automatically a series of actions to alert users when something happens in Sage 300.

### Note:

Workflow is only available for flat views: Master files (e.g. A/R Customers), Transaction Header views (e.g. O/E Header) or Batch Header view (e.g. A/P Invoice batch)

## Workflow Types

A workflow template is a collection of named steps. Each step can have actions that are performed automatically (e.g. send an email, run a script, wait, goto step). When the workflow requires a user decision to progress to the next steps, you can use "Progress-to" Steps.

For detailed examples, see Extender Configurator Tutorials on page 26

### A workflow can be started automatically

- when a view field is updated – you attach the workflow template to a View field.
- the insert/update/upsert/delete operation on a Sage 300 view - the workflow template is attached to a view operation.
- by a Python script run on the Sage 300 desktop or attached to a Sage view.
- by a Python script run using Process Scheduler.

Approval workflows have two main design options:

1. When a field is updated, the workflow is configured to reset the field to its original value and will only update it to the requested value when it is approved. See example in A/R Credit Limit Approval on page 28

2. To approve records being inserted into Sage 300, the workflow needs to be configured to set the record "on hold" or "Inactive" so that it cannot be used or progressed further until it is approved. see example in O/E Orders Approvals on page 42

## **A workflow can be started manually**

You can start a workflow manually from an icon on a Sage 300 screen.

The logged-on user has to be configured as a Workflow User. For details refer to Understanding Workflow Users on page 127,

You configure which screens can start workflow in Information Manager Setup > I/M Options.

Refer to Extender Workflow- Notes/DML/Extender Tray .

See example Customer On-Hold Alert and Approval on page 36

## **Completing a workflow**

A workflow is completed when it enters a step which completes the workflow. This is done by including an action to "Complete the workflow" in the Step actions.

If the workflow is completed, the step name on the workflow console is blank.

If the workflow template has been configured to "Automatically delete when closed" then the Workflow Instance will be deleted when a closing workflow step has been taken. The workflow History can be used to view previously completed workflows.

## Using the workflow

All workflow (completed and outstanding) are in the workflow history.

Outstanding workflows

A workflow instance is created for each running workflow. It includes fields such as what workflow template it is using, the current step, the user who performed the step, the date/time the step was performed, etc. It also has a list of key-values, for example customer, order number, etc.

A workflow instance has a STATUS field and a COLOR field. STATUS can be used by the scripts and is displayed in the workflow console. Status is updated through actions configured in the workflow templates. The COLOR field can be used to colour the rows in the workflow screen (for example, urgent items could be red).

## Setup Workflow templates - Overview

Workflow templates include:

- Steps
- Progress-to Steps

- Actions
- Values

## WORKFLOW STEPS

A workflow step is a collection of actions taken when the workflow starts or is progressed. Each step is recorded in the workflow log and can be viewed in the workflow history.

## WORKFLOW ACTIONS

Actions control what each step of the workflow does. Extender Configurator includes a certain number of pre-defined actions.

For a list of actions, refer to Configurator Actions on page 179

To add a custom action, you need to be licenced for Extender Customizer or Developer edition and upload a custom script to the database.

## PROGRESS-TO STEPS

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

For example, a "requires approval" step could progress to an "Approve" or a "Reject" step.

## VALUES

Values are variables that can be defined in the Workflow templates and used in the Workflow actions. Such values are included in the workflow history Log file.

# WORKFLOW TEMPLATES - SCREEN GUIDE

Workflow templates include:

- Steps
- Progress-to Steps
- Actions
- Values

### **Tips:**

Workflow templates grids are resizable.

You can click on the blue labels - it's the same as pressing F9 to view the details.

## Workflow template configuration

### **WORKFLOW TEMPLATES: FIELDS AND CONTROLS**

#### **TEMPLATE ID**

Enter a unique workflow template ID. It cannot be changed after the template is created.  
If using an Extender Module, make sure the workflow name starts with the module name.

#### **DESCRIPTION**

Enter a meaningful description.

#### **ACTIVE**

Select Yes to Activate the workflow.

If you need to select No to deactivate the workflow, make sure you complete existing open workflow instances first.

#### **AUTO DELETE INSTANCE WHEN COMPLETE**

Defaults to No.

Select Yes to delete the workflow instance when a closing workflow step has been taken. The instance will only be deleted once the workflow log entry has been created. The workflow history will remain available.

#### **CAN START MANUALLY**

- Select Yes to start a workflow from a Sage 300 screen. This requires Orchid Information Manager activated and configured.

User needs to be an Workflow User to start a workflow manually.

See example setup in Customer On-Hold Alert and Approval on page 36

- Select No to start the workflow automatically

The workflow can only be started when a Sage 300 record is inserted or updated (as per View Events and Scripts configuration).

See example setup in A/R Credit Limit Approval on page 28.

**Note:** In both cases, you can start a workflow in a custom Extender script, if using Extender Customizer or Developer Edition.

#### **CAN START MULTIPLE INSTANCES**

This applies to manually started workflow only.

a. "Yes" – then users can start the same workflow for the same key field multiple times.

**Tip:**

**Can start multiple instances:** Yes - If you want the workflow to behave differently if there is an active pending workflow before a new one starts, use the "IfWorkflowExists" action.

b. "No" – do not allow them to start another instance. But no message.

c. "No with message" – do not allow users to start another instance and give them a message "There is already a workflow instance for workflow template: {workflow template name} and {view name} - {record key}"

**Warning!**

When you select "No" or "No with Message", if you update a field/View configured with the workflow template, and an existing workflow instance is active, **the workflow is not triggered.**

This may disable controls you are implementing with this workflow where this workflow has an active instance is active. USE WITH EXTREME CAUTION. Consider using the "IfWorkflowExists" action and "Can start multiple workflow" = Yes

## Workflow Steps

A workflow step is a collection of actions taken when the workflow starts or is progressed. Each step is recorded in the workflow log and can be viewed in the workflow history.

The Previous step and next step are visible on the workflow Console.

### WORKFLOW STEPS : FIELDS AND CONTROLS

Insert a new line for each Step of the workflow. Provide a Step Name, a description and select whether the step is an "Entry Step".

**Note:** You can have more than one entry step in a workflow.

When attaching a workflow template to a View, you can choose the entry step. For details, View Events, Scripts & WF on page 149

For each step, define Actions.

For steps where a user action is required (e.g. Approval), configure the Progress-to steps.

### STEPS AND PARAMETERS

You can configure up to 4 optional parameters when you attach a workflow template to a View in View Events and Scripts and when configuring the Progress-to Steps.

Parameter 1 to Parameter 4 fields on the Steps setup section of the Workflow Template allow you to describe how the parameters are used in the workflow.

**Example:** In the A/R Customer Credit Limit approval workflow, Parameter 1 is the maximum amount a user can update the credit limit without approval, Parameter 2 is the amount above which a manager's approval is required.

## **REASSIGN STEP-**

Extender includes a default Reassign Step on the console where you can select a user/user group to reassign the workflow.

You can design your own Reassign step with custom actions like "send email" - If found, it will be added to the Console automatically, replacing the default step. You don't need to add it as a Progress-to Step.

## Progress-to Steps

Progress-to steps are used when a user needs to select the next Step to progress the workflow. Progress-to steps add Controls to the workflow console. If workflow screen icons are configured in Information Manager, Progress-to steps can be run from the configured Sage 300 screen.

### **TO ADD PROGRESS-TO STEPS**

Select a step and if required, add a row for each step that the workflow can progress to.

You can configure parameters that will be passed to the action when selected.

### **PROGRESS-TO STEPS AND WORKFLOW CONSOLE**

On the workflow console, you will see the available steps depending on the current step that the workflow instance.

e.g. Approve or Reject.

### **PROGRESS-TO STEPS AND WORKFLOW SCREEN ICONS**

If you have configured workflow on Sage 300 screens in Information Manager, Progress-to steps can be used from the screen icons.

Add screenshot/link to Infor manager setup

e.g. Approve or Reject.

## Workflow Actions

Actions control what each step of the workflow does. Extender Configurator includes a certain number of pre-defined actions.

For a list of actions, refer to Configurator Actions on page 179

Use F9 to view the details

Click Insert on the grid or the New button on the F9 zoom screen to create a new action.

**Tip:** Ensure that each Step ends with a Complete action or a GoToStep Action.

## ACTIONS : FIELDS AND CONTROLS

### Action #

Type an Action number.

**Tip:** Leave some gaps in Action numbering to make ongoing maintenance easier. You can use Renumber before inserting rows. See below.

### Action Name

Select an Action.

This will refresh the fields required for each action.

The following actions are pre-configured in Extender Workflow.

An action is a Python script that is stored in the database just like regular user scripts.

Configurator includes a number of predefined actions. For details, refer to Configurator Actions on page 179

To add a custom action, you need to be licenced for Extender Customizer or Developer edition and upload a custom script to the database.

### Complete Fields required for each action

The field labels on F9 Zoom and the grid headings are named after the parameters configured in the Extender Script that defines the action.

Actions can have up to 4 parameters, as defined in the Action script.

### Comment

Enter up to 250 characters to document how the action is configured.

## PARAMETERS AVAILABLE FOR USE IN WORKFLOW ACTIONS.

Use the Help link on the detail action screen for details.

The following values are available to use in action parameters and email templates used in the Workflow.SendEmail action:

{\$1}, {\$2}, {\$3}, {\$4} - step parameters

{PROGRAM} ID of calling program (eg OE1100 = Order Entry)

{ROTOID} ID of the calling view (eg AR0024 = AR Customers)

{USER} current user (eg ADMIN)

{field} gets a value either from the workflow instance values, or from the target view.



{VIEW.field} gets a value from the target view  
{VALUE.name} gets a workflow instance value  
{VIEWID} the view ID for this workflow instance  
{VIEWKEY} the record key for this workflow instance  
{KEYDESC} the description for this workflow instance  
{TOVALUE} the requested value for this workflow instance  
{STATUS} the current status for this workflow instance  
{COLOR} the colour for this workflow instance  
{CURUSER} the user or group currently assigned for this workflow instance  
{WTNAME} the workflow template name for this workflow instance  
{STUSER} the user who started this workflow instance  
{STEPNAME} the current step for this workflow instance  
{PSTEPNAME} the previous step for this workflow instance

**Formatting Numbers:**

Append ':{required decimals}' to the field

E.G. {ORDTOTAL:2}

**TRUE ACTION # AND FALSE ACTION #**

**True Action #:** Enter the Action # that the workflow should perform next if the Action returns True

**False Action #:** Enter the Action # that the workflow should perform next if the Action returns False.

The True and False Action # control what actions will actually take place in the workflow depending on the result of the Action script.

If you set the True and False Action # to 0, the workflow step will stop with that action.

**Important!** If an action number is not in a True or False value, they will never be used in the workflow.

**Example:**

Using the Evaluate Action

The Evaluate action is used to compare a field to a pre-defined value (e.g. Credit Limit greater than a certain amount or Customer Group being a specific value, Vendor name changed from original value).

If the result of the comparison is false, you can go to Action # 50, Approve automatically. This action would be configured as GoToStep "Approve".

If the result of the comparison is true, you want the workflow to do 3 actions, Action # 15, Action #20 and Action #25.

**RENUMBER**

Use the Renumber to re-order the actions displayed on the screen. Extender will use the action number, add a gap of 10 so that you can insert new actions and renumber the True/False actions accordingly.

**STANDARD ACTION CONFIGURATION AND PARAMETERS REQUIRED.**

Action Name	Description	Parameters
AssignUser	Assign to a Workflow User Group	Select a user group. To configure a new user group, refer to <b>Workflow User Groups on page 97.</b>
AssignUser	Assigns a user to the workflow instance	You can type a Sage 300 User ID, select a value defined in the workflow or select a value set in a parameter when attaching the workflow to a view.  Type {USER} to assign workflow the current user.  When you assign a workflow to a user who is not configured as a Workflow User, the AssignUser workflow action returns an error. The next action is configured in the False Action # field in the Workflow Template.  Make sure the Workflow Template notifies an Admin user and proceeds with the rest of the workflow actions.

		<p><b>Tip:</b> You can add a Workflow Action to assign the workflow to ADMIN if the first AssignUser action returns False</p>	
AddParameter	<p>Stores input collected in the workflow</p> <p>Parameters are added to the Values of the workflow</p>	<p>Name: can be used in other actions (such as set field or sendEmail)</p> <p>Parameters</p> <p>Label: description user will see when prompted</p> <p>Type:</p> <p>Parameter types can be:</p> <ul style="list-style-type: none"> <li>&gt; text(size=xx)</li> <li>&gt; integer</li> <li>&gt; number.0 - eg 10.1</li> <li>&gt; number.00 - eg 10.12</li> <li>&gt; number.000 - eg 10.123</li> <li>&gt; user - a user or user group</li> <li>&gt; date</li> </ul> <p>Default Value: Optional -</p> <p>Parameter values (as entered by the user ) are saved as workflow values and available on the console.</p> <p>Parameters can be added to email templates. Use {PARAMNAME} in the email template.</p>	
AskForParameters	<p>Step will stop at that step and wait for user input.</p> <p>True Action should be the action you want to perform when user has submitted the input.</p>	<p>No parameter.</p> <p>Execution continues at the AskForParameters True Action step #.</p> <p>If the user selects "Cancel" on the UI, the action returns False.</p> <p><b>Tip:</b> Configure the actions in the template if you want different process flow if a user enters input or clicks Cancel.</p> <p>This action is not active when the work-</p>	

		flow is progressed through a script, for example the Remote Action poller.	
AssignColour	Assigns a color to a workflow instance in the Wokflow Console	Select a color using the Finder. To configure colors, refer to Workflow Colours on page 96	
Complete	Action to ensure that the action completes the workflow. If Auto delete instance when complete is set to Yes on the workflow, the instance will be deleted when the Complete step is successful	No Parameter. When the workflow is complete, no further processing happens. The next step in the Console shows as Blank	
CreatePOfromReq	Create a PO from a requisition	Requisition requires a vendor on the Header. All lines must use the same vendor. No parameters	
Evaluate	Used to set conditional workflow	Field, Operator, Value If evaluating a Boolean field, use 1 for True/Yes or 0 for False/No  <b>Notes:</b> If the Field is set to {PROGRAM}, the action will compare the RotoID of the screen running the workflow to the value defined in the Value parameter. If you only want the workflow to do certain actions for certain users, you can use Evaluate {USER} to use the logged on user in the condition.	
GenerateAPPaymentBatchListing	Runs and saves as a PDF the AP Payment Batch listing report	For use in a workflow template to approve AP Payment batches See example in A/P Payment Batch Approval on page 51	
GetOptField	Used to read	Parameter 1 = Optional Field View ID -	

	Optional Field Value to use in workflow	Use View Info to select - Use PO0623 for PO Header Optional Fields or G/L0400 for GL Account Optional Field Parameter 2 = Optional Field Name Parameter 3 = Workflow Value	
GoToStep	Go to another workflow step.	Select Step name	
IfWorkflowExists	Returns True if there is a pending workflow.	Can be used in the workflow template to have different actions if the workflow is Active. Can also be used in View Events and Scripts to make a field ReadOnly if using Extender Customizer or Developer Edition.	
IfWorkflowUI	Returns True if the workflow is progressed on the Console or the workflow screen icons.	Used in the workflow template to have different branches if the step is used on the console and in a script such as the Remote Action Poller. Users are generally not prompted for parameters or displayed messages when the workflow is progressed in a script.	
IsDelete	Returns True if the workflow is part of a DELETE view operation.	This only applies to Master file and Transaction views. When a batch is "Deleted", the status is set to "Deleted", the Delete view operation is not run. <b>Tip:</b> Use the Batch status field on the Batch if you need to trigger a workflow when a batch is deleted.	
IsInsert	Returns True if the workflow is part of an INSERT View operation	Can be used when a workflow is attached to an UPSERT View operation or a View Field. This only applies to Master file and Transaction views. When a batch is "Inserted", the batch is created immediately without running an "INSERT" View operation.	

		<p><b>Tip:</b> Use the Number of Entries field on the Batch if you need to trigger a workflow when a batch is inserted (Number of entries = 0)</p>
IsUpdate	Returns True if the workflow is part of an UPDATE View operation (vs an INSERT)	<p>Can be used when a workflow is attached to an UPSERT View operation or a View Field.</p> <p>You may have different actions when a new ON HOLD order is inserted vs when an existing order is updated to "On hold"</p>
IsUserMemberGroup	Return True if the user configured in Parameter 1 is part of the Workflow User Group in parameter 2	To use it for the logged on user, you can use {USER} in Parameter 1
Reassign	<p>Reassign a user to another user/group</p> <p>Displayed in the workflow console.</p>	<p>If there is no reassign step then the user is prompted for the user/group to reassign to, then the workflow user is set to that user. If you have a step called "reassign" in your workflow, the custom step is run.</p> <p><b>Example:</b> If you want to send an email when a workflow is reassigned, add your own Reassign Step.</p>
PostBkEntry	PostBkEntry	<p>The PostBkEntry posts the bank entry configured in the Workflow Instance ID. Use in a workflow template associated with the Bank Entry View.</p> <p>Approver needs rights to post Bank Entry in Sage Security</p>
PostBatch	<p>PostAPAdjustmentBatch</p> <p>PostAPIInvoiceBatch</p> <p>PostAPPaymentBatch</p>	<p>The Post_Batch actions post the relevant batch. Batch number entered as Parameter 1.</p> <p>The approver needs rights to Post the batch in Sage security.</p>

	<p>PostARAd-justmentBatch</p> <p>PostARInvoiceBatch</p> <p>PostARReceiptBatch</p> <p>PostARRefundBatch</p> <p>PostGLBatch</p> <p>ProvPostGLBatch</p>		
SendEmail	<p>Sends an email to the user / user group or email address configured in Parameter 2.</p>	<p>Parameter 1 = Email template - You can use the finder to select the message template.</p> <p>Parameter 2 = Email address or Sage 300 User or Workflow user group.</p> <p>You can use {CURUSER} to send a notification to the user assigned to the workflow. Make sure the SendEmail Action is after the AssignUser Action.</p>	User profile

**Note:**

- In Parameter 2, enter a list of email addresses separated by a ;
- You can add email addresses (someone@company.com, a Sage User ID or an Extender workflow user
- If selecting a Sage 300 user (eg ADMIN), an email is sent to the email address configured in Sage 300 User profile.
- If selecting a Workflow user group (eg APPROVERS), all users in the group are sent an email, to the email address configured in Sage
- You can combine email addresses (e.g. someone@company.com) and user groups

**Example:** someone@company.com;ADMIN;APPROVERS;



		Optional: CC, Subject (to overwrite email template subject)	
SendEmailAttachments	Sends an email with an attachment	<p>Extender Message template - Can include variables from the view the workflow is attached to</p> <p>Email address configured in Parameter 2: refer to SendEmail action above.</p> <p>Set the path and filename of the attachment in a Workflow value and enter the workflow value name in P4.</p> <p>Ensure the path is set to UNC format and the users have access to it.</p>	
SendEmailToStarter	Sends an email to the user who started the workflow	Email template, CC, Subject	
SetDescription	Sets the workflow description for use in Console and workflow logs.	You can use any string/word as well as workflow and view variables.	
SetDrilldown	SetDrilldown sets a value to a Sage 300 view field to enable Drilldown from the console to the underlying Sage 300 screen.	<p>Parameter 1 is the field name that is used as the KEY field in the vid-rilldown.ini file.</p> <p>Parameter 2 is the value you want to set.</p> <p>For example {IDCUST} for the customer number from an ARCUS workflow.</p> <p>For details, refer to Drilldown in workflow on page 190.</p>	
SetField	<p>Sets a configured field to a value.</p> <p>Field can be any field on the view that the Workflow will be attached to</p>	<ul style="list-style-type: none"> <li>• Use Extender Extender View Info on page 174 to identify the Field name</li> <li>• e.g. AMTCRLIMIT for an A/R Customer workflow</li> <li>• Add the field name between curly brackets {}.</li> <li>• Use values defined in the workflow or a set value (e.g. 1</li> </ul>	

		<p>to set OnHold to true/selected)</p> <p>You can use {VIEWID}, {VIEWKEY}, {KEYDESC}, {TOVALUE} - these correspond to the View ID, Record Key, Description, and Requested Value columns in the Workflow Console screen.</p> <p><b>Example:</b> To prevent a change to the credit limit, you use SetField to restore the value to the previous value using SetField and {ORIGINAL_AMTCRDLMT}</p> <p><b>Note:</b> You can update 2 fields with SetField . This is useful when updating SalesPerson and SalesPercentage on OE Order.</p>	
SetOptField	Set an optional field value	<p>Parameter 1 = Optional Field View ID - Use View Info to select - Use PO0623 for PO Header Optional Fields or G/L0400 for GL Account Optional Field</p> <p>Parameter 2 = Optional Field Name</p> <p>Parameter 3 = Optional Field Value</p>	
SetStatus	SetStatus will set the status of a workflow instance. The Status is shown on the workflow Console	<p>P1 is the status you want to set to the workflow instance. Displayed on the console, on the workflow logs and in the workflow reports.</p>	
SetValue	SetValue will add a row to the workflow instance values grid.	<p>Parameter 1 is the field name that you want to give to the Value.</p> <p>Parameter 2 is the value you want to pass. It can be hard-coded, set to a value defined in the workflow or set to the View Field original or new value.</p> <p>Use the field name between curly</p>	

		<p>bracket to store the new amount (e.g. {AMTCRDLMT})</p> <p>P1 can be set to {VIEWID} and value would be the Sage 300 View ID when a workflow is started from a screen and not attached to a view.</p>	
ShowUserError	Displays a Error to the logged on user on the Sage screen.	As above.	
ShowUserMessage	Displays a Message to the logged on user on the Sage screen.	<p>Parameter 1: Text to display.</p> <p><b>For information</b> The message can include Variables, such as Workflow fields or Values from the workflow.</p> <p>Use an Evaluate action before using the ShowUser actions to ensure that the message is only showing when the view is used on a Sage 300 screen.</p> <p>field: "{PROGRAM}"</p> <p>operator: "="</p> <p>value: "AR1300" (RotoID of the screen that should display a message).</p>	
ShowUserWarning	Displays a Warning to the logged on user on the Sage screen.	As above.	

## Workflow Values

Values are variables that can be defined in the Workflow templates and used in the Workflow actions. Such values are included in the workflow history Log file.

### USING VALUES

if you use the SetValue Action, the workflow log will track the value for each step of the workflow instance.

Values can be hard-coded in the workflow, set to View fields when the workflow is attached to a view (e.g. {ORIGINAL\_FIELDNAME} ), or set in the workflow based on parameters configured on View Events and Scripts.

You can also Values from workflow instance

{VIEWID}, {VIEWKEY}, {KEYDESC}, {TOVALUE}, {STATUS}, {COLOR}, {CURUSER}.

**Tips:**

- You can export and import workflow templates. Choose File Menu from the Workflow Templates Screen. "Export" exports the currently selected template, "Export All" exports all Workflow templates. Use Import and select the file with your workflow template/s.
- When importing workflow templates, you can only INSERT new templates, where the Template ID doesn't exist in the database. The column WTID needs to be in the Import file with any Integer value to link the workflow steps, actions, progress to steps and values. It will be auto-assigned during the import to the next available value.
- You can also export Message Templates, User Groups and Colours.

## LINK WORKFLOW TEMPLATE TO EXTENDER VIEW OR SCREEN

### To start a workflow automatically:

You can attach a Workflow Template to a Sage 300 View operation and/or View field/fields. The workflow will start automatically when the view is used in Sage 300.

For details on how to add a workflow to a Sage 300 View, refer to View Events, Scripts & WF on the facing page

- when a view field is updated – you attach the workflow template to a View field.
- the insert/update/upsert/delete operation on a Sage 300 view - the workflow template is attached to a view operation.
- by a Python script run on the Sage 300 desktop or attached to a Sage view.
- by a Python script run using Process Scheduler.

## To start a workflow manually:

You can start a workflow manually from an icon on a Sage 300 screen.

The logged-on user has to be configured as a Workflow User. For details refer to Understanding Workflow Users on page 127,

You configure which screens can start workflow in Information Manager Setup > I/M Options.

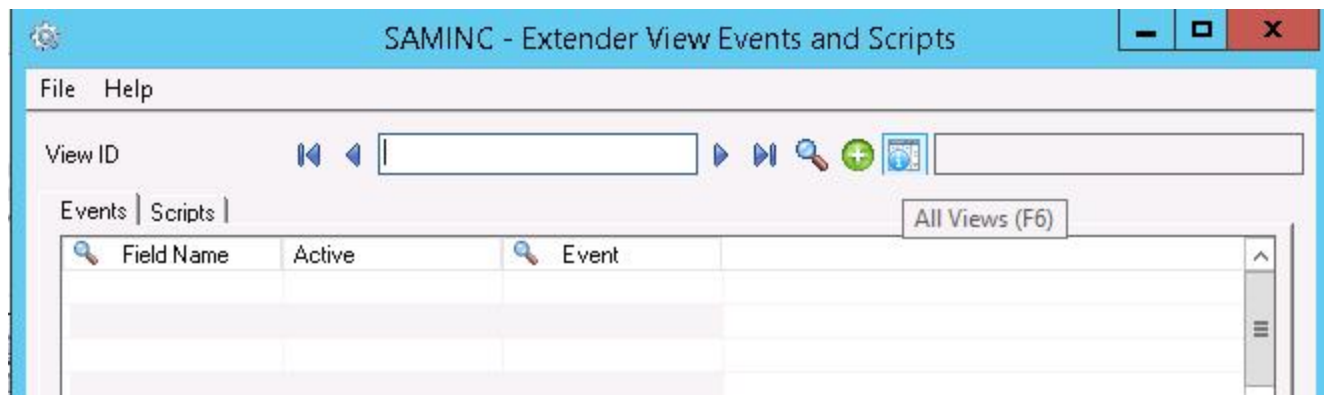
Refer to Extender Workflow- Notes/DML/Extender Tray .

## View Events, Scripts & WF

Use this form to add Extender events, custom scripts and workflows to Extender views and fields.

### Select a Sage 300 View to be configured with Extender.

By clicking on the "All Views" info icon (or use F6 key) , you can select the appropriate view from the list of available views, active in your Sage 300 database.



## Fields and Controls

### REMEMBER ORIGINAL VALUES FOR:

You can determine what fields Extender need to track the original value for. This is particular useful for email messages.

- Leave blank if you don't need the original value in the Script, workflow or email messages.
- You can enter the field names you need. For example, if you only need the original value for the Description and the name, "DESC,NAMECUST"
- Use \* if you want Extender to make the original value available for all fields. This is useful if you use the original values in a script, in email messages or in a workflow, but you don't want to list all the fields you need in advance.

**Note:** On some views that have many columns and that are opened many times, e.g. the OE Shipment Header and OE Shipment detail view, using \* may have an impact on performance.

**Tip:**

You can also add code in the script to determine what fields the script needs the original value.

Refer to Scripts-AdvancedTips\*

## Events Tab

On the Events tab, you can attach an Event Type to an Extender View operation and/or View field/fields.

**Requirement!** The Events Tab is available if using Extender Levels Configurator, Customizer or Developer

### FIELD NAME

Select the appropriate view field from the list of available view fields. All view fields will be available, including the following standard operations of a Extender view

- Delete : when a view record is deleted
- Insert : when a view record is inserted
- Update : when a view record is updated
- Update and Insert <UPSERT>: when a view record is updated or inserted

### ACTIVE

Set to No if you want to Deactivate an Event temporarily without deleting it.

### EVENT CODE

Select the appropriate Event Code from the list of available Event Types. on page 93

**Important!**

If you need to log the Before and After Value, you need to make sure the event type you select has been configured as "Don't Combine".

If you select the View Operation {INSERT}, {UPDATE} or {UPSERT}, the Before and After values will be available if the event is configured as "Don't Combine". One record will be added to the LOG or emailed for each field that is changed.

For the "Delete" action, only one record will be logged.

Refer to Event Types. on page 93

## Scripts Tab

On the Scripts tab, you select the Python script to be run when the selected view is being updated. Multiple scripts can be selected, and are run in the order specified.

**Requirement!** The Scripts Tab is only available if using Extender Levels Customizer or Developer

### ACTIVE

You can activate or deactivate a specific script without deleting it from the View

### RUN ORDER

If multiple scripts have been defined, you can select the order in which they run by entering a number associated with each script. A script associated with Run Order 1 will run before a script associated with Run Order 2 etc.

### FILE NAME (F9 TO EDIT)

If you are uploading a new script, click F6 to browse and find the .PY file to attach to this view. When selected the script will be

- Copied to the associated COMPANY directory, and this is where the ".PY" file will be invoked from
- Imported into the database

If you are attaching a script which already exists in the database, click F9 to find the existing script, and associate with the current view.

If you want to edit an existing script, click F9

### STATUS

Shows blank or "Checked Out" if currently checked out. In order to check out a script for amendment, you can right hand mouse button on the script row, and select Check Out. Once checked out

you can open (to edit the script), and upload (to replace the existing script with the amended script).

### CHECKED OUT BY

User id who currently has the script checked out

**Tip:** Once you have uploaded a Script and it is active against a view, you can “check out” the script to make changes to the script, to test the script while leaving the original script active. Once you “check in” the script, the existing script will be replaced with the new script.

### PARAMETER 1..PARAMETER 4

Your scripts can contain up to 4 parameters.

You can access the parameters in the Python script with the global variables Parameter1, Parameter2, Parameter3, Parameter4.

**Note:** The first few rows of the highlighted script will be shown to assist with the commenting and verification of the attached scripts.

**Tip:** To check out, open, upload or Undo Checkout, right hand mouse button on the required script and select the required action.

### Important!

If you need to amend a script after it is attached to a view, you need to check it out, open it to make the changes, save the script and check it in to enable the changes.

If the script is amended on a separate machine, you need to re-import the PYTHON script

When PYTHON scripts are attached to a view they are

1. Imported into the associated database, so the script will dump and load with the database
2. Copied to the Company directory, where the PYTHON script is run - If you edit the script directly in this directory, your changes might get overwritten.

OCX Scripts do not need to be added to a Sage 300 View. The script name matches the Sage 300 screen Roto ID to indicate that the script is enabled.

## Workflow Tab



On the Workflows tab, you can attach a Workflow Template to a Extender View operation and/or View field/fields. The workflow will start automatically when the view is used in Sage 300.

You can use F9 to open the Workflow Template screen from the Screen.

## FIELDS AND CONTROLS

**Requirement!** The WorkflowTab is available if using Extender Levels Configurator, Customizer or Developer. If using Configurator, you can only use pre-configured actions in the workflow template.

### FIELD NAME

Select the appropriate view field from the list of available view fields. All view fields will be available, including the following standard operations of a Extender view

This allows you to attach a Workflow Template to

- Any field. If a field has an Active Workflow Template, the new value entered will be stored in "{NEWVALUE}" and the original value reset before the record is saved. This new value will be available in the workflow
- Insert/Update/Delete. The record will be saved and then the workflow will be started.
  - Delete : when a view record is deleted
  - Insert : when a view record is inserted
  - Update : when a view record is updated
  - Update and Insert <UPSERT>: when a view record is updated or inserted

### ACTIVE

Set to No if you want to Deactivate an Event temporarily without deleting it.

### WORKFLOW

Select the appropriate Workflow from the list of available workflow templates. Workflow Templates - Screen Guide on page 132

### ENTRY STEP

Select the step that will be run when the field changes / view operation completes.

### PARAMETER 1 TO 4

You can pass up to 4 parameters to the workflow.

To use the parameter value in the workflow, use the SetValue action. You can use {\$1}, {\$2}, {\$3}, {\$4} to set the value to a field.

For details and examples, Using Parameters in Workflow on page 189

**Important!**

Workflow is only available for flat views: Master files (e.g. A/R Customers), Transaction Header views (e.g. O/E Header) or Batch Header view (e.g. A/P Invoice batch)

**Tip:** View Events and Scripts can be exported and imported using the File Menu.

- If you select **Export**, then only the current View configuration will be exported. The export includes the attached events and scripts.
- If you select **Export All**, then all the current View configurations will be exported. The export includes the attached events and scripts for all configured views. The export format is proprietary, and cannot be changed.

**Note:** Different options are available depending on the level of Extender you are running.

## Extender Workflow- Notes/DML/Extender Tray

You configure an Extender Workflow row to add Workflow icons to a Sage 300 screen.

The icons allow Workflow User to start a workflow if it can be manually started, progress a workflow to the next step if you are an approver, and view the workflow status and workflow history.

### WORKFLOW ICONS EXPLAINED

Workflow icons only show if a workflow is configured on a specific field.

One or no workflow icon can be present per screen. Subject to Sage 300 security rights, you can use the icons to view the workflow history.

Depending on the workflow configuration, you can also use the icons to start or progress the workflow.



Click to start manual workflow or view workflow history. There is no pending workflow.



Click to view active workflow. The pending workflow is not assigned to the logged on user.



Click to progress your active workflow. The workflow is assigned to the logged in user and waiting for an action.



Click to progress group active workflow. The workflow is assigned to a workflow user group that the logged in user is part of. The workflow is waiting for an action from one of the group member.

**Note:** If the workflow icons are not configured in Information Manager Options, users can run the workflow Log reports to view workflow history. Workflow users can use the workflow console to view and progress their active workflows.

## Configure Tray

Select **Extender Workflow** Note Type -Alert Based on Extender Script (For further details on note type, view below)

Line Number	9
Type	Extender Workflow
RotolD	AR1700
Field label - {value}	CUSTOMER NO.
Second Field label - {value2}	
Workflow	Customer on hold manual workflow
Workflow Entry Step	Set on hold
Parameter 1	STEVE
Parameter 2	ANNE
Parameter 3	
Parameter 4	

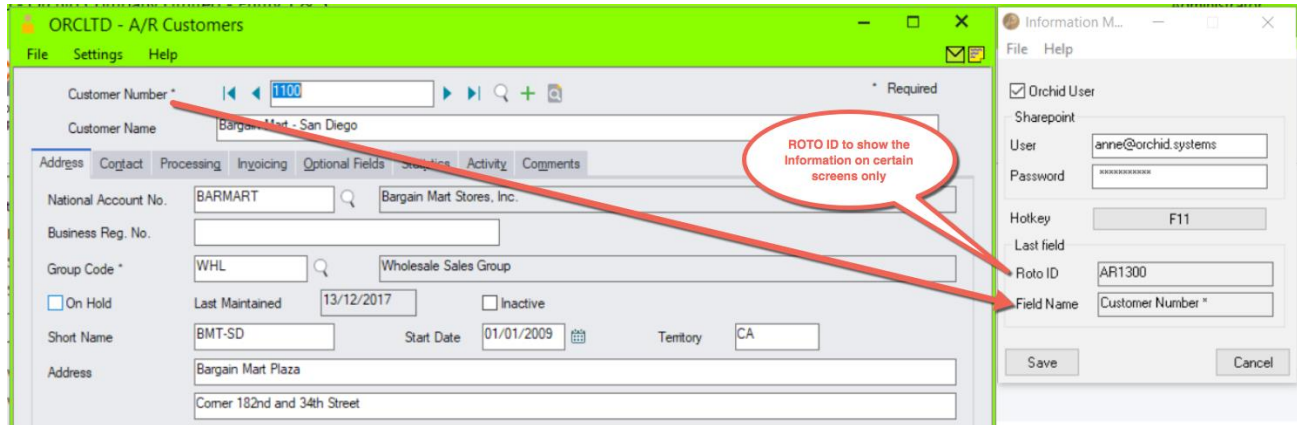
## Fields and Controls

### ROTOID - UNIQUE ID FOR EACH SCREEN

Enter the RotolD of the screen that should display the Extender Workflow Icons.

Example: Enter RotolD AR1300 to display a A/R Customer workflow on the A/R Customer screen.

**Tip:** To know what RotolD/Field label to use, start the appropriate Sage 300 Screen (for example AR Customers) then Right hand mouse click on the Information Manager Tray Icon (the key). Now, as you click on fields in the Sage 300 Screen - the Infoset Hotkey Setup shows you the RotolD and Field Name.



## FIELD LABEL

Enter the field label from the Sage 300 screen which is to trigger the display of the Extender Workflow icons.

If the Field Label is entered with quotes, e.g. "PY", Information Manager will use the hard coded value in addition to the value set in the Second Field Label.

### Important!

1. The same field may have different labels on different screens. See Example 1 below
2. The same field label may be used on the Header and Grid component of the same screen. See Example 2 below. Adding "F." to the field label forces it to use the field control and "G." forces it to use the grid control.

### Examples:

1. In AR Receipt Entry there are two Document Number fields - one on the header and one in the grid. To force the tray to use the correct one, you should use "F.DOCUMENT NUMBER" for the screen label or "G.DOCUMENT NUMBER" for the grid field label. .
2. If you want the same list of documents to show on both the AR Customer Training Screen and the AR Customer Inquiry, you need to add two rows in the IM Setup\Options on the Notes/DML/Extender Tray tab. One for the Field Label "CUSTOMER NUMBER" and one for the Field Label "CUSTOMER NO."

## SECOND FIELD LABEL

Enter the second field label from the Sage 300 screen which is to trigger the display of the Extender Workflow icons. If entered, then the document list will displayed for Field 1 = Field label and Field 2 =

Second Field Label.

Second Field Label is optional and is configured in the same manner as the Field Label.

**EXTENDER WORKFLOW**

Browse to select the Extender Workflow template to be added to the Sage 300 screen.

The workflow needs to be attached to a Sage 300 view that is related to the screen the icon is attached to.

**WORKFLOW ENTRY STEP**

If the workflow template "Can be started manually" is set to "Yes", select an Entry Step. This will enable users to start the workflow manually from the screen.

If the workflow template "Can be started manually" is set to "No", don't select an entry step. The workflow will be started automatically if configured in View Events and Scripts and you can view the Workflow Log and progress the workflow from the screen.

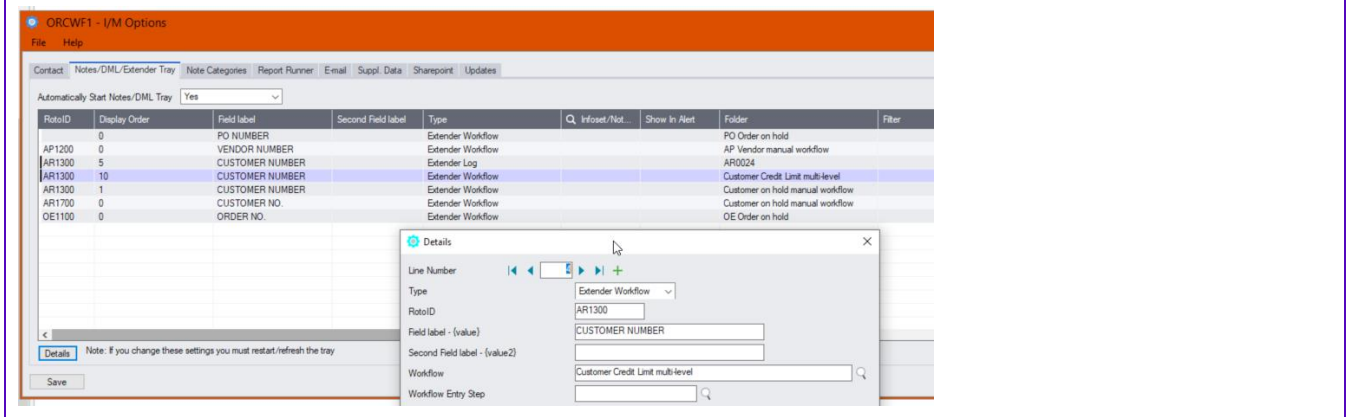
**Examples**

**Example:**

**A/R Customer workflow on A/R Screens**

If you have an A/R Credit Limit approval workflow, you can add the icons to selected screens:

- A/R Customer Screen- RotoID = AR1300 and Field Label = Customer Number
- A/R Customer Inquiry screen - RotoID = 1700, and field label = Customer No



**Example:****A/P Payment Batch workflow on A/P Payment batch screen**

The A/P Payment batch view has a multi-part key, including the Batch Type and the Batch Number. The workflow key is set to PY, Batch number, so the Information Manager configuration needs to include 2 fields as shown below.

Field 1 should be set to "PY" (with quotes) and field 2 set to BATCH NUMBER.

Line Number	5
Type	Extender Workflow
RotoID	AP3100
Field label - {value}	"PY"
Second Field label - {value2}	BATCH NUMBER
Workflow	AP Payment Batch Ready to post
Workflow Entry Step	

**Requirement!**

Selecting this option requires Orchid Extender and Information Manager to be installed and activated.

To use the functionality, a user needs to be flagged as a Workflow User. For details on functionality and licensing method, refer to Understanding Workflow Users on page 127

**Note:**

If the Information Manager Tray is not started, the icons will not show and the user will not be able to use the workflow icons to start or progress the workflow.

However, workflows attached to view operation or view field changes will be started and users configured as Understanding Workflow Users on page 127 are able to access the Workflow Console.

You can start the tray manually in Information Manager > Tray Icon.

## Using Extender Workflow

Once Extender is configured, you use it by interacting with the Sage 300 screens and views.

Many workflows are started automatically when a view field is updated or a record is inserted.

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## TO START A WORKFLOW MANUALLY:

- Set "Can start manually?" = Yes on Workflow template
- Add an Extender Workflow record in I/M Setup > Notes/DML/Extender Tray for the screen where you need to add an icon to start the workflow
- Open the Sage screen as a user marked as " Workflow User" , click on the Workflow icon on the screen .
- Select "Start ... (workflow name)"

### Requirement!

To use the functionality, a user needs to be flagged as a Workflow User. Understanding Workflow Users on page 127

## PROGRESS WORKFLOW ON THE WORKFLOW CONSOLE

To navigate through the workflow records, approve or reject requests and drill down to Sage 300 screens, you can use the Workflow Console.

For details on the Console, Using Workflow Console on the next page.

### Requirement!

To use the functionality, a user needs to be flagged as a Workflow User. Understanding Workflow Users on page 127

## USING ICONS ON SAGE 300 SCREENS

You can also use tray Icons configured on the Sage 300 screens in Information Manager I/M Options.

For details, Extender Workflow- Notes/DML/Extender Tray (IM Options)

**Requirement!**

Information Manager needs to be installed and activated.

To use the functionality, a user needs to be flagged as a Workflow User. Understanding Workflow Users on page 127

## PROGRESSING WORKFLOW OUTSIDE OF SAGE 300

### Using Remote Action Service

This enables Workflow Users to use a one-time link in a notification email to progress a workflow without needing to be logged in to Sage 300.

For details, refer to Remote Action Service : Progress Extender Workflow remotely on page 209

**Requirement!**

Requires an additional subscription to Remote Action Service

To use the functionality, a user needs to be flagged as a Workflow User. Understanding Workflow Users on page 127

**Note:** Workflow Users do not need to use a Sage 300 license if their only interaction with Extender Workflow will be via the Remote Action Service.

### Using Workflow Anywhere

Workflow Anywhere provides an Extender Workflow Console for your mobile device.

**Requirement!** To use the Workflow Anywhere App, a user needs a Workflow User license and a Workflow Anywhere User license. A Sage 300 license is required when the user refreshes the data on the App or progresses the workflow.

For details, refer to Workflow Anywhere Overview

## WORKFLOW HISTORY

Workflow logs are available to users based on security setup.

Refer to Workflow Detail Log on page 173

## USING WORKFLOW CONSOLE

**Requirement!** You need to be a Workflow User to open this screen. Refer to Understanding Workflow Users on page 127



The Workflow Console displays workflow instances. A workflow instance is created when a workflow is started. It is updated when workflow steps are run.

It includes fields relating to the workflow template it is using, the current step, the requested value for workflow requiring a specific field approval, etc. It also has a list of key-values, for example customer, order number, etc.

The Console lets you progress the workflow to the next steps if you have the appropriate security rights.

## Console and Security Groups

The Console screen lets you see all active workflows if you have the "View All Workflow Instances" security group, or just those assigned you or to a group which you are a part of.

Refer to Adding Security on page 122.

**Note:** Unassigned shows workflows assigned to a Sage user or user group that is not configured in Workflow Users in Extender Licence

**Tip:** If you use a Workflow button when you are not assigned to the workflow and don't have "Modify All workflow instances" security group, you will get a security error message and the workflow will not progress.

## how to use console grid

### FILTERING THE CONSOLE

You can filter by up to 5 colors on the console. To configure colors on the console, refer to Workflow Colours on page 96

You can also use CTRL F to filter on any fields.

Select the Template column on a row on the console, use CTRL-F and select Template = "AR Credit Limit workflow". This will display only Workflow records for the AR Credit Limit workflow.

You can use CTRL -F > Clear filter to remove all filters and view all records.

### FIELDS ON CONSOLE

**Template ID:** Set when the instance is started

**Tip:** Double click on the Template name to open the workflow template screen if you have security rights to Edit Workflow setup. For details, Workflow Templates - Screen Guide on page 132

**Started On:** Date when instance started

**Started At:** Time when instance started

**Started By:** User who started the workflow (manually or through a View operation)

**Assigned To:** User or user group currently assigned to the workflow.

**View ID:** Populated automatically by the workflow if it is attached to a View in View Events and Scripts, or populated using SetValue in the workflow template.

**Record Key:** populated by Key field for the record subject to the workflow (can be a Customer number, an Order Number, a Batch Type and Batch number combination)

**Description\*:** Configured in the workflow template.

**Requested Value:** This is populated automatically when the workflow is attached to a specific field in View Events and Scripts.

You can use SetValue action, Value field = {TOVALUE}, value = {VIEWFIELD} such as ORDTOTAL when the workflow is attached to a View operation such as UPDATE or INSERT

**Step:** Shows the current step the workflow is on. If there are Progress-to steps defined for this step, you will see a custom button for each step defined as Progress-to.

**Status\*:** Configured in the workflow template.

## USE CTRL F TO FILTER ON ANY FIELDS.

Select the Template column on a row on the console, use CTRL-F and select Template = "AR Credit Limit workflow". This will display only Workflow records for the AR Credit Limit workflow.

You can use CTRL -F > Clear filter to remove all filters and view all records.

## how to use console buttons

You can progress a workflow to another step. So the buttons you can see on the console depend on what row /Workflow instance you are looking at and how the workflow is configured.

All workflows will have some default buttons:

### DRILL DOWN

When configured in the workflow template, each workflow instance allows drilling down to a Sage 300 screen– for example, you could drill down to the customer, or to the order.

A workflow instance has a list of values associated with it – for example, a customer number or an order number. Drill down works on this list of values. Refer to details in Drilldown in workflow on page 190

#### **Example:**

If the workflow has a value called IDCUST then drill down to the AR Customer screen will be enabled for the workflow.

### HISTORY

Use the History button to view details of previous actions on the workflow record selected on the console.

### VALUES

Values are variables that can be defined in the Workflow templates and used in the Workflow actions. Such values are included in the workflow history Log file.

Typically, values are used to store the original value, the new value, the cut off limit.

**REASSIGN STEP:**

Use this button to reassign a workflow to another user or user group.

If you have added a Reassign Step in the workflow template, the Reassign Step will include the configured actions instead of the default one.

**DELETE:**

Use this button to remove a workflow instance from the console.

If the workflow is configured to "Auto-delete when complete", this will delete the workflow instance from the console and the Workflow log will be updated.

If the workflow is NOT configured to "Auto-delete when complete", this will update the workflow instance to clear the next step to complete the workflow. No specific actions will be taken by that action. You can use DELETE again to remove the instance from the console.

**NOTE ON COMPLETED WORKFLOWS**

When a workflow is complete (the instance has been through a "Complete" Action), the step name on the console is blank.

Many workflow templates are setup as "Auto-delete instance when complete". This option deletes completed workflow from the console.

If the instance is deleted when the workflow is complete, the workflow log keeps the audit trail of previous workflow instances. Go to Extender Inquiries > Workflow Summary Log or Workflow Detail Log to view workflow history that have been deleted from the console.

Refer to Workflow Summary Log on page 171 or Workflow Detail Log on page 173

## workflow template configuration and console layout

Refer to Workflow Templates - Screen Guide on page 132 and Configurator Actions on page 179 for details. It is recommended practice to include the actions below in all steps of the workflow templates to make the console and workflow history log clearer and suited to your business practice.

**DESCRIPTION**

Use the setDescription action in the workflow template to set the Workflow Status in the console and in the workflow log depending on what step of the workflow you are in.

**STATUS**

Use the setStatus action in the workflow template to set the Workflow Status in the console and in the workflow log depending on what step of the workflow you are in.

## ROW COLOURS

You can configure the workflow using the AssignColour action to assign a colour in the console depending on what step of the workflow you are in.

## WORKFLOW DETAIL LOG

This screen lets you view the workflow detail log, including all steps each workflow instance has followed. Every time a step is run, an entry is made in the workflow log table.

### HOW TO USE

Use CTRL F to filter by any columns on the screen.

If you want to find all "AR Credit Limit" workflow steps, select the Template ID Column, CTRL F, and select the Template you want to filter by. You can then add other filter criteria by selecting a new column and selecting CTRL F again.

### FILE MENU TO CHANGE SORT ORDER.

Use the File Menu to change the Sort order, based on the workflow Start Date/Time.

- Sort Oldest Record First
- Sort Newest Record First

### WHAT IS INCLUDED IN THE DETAIL LOG

Clicking Values will show the values associated with this log entry.

If the Last Step is blank, it generally means the workflow is completed as there are no more steps to follow.

The workflow status is updated when the SetStatus action is included in a workflow step as per the workflow template configuration. It is recommended practice to ensure each step in the workflow includes a "SetStatus" action to make the log easier to read at a glance.

The Description in the workflow log is set using the SetDescription action in the Workflow Template configuration.

### SECURITY GROUP

Need View Workflow logs security group

## Workflow Log buttons

### REFRESH

Use this button to refresh the details on the screen.

For example, if new workflow have been started, progressed or completed since you opened the screen.

## **DRILL DOWN**

When configured in the workflow template, each workflow instance allows drilling down to a Sage 300 screen– for example, you could drill down to the customer, or to the order.

A workflow instance has a list of values associated with it – for example, a customer number or an order number. Drill down works on this list of values. Refer to details in Drilldown in workflow on page 190

### **Example:**

If the workflow has a value called IDCUST then drill down to the AR Customer screen will be enabled for the workflow.

## **VALUES**

Values are variables that can be defined in the Workflow templates and used in the Workflow actions. Such values are included in the workflow history Log file.

Typically, values are used to store the original value, the new value, the cut off limit.

## **WORKFLOW SUMMARY LOG**

This screen lets you view the workflow summary log, including users who started the workflow and date when the workflow was started.

Every time a workflow is started, an entry is made in the workflow summary log table. The latest step and latest workflow status are updated when the workflow progresses through the various steps.

## **HOW TO USE**

Use CTRL F to filter by any columns on the screen.

If you want to find all "AR Credit Limit" workflow steps, select the Template ID Column, CTRL F, and select the Template you want to filter by. You can then add other filter criteria by selecting a new column and selecting CTRL F again.

**Tip:** Double click on the Template name to open the workflow template screen if you have security rights to Edit Workflow setup. For details, [Workflow Templates - Screen Guide on page 132](#)

### **Tip:**

You can double click on columns in the Summary Log to open the Details Log screen.

Use the Values button on the Details Log to view values configured in the workflow for each step.

## **FILE MENU TO CHANGE SORT ORDER.**

Use the File Menu to change the Sort order, based on the workflow Start Date/Time.

- Sort Oldest Record First
- Sort Newest Record First

## WHAT IS INCLUDED IN THE SUMMARY LOG

The Summary Log shows the Step that the workflow is on and the last status update.

Clicking Details will show the detailed steps associated with the selected workflow entry.

If the Last Step is blank, it generally means the workflow is completed as there are no more steps to follow.

**Note:** The workflow status is updated when the SetStatus action is included in a workflow step as per the workflow template configuration. It is recommended practice to ensure each step in the workflow includes a "SetStatus" action to make the log easier to read at a glance.

The Description in the workflow log is set using the setDescription action in the Workflow Template configuration.

## SECURITY GROUP

Need View Workflow logs security group

## Workflow Summary Log buttons

### REFRESH

Use this button to refresh the details on the screen.

For example, if new workflow have been started, progressed or completed since you opened the screen.

### DRILL DOWN

When configured in the workflow template, each workflow instance allows drilling down to a Sage 300 screen– for example, you could drill down to the customer, or to the order.

A workflow instance has a list of values associated with it – for example, a customer number or an order number. Drill down works on this list of values. Refer to details in Drilldown in workflow on page 190

**Example:**

If the workflow has a value called IDCUST then drill down to the AR Customer screen will be enabled for the workflow.

## DETAIL LOG

Use the Detail Log button to view details of previous actions on the workflow record selected on the console.

**Tip:**

You can double click on columns in the Summary Log to open the Details Log screen.

Use the Values button on the Details Log to view values configured in the workflow for each step.

## PRINT WORKFLOW HISTORY LOG REPORT

Open Extender > Extender Reports > Workflow History Logs.

Select the default report or Browse to find a custom report.

**Tip:**

Extender includes one default report VIWFHistLog.rpt. You can duplicate the report, rename it and use Crystal Reports to create your own report.

Make sure it includes the same parameters as the default report if you want to run it from the Extender screen.

### REPORT PARAMETERS

**From and To Workflow ID:** used to identify the range of Workflow templates to include on the report.

**From Step/To Step:** Enter Steps to filter by in the report. Refer to the workflow template for the step name.

Filter by Step refer to the "Step Name" as per the Workflow Detail Log Inquiry screen.

**From Date/ To:** field to identify the range of events to be included on the report

**From User /To:** to restrict the range of events to a single user. If left blank, all users will be included on the report

**From Record Key / To:** Enter the Key fields you need the report to filter by. Refer to the Inquiries > Workflow Summary Log

**Show Details:**

Select Yes to include all steps that the workflow instances have been through.

Select No: The report will only include one row per workflow instance, including the latest step and status.

**Note:**

If the report "Show Details" is set to "Yes", the User refers to the user who performed the workflow step and the date is the date/time when the workflow step was performed.

If the report "Show Details" is set to "No", the user refers to the user who started the workflow and the date is the date the workflow was started.

## USING EXTENDER TRAY ICONS

If configured in Information Manager and you are setup as a Workflow User, you can use icons on the Sage 300 screens to start a workflow, progress an existing workflow or view workflow history.

Refer to Workflow Icons Explained on page 178 for a detailed description of the icons.



## Extender Inquiries and Reports

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<b>Reports for Extender</b> .....	<b>176</b>

### INQUIRIES FOR EXTENDER

You use the icons in the Extender Inquiries folder to:

- Review the View records inserted, updated and deleted and the View fields amended – for those views which have had Log events attached to them. The date/time and user id of the user who did the amendment is logged, together with the actual change. (Choose [Logs](#))
- Use View Info to explore all the views per Sage 300 Module activated in the current database, together with the associated fields for the views. (Choose [View Info](#))

#### Log Inquiries.

The Log form lets you view the changes to the views that have been configured to be logged.

You can filter the data by:

- Date range
- View ID
- Field
- User id
- Range of User Ids

#### **Tips:**

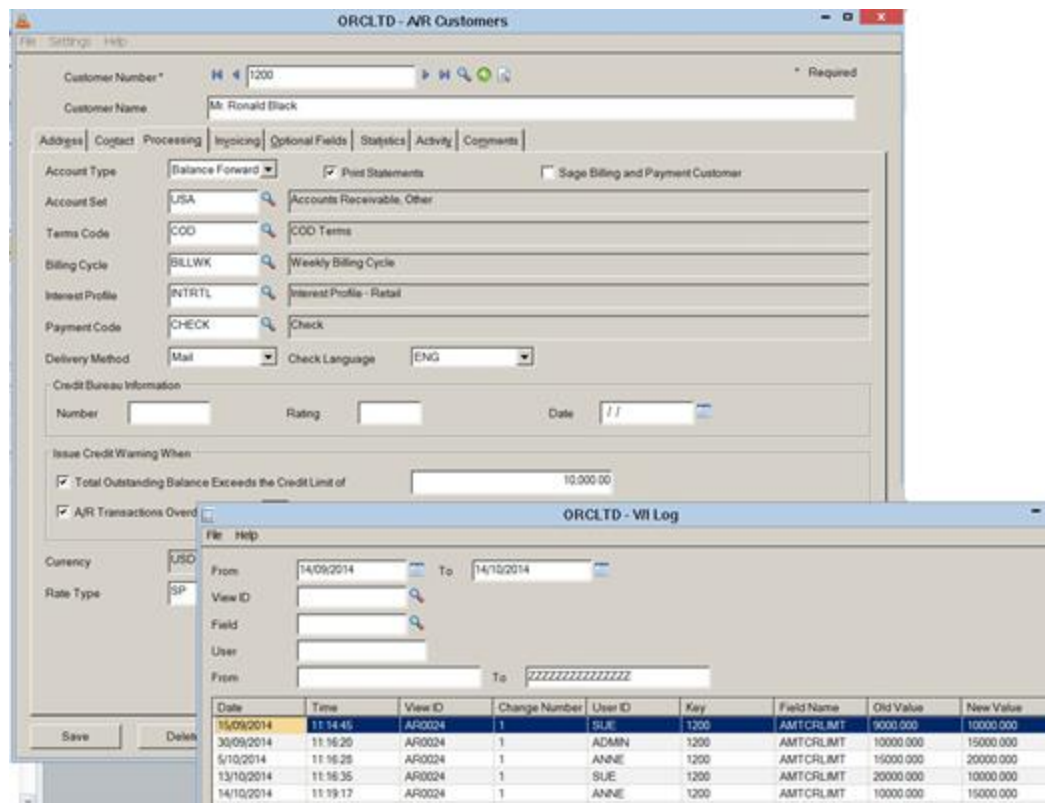
By clicking [Ctrl F] in any of the columns, you are able to filter the log contents by the column. You can apply a filter on multiple columns by first clicking [Ctrl] on the first column required and applying the filter, and then by clicking [Ctrl] on the second column required and applying the filter. The current filter is shown along the bottom of the screen, and is saved per user per screen.

If the filter is not cleared prior to closing the screen, it will be remembered and re-applied the next time the same user opens the same screen.

**Tip:**

You can view the Log for a particular view in the original screen. For example if you want to view the changes made to the Customer view from the Customer entry screen, highlight any text field and enter ` (back tick) and [tab] and the Extender Log will be displayed, filtering on the appropriate View. An example of a text field on the Customer screen on the processing tab is the Credit Bureau Information Rating field or the Credit Bureau Information Number field. Other examples are the Address fields on the Address tab.

`[tab] cannot be entered on a date, a number, a check box field or a lookup field with a mask on what can be typed in the field. If the text field already has information – for example the Customer name, you need to select all the text (highlight it), then type `[tab] – the VI Log will be displayed and the original text restored to the field.



If you are using Information Manager and have licences for Workflow Users, you can configure an icon on the Sage 300 screen to view the Logs.

For details, refer to Extender LOG- Notes/DML/Extender Tray on page 201.

## EXTENDER LOG - FIELD LIST

### DATE

The date the change was made

**TIME**

The time the change was made

**VIEW ID**

The View ID that was changed

**CHANGE NUMBER**

The number of changes done in the same event at the same time

**USER ID**

The Sage 300 user id who made the change

**KEY**

The key value of the view that was changed

**FIELD NAME**

The view field name that was changed

**OLD VALUE**

The original value of the View Field prior to being changed

**NEW VALUE**

The new value of the View Field after the change was done

## Workflow Summary Log

This screen lets you view the workflow summary log, including users who started the workflow and date when the workflow was started.

Every time a workflow is started, an entry is made in the workflow summary log table. The latest step and latest workflow status are updated when the workflow progresses through the various steps.

**HOW TO USE**

Use CTRL F to filter by any columns on the screen.

If you want to find all "AR Credit Limit" workflow steps, select the Template ID Column, CTRL F, and select the Template you want to filter by. You can then add other filter criteria by selecting a new column and selecting CTRL F again.

**Tip:** Double click on the Template name to open the workflow template screen if you have security rights to Edit Workflow setup. For details, Workflow Templates - Screen Guide on page 132

**Tip:**

You can double click on columns in the Summary Log to open the Details Log screen.

Use the Values button on the Details Log to view values configured in the workflow for each step.

## FILE MENU TO CHANGE SORT ORDER.

Use the File Menu to change the Sort order, based on the workflow Start Date/Time.

- Sort Oldest Record First
- Sort Newest Record First

## WHAT IS INCLUDED IN THE SUMMARY LOG

The Summary Log shows the Step that the workflow is on and the last status update.

Clicking Details will show the detailed steps associated with the selected workflow entry.

If the Last Step is blank, it generally means the workflow is completed as there are no more steps to follow.

**Note:** The workflow status is updated when the SetStatus action is included in a workflow step as per the workflow template configuration. It is recommended practice to ensure each step in the workflow includes a "SetStatus" action to make the log easier to read at a glance.

The Description in the workflow log is set using the setDescription action in the Workflow Template configuration.

## SECURITY GROUP

Need View Workflow logs security group

## Workflow Summary Log buttons

### REFRESH

Use this button to refresh the details on the screen.

For example, if new workflow have been started, progressed or completed since you opened the screen.

### DRILL DOWN

When configured in the workflow template, each workflow instance allows drilling down to a Sage 300 screen– for example, you could drill down to the customer, or to the order.

A workflow instance has a list of values associated with it – for example, a customer number or an order number. Drill down works on this list of values. Refer to details in Drilldown in workflow on page 190

**Example:**

If the workflow has a value called IDCUST then drill down to the AR Customer screen will be enabled for the workflow.

**DETAIL LOG**

Use the Detail Log button to view details of previous actions on the workflow record selected on the console.

**Tip:**

You can double click on columns in the Summary Log to open the Details Log screen.

Use the Values button on the Details Log to view values configured in the workflow for each step.

## Workflow Detail Log

This screen lets you view the workflow detail log, including all steps each workflow instance has followed. Every time a step is run, an entry is made in the workflow log table.

**HOW TO USE**

Use CTRL F to filter by any columns on the screen.

If you want to find all "AR Credit Limit" workflow steps, select the Template ID Column, CTRL F, and select the Template you want to filter by. You can then add other filter criteria by selecting a new column and selecting CTRL F again.

**FILE MENU TO CHANGE SORT ORDER.**

Use the File Menu to change the Sort order, based on the workflow Start Date/Time.

- Sort Oldest Record First
- Sort Newest Record First

**WHAT IS INCLUDED IN THE DETAIL LOG**

Clicking Values will show the values associated with this log entry.

If the Last Step is blank, it generally means the workflow is completed as there are no more steps to follow.

The workflow status is updated when the SetStatus action is included in a workflow step as per the workflow template configuration. It is recommended practice to ensure each step in the workflow includes a "SetStatus" action to make the log easier to read at a glance.

The Description in the workflow log is set using the SetDescription action in the Workflow Template configuration.

## SECURITY GROUP

Need View Workflow logs security group

## Workflow Log buttons

### REFRESH

Use this button to refresh the details on the screen.

For example, if new workflow have been started, progressed or completed since you opened the screen.

### DRILL DOWN

When configured in the workflow template, each workflow instance allows drilling down to a Sage 300 screen– for example, you could drill down to the customer, or to the order.

A workflow instance has a list of values associated with it – for example, a customer number or an order number. Drill down works on this list of values. Refer to details in Drilldown in workflow on page 190

#### **Example:**

If the workflow has a value called IDCUST then drill down to the AR Customer screen will be enabled for the workflow.

### VALUES

Values are variables that can be defined in the Workflow templates and used in the Workflow actions. Such values are included in the workflow history Log file.

Typically, values are used to store the original value, the new value, the cut off limit.

## Extender View Info

When this screen first opens, the program will scan for all the currently installed and activated modules in the open company and show them in the left hand window. A program group per active module will be created.

### Open details for a view

Click on the plus sign (+) beside the relevant program group, a list of all the views will be displayed, sorted in view ID order.

Double click on the required view, the list of available view fields will be displayed in the right hand window.

You can also right click on it and select Open in New Window, or Export the selected view to a Text file.

## Use view details

If you want to copy this text, right click or press Ctrl-C.

This is useful to copy and paste the field names to Extender setup screens or scripts.

- Any one of these views can be included in the View Events and Scripts screen.
- Any one of the view fields will be available for use in the attached *PYTHON 3* scripts that are written for this view.
- Fields can be included in message templates and Extender workflow templates.

**Tip:** You can press F5 to open a finder for the selected view and see the records in the database.

## Shortcuts to Find views and fields

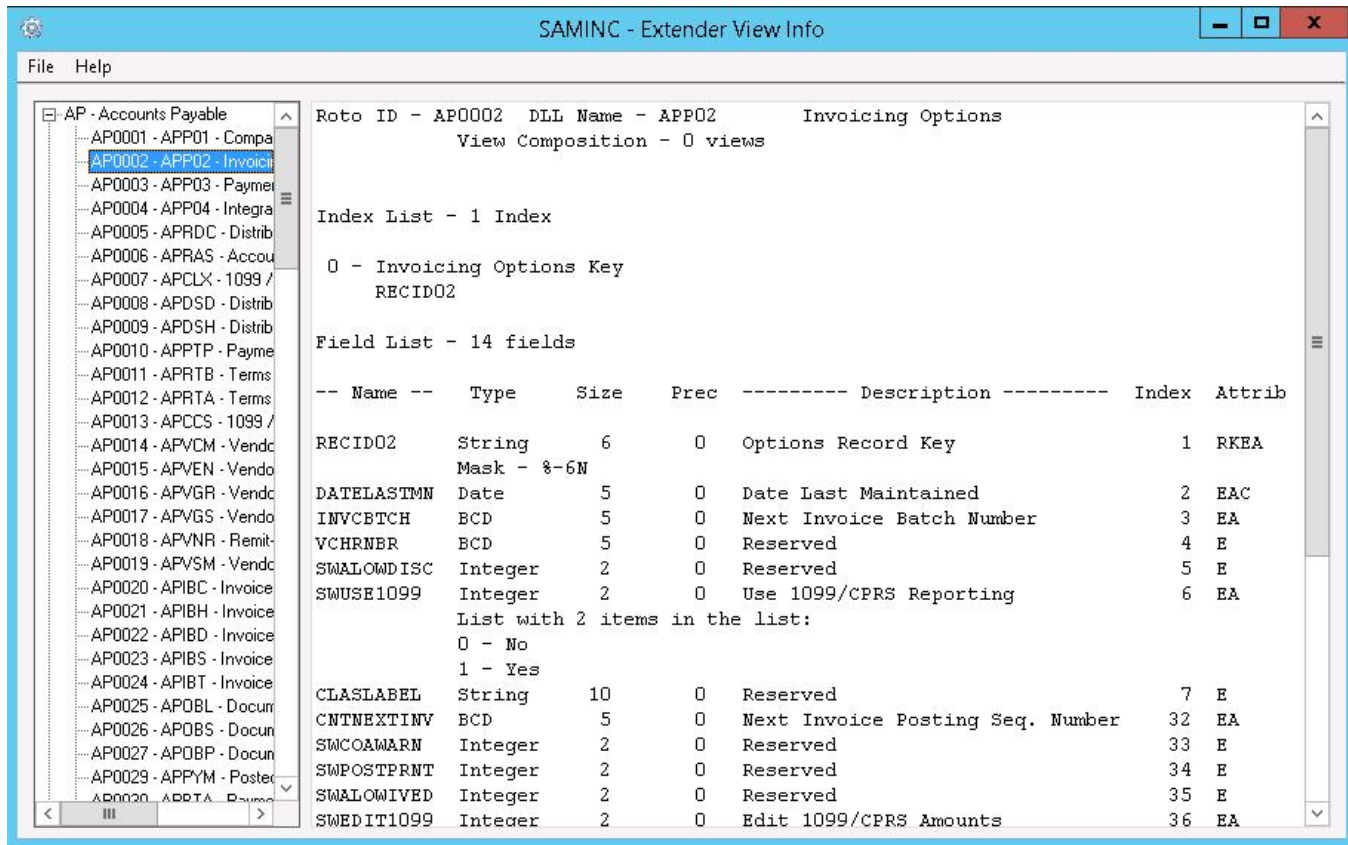
Using the **Find** field at the bottom of the screen, you can enter:

!rotoID - open specified view, e.g. !IC0310, !CITEM will open the I/C Item view

!!rotoID - open specified view in a new window

#text - find specified text in current view

text - find specified text in current view, or find a view with that text in the name



### ATTRIB COLUMN LEGEND

- R = Required
- K = Key field
- E = editable
- A = enabled
- C = calculated field
- T = type changes
- P = presentation list/mask changes
- X = editable changes

## REPORTS FOR EXTENDER

You use the icon in the Extender Reports folder to:

- Print the View records inserted, updated and deleted and the View fields amended – for those views which have had Log events attached to them. The date/time and user id of the user who did the amendment is logged, together with the actual change. (Choose [Print Logs](#))



## Print Log

1. Open Extender > Extender Reports > Print Logs
2. Use the From Date/ To field to identify the range of events to be included on the report
3. Use the View id to restrict the range of events to a single view. If left blank, all views will be included on the report
4. Use the Field id to restrict the range of events to a single field. If left blank, all fields will be included on the report
5. Use the User id to restrict the range of events to a single user. If left blank, all users will be included on the report
6. Use the User id from/To field to identify the range of users to be included on the report

## Print Workflow History Log Report

Open Extender > Extender Reports > Workflow History Logs.

Select the default report or Browse to find a custom report.

**Tip:**

Extender includes one default report VIWFHistLog.rpt. You can duplicate the report, rename it and use Crystal Reports to create your own report.

Make sure it includes the same parameters as the default report if you want to run it from the Extender screen.

### REPORT PARAMETERS

**From and To Workflow ID:** used to identify the range of Workflow templates to include on the report.

**From Step/To Step:** Enter Steps to filter by in the report. Refer to the workflow template for the step name.

Filter by Step refer to the "Step Name" as per the Workflow Detail Log Inquiry screen.

**From Date/ To:** field to identify the range of events to be included on the report

**From User /To:** to restrict the range of events to a single user. If left blank, all users will be included on the report

**From Record Key / To:** Enter the Key fields you need the report to filter by. Refer to the Inquiries > Workflow Summary Log

**Show Details:**

Select Yes to include all steps that the workflow instances have been through.

Select No: The report will only include one row per workflow instance, including the latest step and status.

**Note:**

If the report "Show Details" is set to "Yes", the User refer to the user who performed the workflow step and the date is the date/time when the workflow step was performed.

If the report "Show Details" is set to "No", the user refers to the user who started the workflow and the date is the date the workflow was started.

## Workflow Technical Info

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## WORKFLOW ICONS EXPLAINED

Workflow icons only show if a workflow is configured, the user is configured as a Workflow User, and the Information Manager tray is started.

To setup workflow icons in Sage 300 screens, refer to Extender Workflow- Notes/DML/Extender Tray

One or no workflow icon can be present per screen. Subject to Sage 300 security rights, you can use the icons to view the workflow history.

Depending on the workflow configuration, you can also use the icons to start or progress the workflow.



Click to start manual workflow or view workflow history. There is no pending workflow.



Click to view active workflow. The pending workflow is not assigned to the logged on user.



Click to progress your active workflow. The workflow is assigned to the logged in user and waiting for an action.



Click to progress group active workflow. The workflow is assigned to a workflow user group that the logged in user is part of. The workflow is waiting for an action from one of the group member.

**Note:** If the workflow icons are not configured in Information Manager Options, users can run the workflow Log reports to view workflow history. Workflow users can use the workflow console to view and progress their active workflows.

**Note:**

If the Information Manager Tray is not started, the icons will not show and the user will not be able to use the workflow icons to start or progress the workflow.

However, workflows attached to view operation or view field changes will be started and users configured as Understanding Workflow Users on page 127 are able to access the Workflow Console.

You can start the tray manually in Information Manager > Tray Icon.

## CONFIGURATOR ACTIONS

Action Name	Description	Parameters
AssignUser	Assign to a Workflow User Group	Select a user group. To configure a new user group, refer to <b>Workflow User Groups on page 97.</b>
AssignUser	Assigns a user to the workflow instance	You can type a Sage 300 User ID, select a value defined in the workflow or select a value set in a parameter when attaching the workflow to a view.  Type {USER} to assign workflow the current user.  When you assign a workflow to a user who is not configured as a Workflow User, the AssignUser workflow action returns an error. The next action is configured in the False Action # field in the Workflow Template.  Make sure the Workflow Template notifies an Admin user and proceeds with the rest of the workflow actions.

		<p><b>Tip:</b> You can add a Workflow Action to assign the workflow to ADMIN if the first AssignUser action returns False</p>	
<p>AddParameter</p>	<p>Stores input collected in the workflow</p> <p>Parameters are added to the Values of the workflow</p>	<p>Name: can be used in other actions (such as set field or sendEmail)</p> <p>Parameters</p> <p>Label: description user will see when prompted</p> <p>Type:</p> <p>Parameter types can be:</p> <ul style="list-style-type: none"> <li>&gt; text(size=xx)</li> <li>&gt; integer</li> <li>&gt; number.0 - eg 10.1</li> <li>&gt; number.00 - eg 10.12</li> <li>&gt; number.000 - eg 10.123</li> <li>&gt; user - a user or user group</li> <li>&gt; date</li> </ul> <p>Default Value: Optional -</p> <p>Parameter values (as entered by the user) are saved as workflow values and available on the console.</p> <p>Parameters can be added to email templates. Use {PARAMNAME} in the email template.</p>	
<p>AskForParameters</p>	<p>Step will stop at that step and wait for user input.</p> <p>True Action should be the action you want to perform when user has submitted the input.</p>	<p>No parameter.</p> <p>Execution continues at the AskForParameters True Action step #.</p> <p>If the user selects "Cancel" on the UI, the action returns False.</p> <p><b>Tip:</b> Configure the actions in the template if you want different process flow if a user enters input or clicks Cancel.</p> <p>This action is not active when the workflow is progressed through a script, for</p>	

		example the Remote Action poller.	
AssignColour	Assigns a color to a workflow instance in the Wokflow Console	Select a color using the Finder. To configure colors, refer to Workflow Colours on page 96	
Complete	Action to ensure that the action completes the workflow. If Auto delete instance when complete is set to Yes on the workflow, the instance will be deleted when the Complete step is successful	No Parameter. When the workflow is complete, no further processing happens. The next step in the Console shows as Blank	
CreatePOfromReq	Create a PO from a requisition	Requisition requires a vendor on the Header. All lines must use the same vendor. No parameters	
Evaluate	Used to set conditional workflow	Field, Operator, Value If evaluating a Boolean field, use 1 for True/Yes or 0 for False/No  <b>Notes:</b> If the Field is set to {PROGRAM}, the action will compare the RotoID of the screen running the workflow to the value defined in the Value parameter. If you only want the workflow to do certain actions for certain users, you can use Evaluate {USER} to use the logged on user in the condition.	
Gen-erateAPPaymBatchListing	Runs and saves as a PDF the AP Payment Batch listing report	For use in a workflow template to approve AP Payment batches See example in A/P Payment Batch Approval on page 51	
GetOptField	Used to read Optional Field	Parameter 1 = Optional Field View ID - Use View Info to select - Use PO0623 for	

	Value to use in workflow	PO Header Optional Fields or G/L0400 for GL Account Optional Field Parameter 2 = Optional Field Name Parameter 3 = Workflow Value	
GoToStep	Go to another workflow step.	Select Step name	
IfWorkflowExists	Returns True if there is a pending workflow.	Can be used in the workflow template to have different actions if the workflow is Active. Can also be used in View Events and Scripts to make a field ReadOnly if using Extender Customizer or Developer Edition.	
IfWorkflowUI	Returns True if the workflow is progressed on the Console or the workflow screen icons.	Used in the workflow template to have different branches if the step is used on the console and in a script such as the Remote Action Poller. Users are generally not prompted for parameters or displayed messages when the workflow is progressed in a script.	
IsDelete	Returns True if the workflow is part of a DELETE view operation.	This only applies to Master file and Transaction views. When a batch is "Deleted", the status is set to "Deleted", the Delete view operation is not run. <b>Tip:</b> Use the Batch status field on the Batch if you need to trigger a workflow when a batch is deleted.	
IsInsert	Returns True if the workflow is part of an INSERT View operation	Can be used when a workflow is attached to an UPSERT View operation or a View Field. This only applies to Master file and Transaction views. When a batch is "Inserted", the batch is created immediately without running an "INSERT" View operation.	

		<p><b>Tip:</b> Use the Number of Entries field on the Batch if you need to trigger a workflow when a batch is inserted (Number of entries = 0)</p>	
IsUpdate	Returns True if the workflow is part of an UPDATE View operation (vs an INSERT)	<p>Can be used when a workflow is attached to an UPSERT View operation or a View Field.</p> <p>You may have different actions when a new ON HOLD order is inserted vs when an existing order is updated to "On hold"</p>	
IsUserMemberGroup	Return True if the user configured in Parameter 1 is part of the Workflow User Group in parameter 2	To use it for the logged on user, you can use {USER} in Parameter 1	
Reassign	Reassign a user to another user/group Displayed in the workflow console.	<p>If there is no reassign step then the user is prompted for the user/group to reassign to, then the workflow user is set to that user. If you have a step called "reassign" in your workflow, the custom step is run.</p> <p><b>Example:</b> If you want to send an email when a workflow is reassigned, add your own Reassign Step.</p>	
PostBkEntry	PostBkEntry	<p>The PostBkEntry posts the bank entry configured in the Workflow Instance ID. Use in a workflow template associated with the Bank Entry View.</p> <p>Approver needs rights to post Bank Entry in Sage Security</p>	
PostBatch	<p>PostAPAd-justmentBatch</p> <p>PostAPIInvoiceBatch</p> <p>PostAPPaymentBatch</p> <p>PostARAd-justmentBatch</p>	<p>The Post_Batch actions post the relevant batch. Batch number entered as Parameter 1.</p> <p>The approver needs rights to Post the batch in Sage security.</p>	

**Extender**

	PostARInvoiceBatch PostARReceiptBatch PostARRefundBatch PostGLBatch ProvPostGLBatch		
SendEmail	Sends an email to the user / user group or email address configured in Parameter 2.	Parameter 1 = Email template - You can use the finder to select the message template. Parameter 2 = Email address or Sage 300 User or Workflow user group. You can use {CURUSER} to send a notification to the user assigned to the workflow. Make sure the SendEmail Action is after the AssignUser Action.	User profile



		<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• In Parameter 2, enter a list of email addresses separated by a ;</li> <li>• You can add email addresses (someone@company.com, a Sage User ID or an Extender workflow user</li> <li>• If selecting a Sage 300 user (eg ADMIN), an email is sent to the email address configured in Sage 300 User profile.</li> <li>• If selecting a Workflow user group (eg APPROVERS), all users in the group are sent an email, to the email address configured in Sage</li> <li>• You can combine email addresses (e.g. someone@-company.com) and user groups</li> </ul> <div style="border: 1px solid purple; padding: 5px; margin-top: 10px;"> <p><b>Example:</b> someone@-company.com;ADMIN;APPROVERS;</p> </div> <p>Optional: CC, Subject (to overwrite email template subject)</p>	
SendEmailAttachments	Sends an email	Extender Message template - Can include variables from the view the workflow is	

	with an attachment	<p>attached to</p> <p>Email address configured in Parameter 2: refer to SendEmail action above.</p> <p>Set the path and filename of the attachment in a Workflow value and enter the workflow value name in P4.</p> <p>Ensure the path is set to UNC format and the users have access to it.</p>	
SendEmailToStarter	Sends an email to the user who started the workflow	Email template, CC, Subject	
SetDescription	Sets the workflow description for use in Console and workflow logs.	You can use any string/word as well as workflow and view variables.	
SetDrilldown	SetDrilldown sets a value to a Sage 300 view field to enable Drilldown from the console to the underlying Sage 300 screen.	<p>Parameter 1 is the field name that is used as the KEY field in the vidrilldown.ini file.</p> <p>Parameter 2 is the value you want to set.</p> <p>For example {IDCUST} for the customer number from an ARCUS workflow.</p> <p>For details, refer to Drilldown in workflow on page 190.</p>	
SetField	<p>Sets a configured field to a value.</p> <p>Field can be any field on the view that the Workflow will be attached to</p>	<ul style="list-style-type: none"> <li>• Use Extender Extender View Info on page 174 to identify the Field name</li> <li>• e.g. AMTCRLIMIT for an A/R Customer workflow</li> <li>• Add the field name between curly brackets {}.</li> <li>• Use values defined in the workflow or a set value (e.g. 1 to set OnHold to true/selected)</li> </ul> <p>You can use {VIEWID}, {VIEWKEY}, {KEYDESC}, {TOVALUE} - these correspond to the View ID, Record Key, Description, and Requested Value columns in the Workflow Console screen.</p>	

		<p><b>Example:</b> To prevent a change to the credit limit, you use SetField to restore the value to the previous value using SetField and {ORIGINAL_AMTCRDLMT}</p> <p><b>Note:</b> You can update 2 fields with SetField . This is useful when updating SalesPerson and SalesPercentage on OE Order.</p>	
SetOptField	Set an optional field value	<p>Parameter 1 = Optional Field View ID - Use View Info to select - Use PO0623 for PO Header Optional Fields or G/L0400 for GL Account Optional Field</p> <p>Parameter 2 = Optional Field Name</p> <p>Parameter 3 = Optional Field Value</p>	
SetStatus	SetStatus will set the status of a workflow instance. The Status is shown on the workflow Console	P1 is the status you want to set to the workflow instance. Displayed on the console, on the workflow logs and in the workflow reports.	
SetValue	SetValue will add a row to the workflow instance values grid.	<p>Parameter 1 is the field name that you want to give to the Value.</p> <p>Parameter 2 is the value you want to pass. It can be hard-coded, set to a value defined in the workflow or set to the View Field original or new value.</p> <p>Use the field name between curly bracket to store the new amount (e.g. {AMTCRDLMT})</p> <p>P1 can be set to {VIEWID} and value would be the Sage 300 View ID when a workflow is started from a screen and not attached to a view.</p>	
ShowUserError	Displays a Error to the logged on user on the Sage screen.	As above.	

ShowUserMessage	Displays a Message to the logged on user on the Sage screen.	<p>Parameter 1: Text to display.</p> <p><b>For information</b> The message can include Variables, such as Workflow fields or Values from the workflow.</p> <p>Use an Evaluate action before using the ShowUser actions to ensure that the message is only showing when the view is used on a Sage 300 screen.</p> <p>field: "{PROGRAM}"</p> <p>operator: "="</p> <p>value: "AR1300" (RotoID of the screen that should display a message).</p>	
ShowUserWarning	Displays a Warning to the logged on user on the Sage screen.	As above.	

## Parameters to be used in workflow actions

The following values are available to use in action parameters and email templates used in the Workflow.SendEmail action:

{\$1}, {\$2}, {\$3}, {\$4} - step parameters

{PROGRAM} ID of calling program (eg OE1100 = Order Entry)

{ROTOID} ID of the calling view (eg AR0024 = AR Customers)

{USER} current user (eg ADMIN)

{field} gets a value either from the workflow instance values, or from the target view.

{VIEW.field} gets a value from the target view

{VALUE.name} gets a workflow instance value

{VIEWID} the view ID for this workflow instance

{VIEWKEY} the record key for this workflow instance

{KEYDESC} the description for this workflow instance

{TOVALUE} the requested value for this workflow instance

{STATUS} the current status for this workflow instance

{COLOR} the colour for this workflow instance

{CURUSER} the user or group currently assigned for this workflow instance

{WTNAME} the workflow template name for this workflow instance

{STUSER} the user who started this workflow instance  
{STEPNAME} the current step for this workflow instance  
{PSTEPNAME} the previous step for this workflow instance

**Formatting Numbers:**

Append '{required decimals}' to the field

E.G. {ORDTOTAL:2}

## USING PARAMETERS IN WORKFLOW

Parameters can be used when attaching a workflow to a Extender view and when configuring the Progress To Steps.

To use the parameters in the workflow, use {\$1}, {\$2}, {\$3} and {\$4} in the entry step of the workflow.

**Tip:**

Remember to include a description of how the parameters are used in the workflow template.

Parameter 1 is to Parameter 4 is fields on the Steps setup section of the Workflow Template allow you to describe how the parameters are used in the workflow.

**PARAMETERS AND VIEW EVENTS AND SCRIPTS**

You can configure up to 4 parameters when attaching a workflow to a Sage 300 View in View events and scripts.

To use the parameter value and store it as a workflow value, include a SetValue action in the Entry Step step

**PARAMETERS AND PROGRESS TO STEPS**

Each of the Progress To steps can also include up to 4 parameter fields that the next steps can use.

To use the parameter value and store it as a workflow value, include a SetValue action in the Progress-to Step step

SetValue and parameter example.

The screenshot shows a 'Step Action' configuration window. It contains the following fields and values:

- Line Number: Navigation buttons and a text box containing '30'.
- Action #: Text box containing '30'.
- Action Name: Text box containing 'SetValue'.
- Field: Text box containing '{ARUSERLMT}'.
- Value: Text box containing '{\$1}'.
- True Action #: Text box containing '40'.
- False Action #: Text box containing '40'.
- Comment: Text area containing 'Sets the value to the parameter configured in View Events and scripts'.

At the bottom of the window are three buttons: 'Save', 'Delete', and 'Close'. A 'Help' link is also visible in the top right corner.

## PARAMETERS AND MANUAL WORKFLOW.

When configuring screen icons in Information Manager > Notes/DML/Extender Tray, you can enter up to 4 parameters that can be saved in the workflow in the Entry Step.

Refer to Extender Workflow- Notes/DML/Extender Tray .

## DRILLDOWN IN WORKFLOW

Drilldown is the ability to open a Sage 300 screen from the workflow console.

**Requirement!** Users need to be configured as a Workflow User and have security rights in Sage 300 to the relevant module and functionality.

**Note:**

Drilldown opens the Sage 300 screen and includes customisations done with Extender OCX scripts (new buttons, etc). If there are Information Manager Notes or Document Management Link details configured for the screen, they will open too.

## Using the SetDrilldown action configured in the vidrilldown.ini or viuserdrilldown.ini files

To enable drilldown for a workflow, you need to configure the key fields you want to drill down to in the workflow template.

You use SetDrilldown action, Field= Sage 300 key field name (e.g. IDCUST) and Value = {IDCUST} - name of the key field in the Sage 300 view.

### TO FIND OUT THE FIELD NAME TO USE

You can also look at the vidrilldown.ini file in the VI69A folder of your Extender installation.

Drill down description	Field name to use as parameter 1	Sage 300 program / Rotold reference
[Asset Number]	FieldNames=ASTNO	Rotold=AM1038
[A/P Invoice Number]	FieldNames=APIDINVC,APINVDC,APDocumentNumber	Rotold=AP2100
[A/P Invoice Batch]	FieldNames=APINVBATCH	Rotold=AP2100
[A/P Payment Number]	FieldNames=PYBATCH,APPAYBATCH	Rotold=AP3100
[A/P Vendor Activity]	FieldNames=VENDNO,IDVEND,VENDOR	Rotold=AP1500
[A/P Vendor Number]	FieldNames=VENDNO,IDVEND,VENDOR	Rotold=AP1200
[A/R Customer Activity]	FieldNames=CUSTNO,IDCUST,CUSTOMER	Rotold=AR1700
[A/R Customer Number]	FieldNames=CUSTNO,IDCUST,CUSTOMER	Rotold=AR1300
[A/R Invoice Number]	FieldNames=ARIDINVC,ARDocumentNumber	Rotold=AR2100
[G/L Account]	FieldNames=GLACCOUNT,ACCOUNT,ACCTID	Rotold=GL1100
[G/L Account Number]	FieldNames=GLACCOUNT,ACCOUNT,ACCTID	Rotold=GL1200
[G/L Batch Entry]	FieldNames=BATCHENTRY	Rotold=GL2100
[I/C Item Number]	FieldNames=ITEM,ITEMNO,FMTITEMNO	Rotold=IC1110
[O/E Credit/Debit Note Number]	FieldNames=CRDNUMBER	Rotold=OE1600
[O/E Invoice Number]	FieldNames=INVNUMBER	Rotold=OE1900
[O/E Order Number]	FieldNames=ORDNUMBER	Rotold=OE1100
[O/E Shipment Number]	FieldNames=SHINUMBER	Rotold=OE2200
[P/O Purchase Order Number]	FieldNames=PONUMBER	Rotold=PO1210
[P/O Purchase Receipt Number]	FieldNames=RCPNUMBER	Rotold=PO1310
[P/O Purchase Invoice Number]	FieldNames=POINVNUMBER	Rotold=PO1400
[P/O Purchase Return Number]	FieldNames=RETNUMBER	Rotold=PO1320
[P/O Purchase Credit/Debit Note Number]	FieldNames=CRNNUMBER	Rotold=PO1500
[P/O Requisition Number]	FieldNames=RQNNUMBER	Rotold=PO1110
[R/A RMA Number]	FieldNames=RMANUMBER	Rotold=RA1001

### CONFIGURING CUSTOM DRILLDOWN.

## Extender

Drill downs are defined in the vidrilldown.ini file. Do not modify the vidrilldown.ini file as it could be overwritten with a product update.

Users can add their own **viuserdrilldown.ini** file in the customisation folders to add additional drill-downs.

Drilldowns come from the following files:

1. The customization directory for the current user and organization
2. The customization directory for the current user and default organization
3. The customization directory for the default user and current organization
4. The default customization directory
5. The vixxa folder

### **Example:** Custom Table in Extender

If you want to configure Drilldown to an Extender custom table, you need a custom script to display the table `myscript.py` and configure a custom drilldown in the `viuserdrilldown.ini` file.

#### vidrilldown.ini entry for custom tables

```
RotoId=VI1007  
Parameters=SCRIPT=myscript.py\nDOCNUM=%value%
```

**Tip:** If you see multiple records for the same drill down, it is likely that the same configuration exists in the `vidrilldown.ini` and a `viuserdrilldown.ini` files. Ensure that the `viuserdrilldown.ini` file only includes custom options that don't exist in the default file.

### **Examples: [A/R Customer Number]**

Use `SetDrilldown`, Drilldown field name = {CUSTOMER} (as per the drilldown.ini file, Value = {IDCUST} as per the ARCUS View field name.

```
Fields=IDCUST
```

```
RotoID=AR1300
```

```
Parameters=IDCUST={IDCUST}
```

```
DrillDownText=Open A/R Customer {IDCUST}
```



**O/E Order Number workflow**

You can add SetDrilldown IDCUST to the current order customer and SetDrilldown ORDNUMBER for the current Order. When looking at that order on the Console, you can drill down to the Customer or to the Order.

Step Actions - Executed when a workflow enters this step

Lin...	Action #	Action Name	DrillDownField	Value	True Action #	False Action #	Comment
1	10	SetDescription	{CUSTOMER}/(BILL NAME)/PO: (PONUMBER)		20	20	Set description for the console to Customer Number and PO Number
2	30	SetDrilldown	CUSTOMER	{CUSTOMER}	30	30	Enable drilldown to customer by populating Customer value
3	40	SetDrilldown	ORDERNO	{ORDNUMBER}	40	40	Enable drilldown to Order number
4	50	SetDrilldown	ORDERNO	{ORDNUMBER}	50	50	Set the console to show from View console parameter

**A/P Payment Batch**

SetDrilldown: Field = PYBATCH or APPAYBATCH, Value = {CNTBTCH} for batch number

**A/P Invoice Batch**

SetDrilldown: Field = APINVBATCH, Value = {CNTBTCH} for batch number

## Using Workflow value to configure drilldown

You can add a workflow value called "DRILLDOWN.xxx" where xxx can be up to 10 characters. This is useful to drilldown to screens that don't have key values.

The value should be either:

desc|rotoid, or

desc|rotoid|parameters

### Examples:

To drilldown to the EFT Options screen, with no key value, add a workflow value DRILLDOWN.EFT = EFT Options|EL2000

Workflow Values	
Name	Value
DRILLDOWN.EFT	EFT Options EL2000
NOTIF	

To drilldown to the GL Batch , you can add a workflow value DRILLDOWN.GLBATCH . Value GL Batch|GL2100|BATCHID={BATCHID}\nENTRYNBR=1

Workflow Values	
Name	Value
APPROVER	
DRILLDOWN.GLBATCH	GL Batch GL2100 BATCHID={BATCHID}\nENTRYNBR=1
GLSRCELEDGR	GL
WFCOMMENT	

## WORKFLOW BEST PRACTICES TIPS

### General

1. Plan the workflow and draw a flow chart including key steps and decision points.
2. When a workflow is attached to a view field or view operation, every time the view field changes, a workflow instance is created (even if no approval is required).

**Note:** If you only want the workflow to start in some circumstances, you need a custom script and a license for Extender Customizer or Developer.

3. Set "Auto-delete instance when complete" to Yes for most workflow. This enables you to use the Console to manage outstanding tasks assigned to you / your group in pending workflows. The Workflow inquiries can be used to view all previous workflows.

## Actions in workflow template

### **COMPLETING WORKFLOW**

Ensure the key branches in the workflow end with a "Complete" step. If the workflow is not completed, and there are no Progress To Actions, you need to use the "DELETE" button on the console to clear the console.

### **TRUE/FALSE ACTIONS**

When using SetField action in particular, ensure you have different actions for True / False

False action on critical actions of the workflow should go to a step called "ErrorMessage" that sends an email, sets the colour to Red, assigns the record to a Power user.

SetField can return "False" if the field name is wrong or if the assigned user doesn't have sufficient rights in Sage 300.

### **VALIDATING WORKFLOW ACTIONS**

- Check spelling of the step when using GoToStep, ensure the step exists in the workflow. If you rename a step in the workflow, make sure you check all the actions. If not, users will receive an error message "Step ABC does not exist" and the workflow will not progress to the next step.

## Approval workflow to prevent fields being updated.

1. To prevent a field from being changed, the entry step needs to have an action SetField = {ORIGINAL\_FIELDNAME} (e.g. {ORIGINAL\_AMTCRLIMIT}). This action is required whether there is a workflow active or not.
2. When the change is approved, the Approval step needs an action to set the field value to the requested value SetField = {TOFIELD}
3. Workflow "Can start multiple instances" should be set to Yes and if you want to control what happens when there is an active workflow, use the IfWorkflowExists action.
4. In most cases, when an active workflow already exists (IfWorkflowExists action = True), the workflow displays a message to users if run from a Sage 300 screen and completes the new workflow, leaving the original workflow instance active.

**Example:**

In the A/R Credit Limit approval:

Check step includes an action to restore the old credit limit using SetField. This action is run whether there is a workflow active or not.

```
SetField {AMTCRLIMIT} = {ORIGINAL_AMTCRLIMIT}
```

Approve step includes an action to set the credit limit to the requested credit limit

```
SetField {AMTCRLIMIT} = {TOVALUE}
```

## Actions in steps and workflow console

Refer to Workflow Templates - Screen Guide on page 132 and Configurator Actions on page 179 for details. It is recommended practice to include the actions below in all steps of the workflow templates to make the console and workflow history log clearer and suited to your business practice.

### DESCRIPTION

Use the SetDescription action in the workflow template to set the Workflow Status in the console and in the workflow log depending on what step of the workflow you are in.

### STATUS

Use the SetStatus action in the workflow template to set the Workflow Status in the console and in the workflow log depending on what step of the workflow you are in.

### ROW COLOURS

You can configure the workflow using the AssignColour action to assign a colour in the console depending on what step of the workflow you are in.

**Tip:** You can use SetValue {TOVALUE}, insert a field from the record, such as {ORDTOTAL} when attaching a workflow to a View operation to have visibility in the console and the workflow logs.

## Configurator actions that require another one.

To prompt a user for parameter, you need to use " AddParameter" and " AskForParameters".

Lin...	Action #	Q Action Name	Name	Label	Type(L...	Defau...	True Action #	False Action #	Comment
1	10	AddParameter	APPRCRLIMIT	Approved Credit Limit	number.0	{TOV...	20	20	Approved limit, defaults to requested value, can be overwritter
2	20	AddParameter	ApprComment	Approver's comment	text(size...		30	80	Prompt approver for a comment
3	30	AskForParameters					40	80	Step will stop there and go back to True Action (Set field and

To display a message on a screen where the workflow is triggered, use Evaluate to check that the program is a Sage 300 Screen / Roto ID and then ShowUserMessage or ShowUserWarning or ShowUserError

9	90	SetField	{HOLDREASON}	{WFCOMMENT}-{ORDTOTAL}	
10	100	Evaluate	{PROGRAM}	=	OE1100
11	110	ShowUserWarning	Order {ORDNUMBER} is on hold. Workflow approval required by user {S2}		
12	130	SetValue	WFCOMMENT	Order off hold requested, reset on hold	

## WRITING CUSTOM ACTIONS FOR WORKFLOW

When using Extender Customizer or Developer Edition, you can write or import custom workflow actions. Workflow actions are Python Extender Scripts that follow certain rules. For details on Extender scripts, refer to Extender Scripts on page 109

### Naming Extender scripts used as Workflow Actions

User defined Custom Workflow Actions must contain the string "Workflow" in their name to allow Extender to identify them as Workflow Actions:

[MODULE NAME].Workflow.ActionName

ActionName should be a short descriptive name with no spaces.

**Tip:** For details on Extender modules, refer to Extender Modules on page 117

### Scripts return value

The scripts that define the custom actions are expected to return 0 for success, 1 for failure.

#### Note:

The result from a custom action determines whether the workflow will follow a True or False decision branch.

Traditionally, 1 represents True, 0 represents False.

However, Workflow custom actions return 0 = True, 1 = False.

This falls in line with the 0 = success, 1 = failure convention prevalent in Sage 300 SDK development.

Therefore, for a custom action to direct a workflow down a True branch, it must return 0 (not 1).

### Workflow actions and parameters

Use Parameter at the top of the script to define parameters and field names in the grid

### Actions have up to 4 parameter fields

In the workflow template, you can assign a value to the parameter, up to 250 characters for each parameter.

Parameters are called P1, P2, P3 and P4. Each is given a label in the script.

### Parameter Labels in workflow action

```
## P1 Template
## P2 To
## P3 CC
## P4 Subject # leave blank to use the template subject
## P1.FinderView=VI0008
## P1.FinderField=MSGID
## P1.FinderFields=MSGID,TEXTDESC,COMMENTS,BODY
```

## Workflow actions can have finders for the parameters.

You need to configure FinderView for the Sage 300 view storing the details, FinderField for the key field and FinderFields for the fields you want to view in the finder grid.

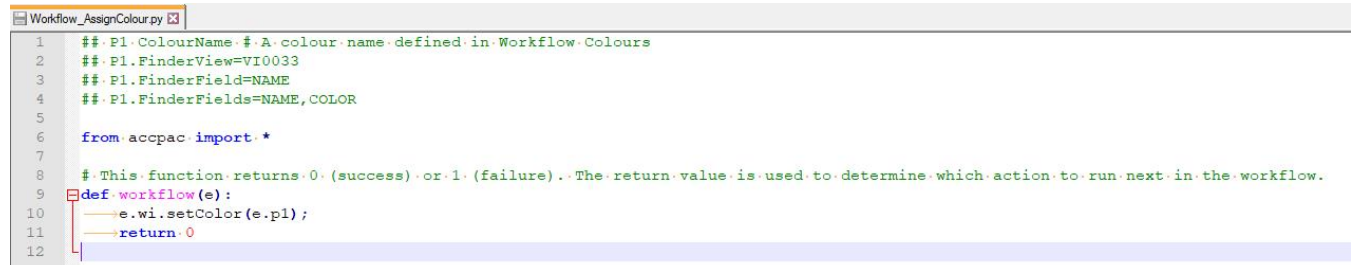
Use FinderOrder to set the View Index for the FinderField

Use FinderFilter to filter the records.

Look at the Workflow.AssignColour or the Workflow.SendEmail workflow actions for example scripts.

### Finder for workflow action parameter

```
## P1 Customer # for a finder to select an active customer setup in AR
## P1.FinderView=AR0024
## P1.FinderField=IDCUST
## P1.FinderFields=IDCUST,NAME
## P1.FinderOrder=0 #Key number
## P1.FinderFilter=SWACTV=1 #valid filter string including FIELDNAME=VALUE.
## P1.FinderFilter=IDGRP="RTL" #example with a string
```



```
Workflow_AssignColour.py
1  ## P1.ColourName:# A colour name defined in Workflow.Colours
2  ## P1.FinderView=VI0033
3  ## P1.FinderField=NAME
4  ## P1.FinderFields=NAME,COLOR
5
6  from accpac import *
7
8  # This function returns 0 (success) or 1 (failure). The return value is used to determine which action to run next in the workflow.
9  def workflow(e):
10     e.wi.setColor(e.p1);
11     return 0
12
```

## Examples:

If you want to start a workflow when a Customer's address details are updated, you can configure a workflow on each address field you want to track. However, this would create a workflow record for each field. So you would need to approve change to each field separately. You could also attach a workflow to an {UPDATE} view operation and the workflow would include a series of Evaluate actions to identify which fields have changed. While this would work for 2 or 3 fields, it might become cumbersome for all the fields that make up an address.

You could write a custom action "HasAddressChanged" that would return 0 if any address field has changed, 1 if no address field has changed.

## Configure Tray Icon to display Extender Logs and Workflow

If you want to configure icons on Sage 300 screens to progress the workflow and to view workflow history, you need to configure Information Manager.

- Install and activate Information Manager for your version of Sage 300.
- Setup I/M Options for Extender Workflow. For details, Extender Workflow- Notes/DML/Extender Tray

In Information Manager, I/M Options > Notes/DML/Extender Tray



### **AUTOMATICALLY START THE NOTES/DML/EXTENDER**

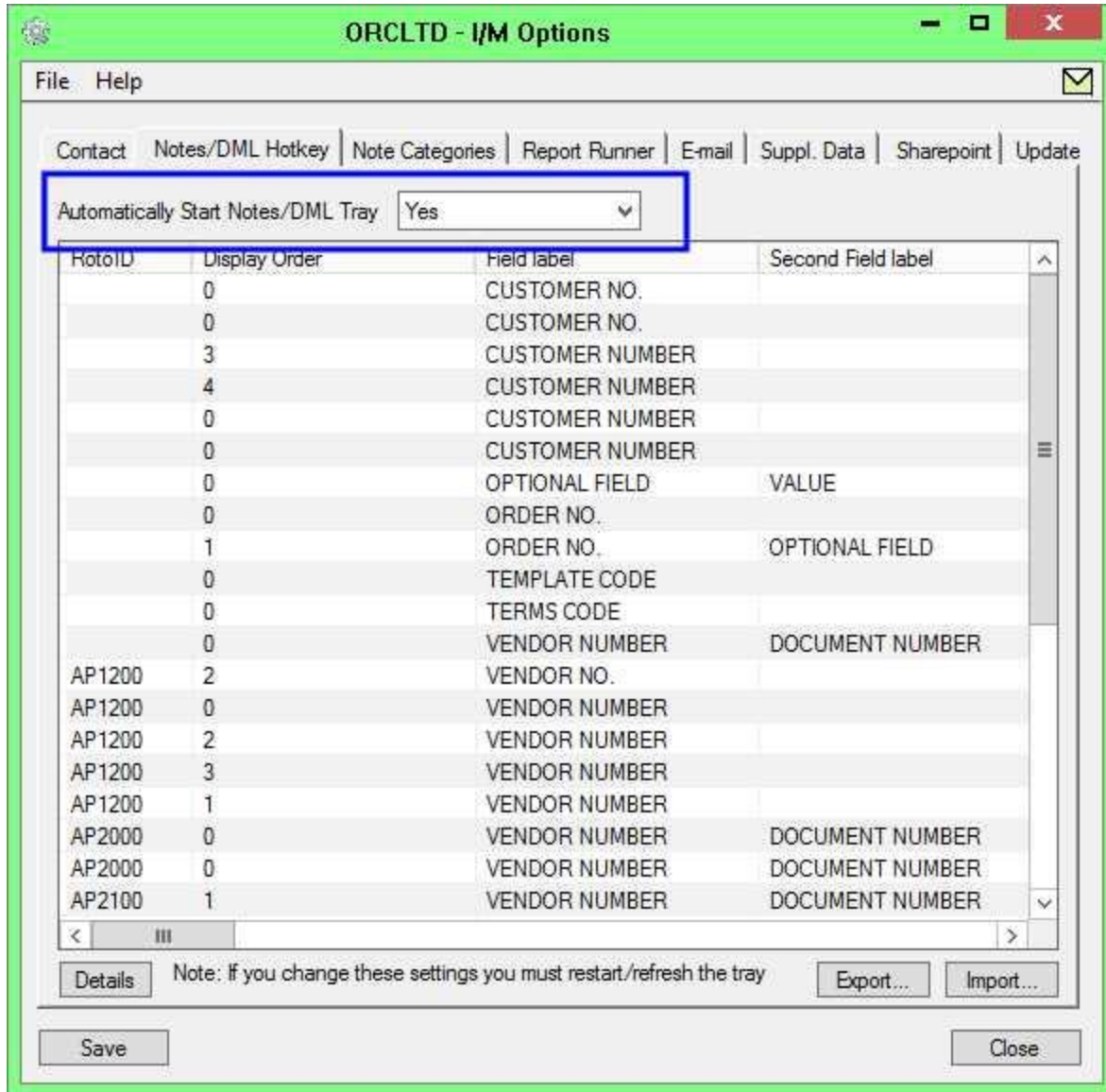
#### **Select "Yes" for the "Automatically Start Notes/DML Tray" option**

The Tray will automatically start for all Sage 300 users, using their currently logged on credentials.

In order for Notes or Documents to be displayed for the user, the tray icon needs to be running while the user is active in Sage 300 .

**Note:** Individual Users can overwrite the Notes setup in the IM Transactions / Notes User Options. See details in Information Manager documentation





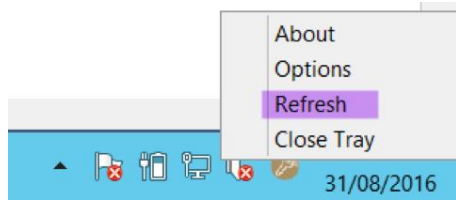
### DISPLAYING THE TRAY ICON ON THE TASKBAR.

Depending on your workstation setup, you may need to customise the Notification Area Icons for the Tray icon to display on the Taskbar.



Refresh the Tray icon if you have made any changes on the IM Setup>Options in the current session as the Tray icon reads the current setup when the company is first opened.





**Tip:** If you have multiple Tray icons, Close the Sage 300 desktop and re-open to refresh the configuration.

## USING WORKFLOW ICONS

To enable functionality in the Workflow Console, workflow icons and Extender Log icons, the logged on user needs to be set as a Workflow User.

Refer to Extender License and Workflow Users on page 129

**Tip:** ADMIN is automatically configured as a Workflow User.

## EXTENDER LOG- NOTES/DML/EXTENDER TRAY

You configure an Extender Log row to add Extender Log icons to a Sage 300 screen.

The icons will allow you view the log entries for fields which have been configured with a LOG event.

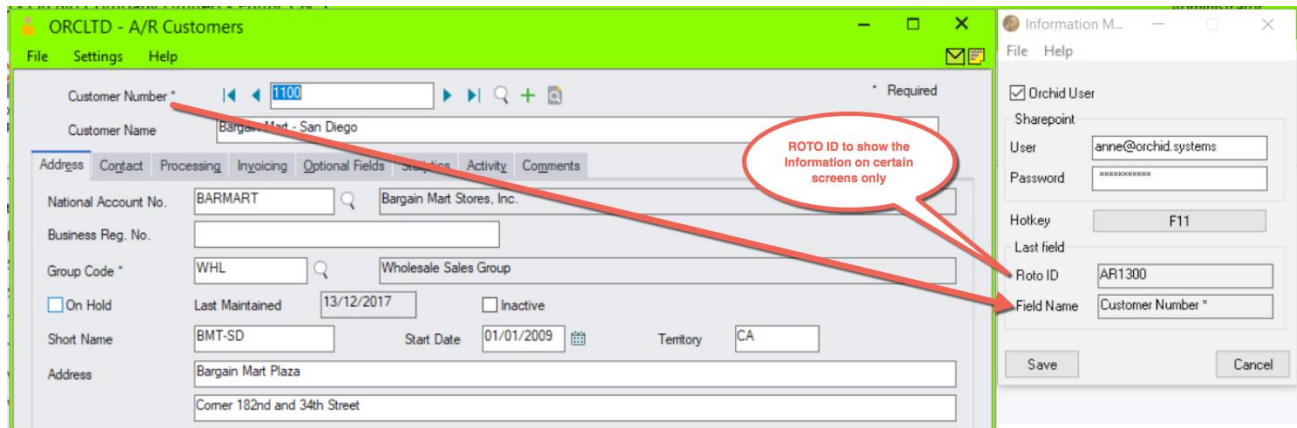
Select **Extender Log** Note Type.

### ROTOID - UNIQUE ID FOR EACH SCREEN

Enter the RotoID of the screen that should display the Extender Log Icons.

Example: Enter RotoID AR1300 to display a A/R Customer workflow on the A/R Customer screen.

**Tip:** To know what RotoID/Field label to use, start the appropriate Sage 300 Screen (for example AR Customers) then Right hand mouse click on the Information Manager Tray Icon (the key). Now, as you click on fields in the Sage 300 Screen - the Infoset Hotkey Setup shows you the RotoID and Field Name.



## FIELD LABEL

Enter the field label from the Sage 300 screen which is to trigger the display of the Extender Log icons.

If the Field Label is entered with quotes, e.g. "PY", Information Manager will use the hard coded value in addition to the value set in the Second Field Label.

### Important!

1. The same field may have different labels on different screens. See Example 1 below
2. The same field label may be used on the Header and Grid component of the same screen. See Example 2 below. Adding "F." to the field label forces it to use the field control and "G." forces it to use the grid control.

### Examples:

1. In AR Receipt Entry there are two Document Number fields - one on the header and one in the grid. To force the tray to use the correct one, you should use "F.DOCUMENT NUMBER" for the screen label or "G.DOCUMENT NUMBER" for the grid field label. .
2. If you want the same list of documents to show on both the AR Customer Screen and the AR Customer Inquiry, you need to add two rows in the IM Setup\Options on the Notes/DML/Extender Tray tab. One for the Field Label "CUSTOMER NUMBER" and one for the Field Label "CUSTOMER NO."

## SECOND FIELD LABEL

Enter the second field label from the Sage 300 screen which is to trigger the display of the Extender Log icons. If entered, then the document list will displayed for Field 1 = Field label and Field 2 = Second Field Label.

Second Field Label is optional and is configured in the same manner as the Field Label.

## EXTENDER LOG

Select the View ID that has the Log Events you want to access from the Sage 300 screen.

### Example:

If you have a LOG event attached to A/R Credit Limit and On Hold fields, you can add the icons to selected screens.

- A/R Customer - RotoID = AR130 and Field Label = Customer Number, View AR0024
- A/R Customer Inquiry screen (RotoID = 1700, and field label = Customer No, View AR0024

## EXTENDER LOG ICONS ON SCREENS

This will add an Extender Log icon to the screen.



If there are Log records for the selected record on the screen, the icon will show with lines as below.



### Requirement!

Selecting this option requires Orchid Extender and Information Manager to be installed and activated. To use the functionality, a user needs to be flagged as a Workflow User. For details Understanding Workflow Users on page 127

## EXTENDER WORKFLOW- NOTES/DML/EXTENDER TRAY

You configure an Extender Workflow row to add Workflow icons to a Sage 300 screen.

The icons allow Workflow User to start a workflow if it can be manually started, progress a workflow to the next step if you are an approver, and view the workflow status and workflow history.

## WORKFLOW ICONS EXPLAINED

Workflow icons only show if a workflow is configured on a specific field.

One or no workflow icon can be present per screen. Subject to Sage 300 security rights, you can use the icons to view the workflow history.

Depending on the workflow configuration, you can also use the icons to start or progress the workflow.



Click to start manual workflow or view workflow history. There is no pending workflow.



Click to view active workflow. The pending workflow is not assigned to the logged on user.



Click to progress your active workflow. The workflow is assigned to the logged in user and waiting for an action.

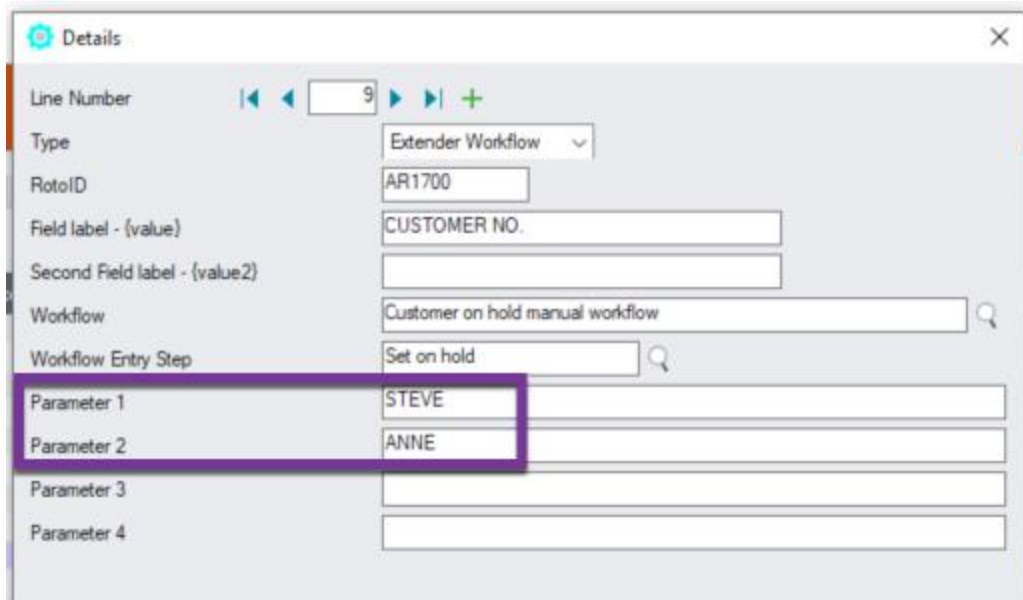


Click to progress group active workflow. The workflow is assigned to a workflow user group that the logged in user is part of. The workflow is waiting for an action from one of the group member.

**Note:** If the workflow icons are not configured in Information Manager Options, users can run the workflow Log reports to view workflow history. Workflow users can use the workflow console to view and progress their active workflows.

## Configure Tray

Select **Extender Workflow** Note Type -Alert Based on Extender Script (For further details on note type, view below)



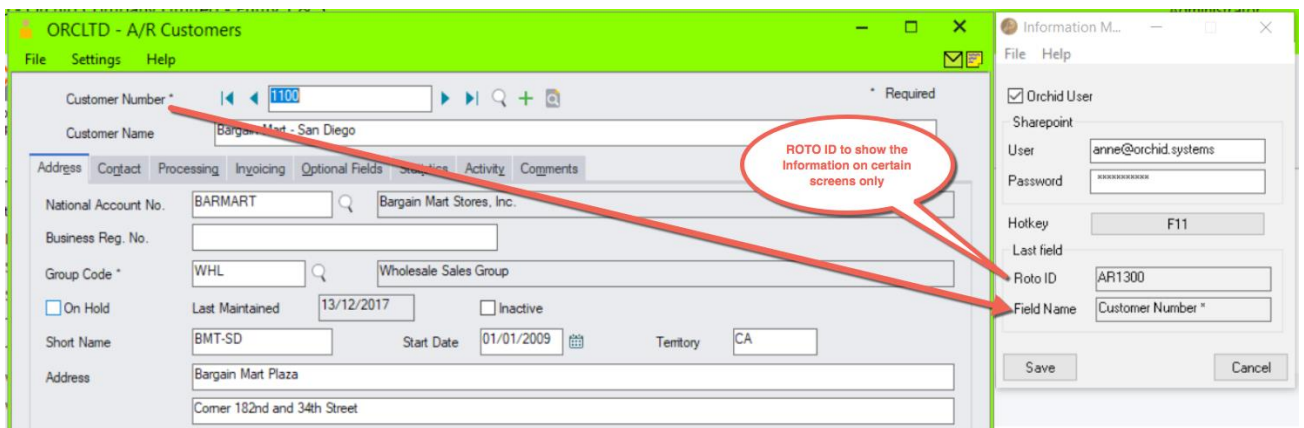
## Fields and Controls

### ROTOID - UNIQUE ID FOR EACH SCREEN

Enter the RotoID of the screen that should display the Extender Workflow Icons.

Example: Enter RotoID AR1300 to display a A/R Customer workflow on the A/R Customer screen.

**Tip:** To know what RotoID/Field label to use, start the appropriate Sage 300 Screen (for example AR Customers) then Right hand mouse click on the Information Manager Tray Icon (the key). Now, as you click on fields in the Sage 300 Screen - the Infoset Hotkey Setup shows you the RotoID and Field Name.



### FIELD LABEL

Enter the field label from the Sage 300 screen which is to trigger the display of the Extender Workflow icons.

If the Field Label is entered with quotes, e.g. "PY", Information Manager will use the hard coded value in addition to the value set in the Second Field Label.

**Important!**

1. The same field may have different labels on different screens. See Example 1 below
2. The same field label may be used on the Header and Grid component of the same screen. See Example 2 below. Adding "F." to the field label forces it to use the field control and "G." forces it to use the grid control.

**Examples:**

1. In AR Receipt Entry there are two Document Number fields - one on the header and one in the grid. To force the tray to use the correct one, you should use "F.DOCUMENT NUMBER" for the screen label or "G.DOCUMENT NUMBER" for the grid field label. .
2. If you want the same list of documents to show on both the AR Customer Screen and the AR Customer Inquiry, you need to add two rows in the IM Setup\Options on the Notes/DML/Extender Tray tab. One for the Field Label "CUSTOMER NUMBER" and one for the Field Label "CUSTOMER NO."

**SECOND FIELD LABEL**

Enter the second field label from the Sage 300 screen which is to trigger the display of the Extender Workflow icons. If entered, then the document list will displayed for Field 1 = Field label and Field 2 = Second Field Label.

Second Field Label is optional and is configured in the same manner as the Field Label.

**EXTENDER WORKFLOW**

Browse to select the Extender Workflow template to be added to the Sage 300 screen.

The workflow needs to be attached to a Sage 300 view that is related to the screen the icon is attached to.

**WORKFLOW ENTRY STEP**

If the workflow template "Can be started manually" is set to "Yes", select an Entry Step. This will enable users to start the workflow manually from the screen.

If the workflow template "Can be started manually" is set to "No", don't select an entry step. The workflow will be started automatically if configured in View Events and Scripts and you can view the Workflow Log and progress the workflow from the screen.

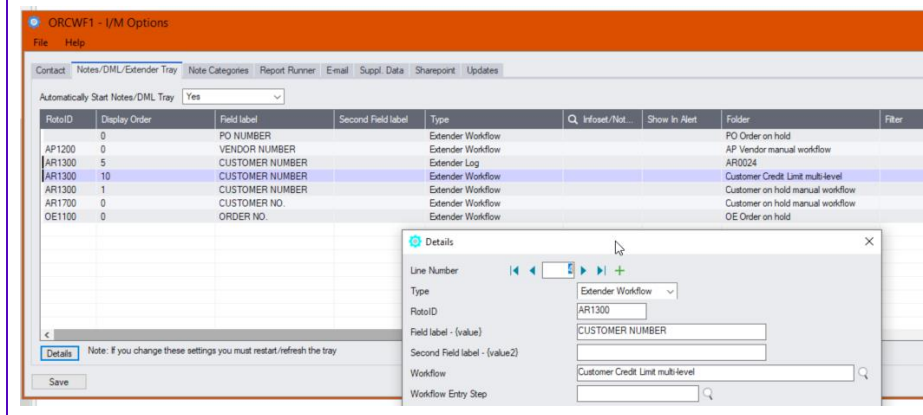
## Examples

### Example:

#### A/R Customer workflow on A/R Screens

If you have an A/R Credit Limit approval workflow, you can add the icons to selected screens:

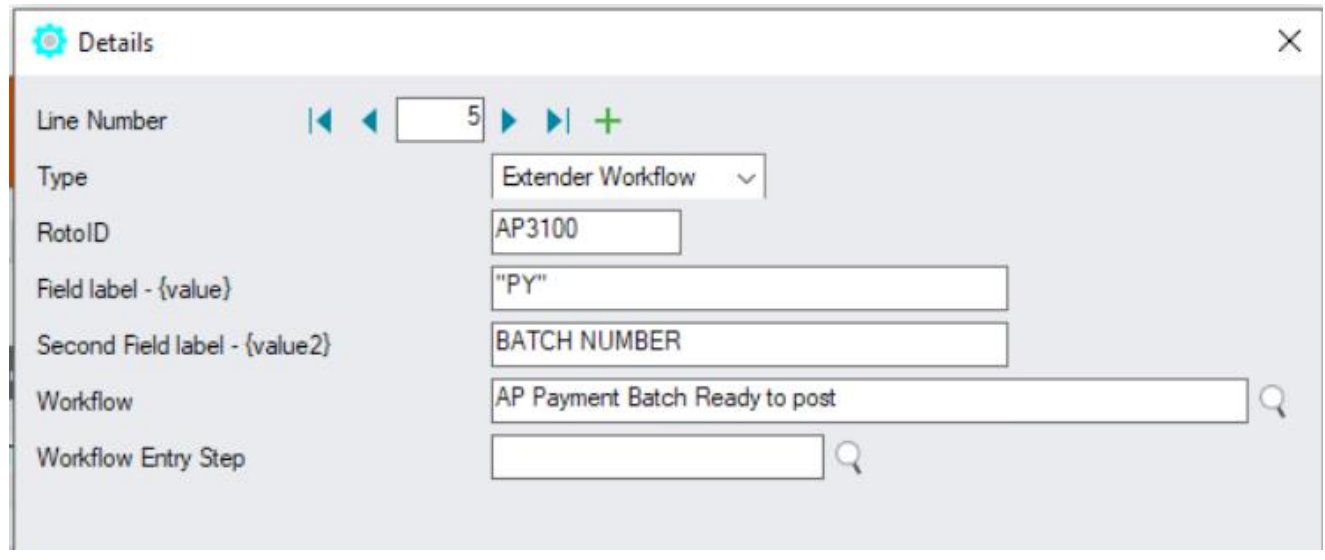
- A/R Customer Screen- RotoID = AR1300 and Field Label = Customer Number
- A/R Customer Inquiry screen - RotoID = 1700, and field label = Customer No



**Example:****A/P Payment Batch workflow on A/P Payment batch screen**

The A/P Payment batch view has a multi-part key, including the Batch Type and the Batch Number. The workflow key is set to PY, Batch number, so the Information Manager configuration needs to include 2 fields as shown below.

Field 1 should be set to "PY" (with quotes) and field 2 set to BATCH NUMBER.



Line Number	5
Type	Extender Workflow
RotoID	AP3100
Field label - {value}	"PY"
Second Field label - {value2}	BATCH NUMBER
Workflow	AP Payment Batch Ready to post
Workflow Entry Step	

**Requirement!**

Selecting this option requires Orchid Extender and Information Manager to be installed and activated.

To use the functionality, a user needs to be flagged as a Workflow User. For details on functionality and licensing method, refer to [Understanding Workflow Users on page 127](#)

**Note:**

If the Information Manager Tray is not started, the icons will not show and the user will not be able to use the workflow icons to start or progress the workflow.

However, workflows attached to view operation or view field changes will be started and users configured as [Understanding Workflow Users on page 127](#) are able to access the Workflow Console.

You can start the tray manually in Information Manager > Tray Icon.



## Remote Action Service : Progress Extender Workflow remotely

When a Workflow Action is assigned to an individual (or group member), they can be notified by email. That email is configured to contain a unique hyperlink to a Remote Action service web page/fleeting form.

The Remote Action page is entirely independent from Sage 300, and merely requires internet access. The form is unique to a given user and Workflow Action.

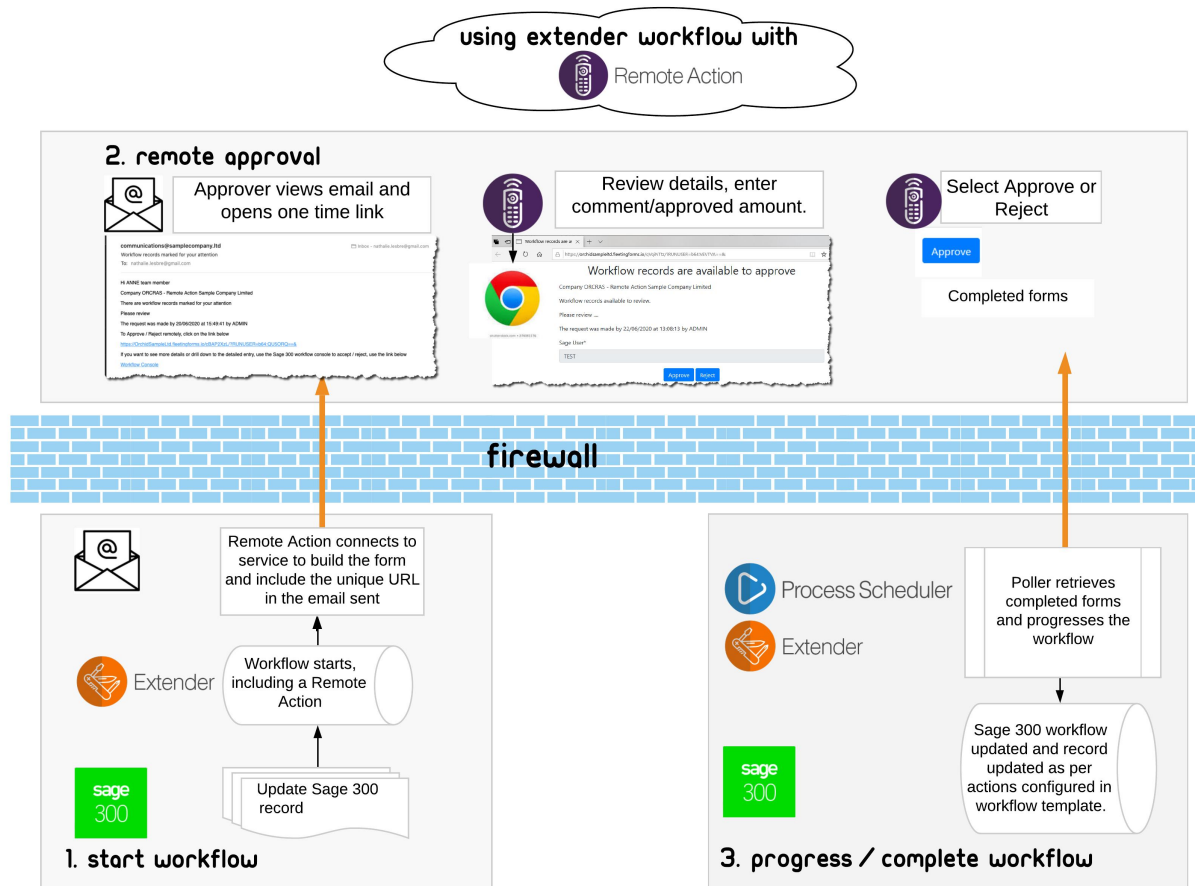
The form is configurable in the Workflow Template. E.g. it could include Approve and Reject buttons, capture a comment, and capture new values for a Sage 300 field related to the action.

Completed forms are pulled into Sage 300 when required. Orchid Process Scheduler can be used to poll the Remote Action site automatically on a regular basis for newly completed action data, and feed the results back into Sage 300 to progress the Workflow. Completed forms are then deleted from the website.

To get started, refer to Remote Action Service - Getting Started on the next page

Refer to Online Help for details. [Remote Action Service Online Documentation](#)

Remote Action user guide can be found online: User Guides



<b>Remote Action Service - Getting Started</b>	<b>210</b>
<b>Remote Action Message Templates</b>	<b>215</b>
<b>Add Remote Action to Workflow Template</b>	<b>217</b>

## REMOTE ACTION SERVICE - GETTING STARTED

Remote Action service is used in conjunction with Extender workflow to enable approvals of Sage 300 records outside of the Sage 300 environment. Approvers receive a one time email link that they can use to complete the Approval (or rejection) form.

For details on how it works - refer to Remote Action Service : Progress Extender Workflow remotely on the previous page

In most cases, you configure the Extender Workflow as per your required flowchart first without Remote Action Service. Once you have tested the workflow template, you can add a Remote Action Service action to send the email to the approvers with the link to approve outside of Sage 300.

**Example:** Tutorial: Remote Action tutorial - A/R Credit Limit approvals

### **Requirement!**

The following modules are required to use the Remote Action Service:

- Extender (Configurator or Developer)
- Workflow Users
- Remote Action Subscription
- Process Scheduler Level 1 and above to automate completed form retrieval (optional but highly recommended)

## Prerequisites - install Extender and Remote action service

### **Extender setup**

- Ensure the latest product update for Extender installed and activated.
- In Extender Options, set the Python version to version 3.8.8 - Refer to Python Version on page 85
- In Extender Options > Email Tab, configure the SMTP Details as Remote Action service needs to email. Refer to Extender Email Tab on page 86
- Configure Workflow Users. Extender License and Workflow Users on page 129

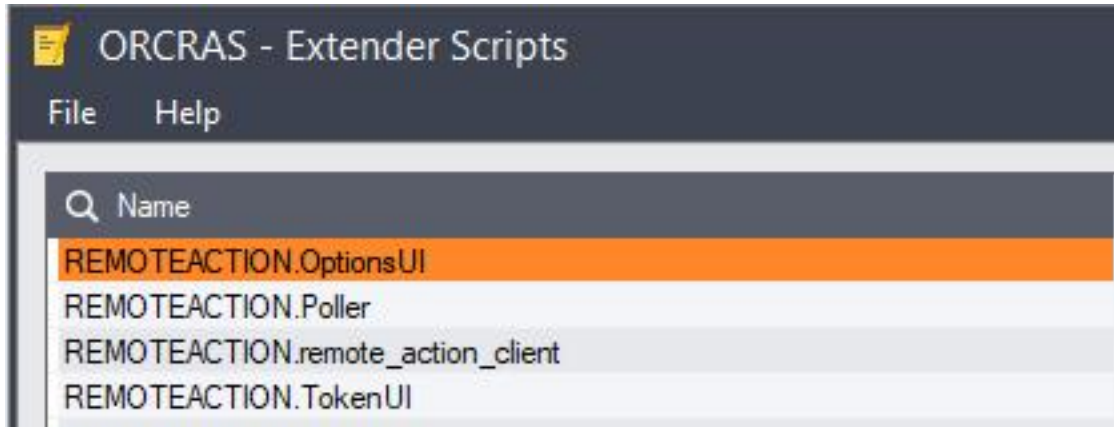
### **Install Remote Action Service**

- Subscribe to the Remote Action Service through your Sage 300 Business partner and have the token available.
- Import the `RemoteAction.vi` module

### **REMOTE ACTION MODULE DETAILS**

The Remote Action module includes the Extender custom tables and scripts required to configure and manage the service.

#### **Remote Action Scripts**



### Workflow Actions

It also includes three workflow actions to build the form hyperlink and email the on-time link to the workflow users.

SendRemoteActionCommentAmountFormEmail includes a comment and an amount field for the approver to complete. Amount defaults to the requested value in the workflow.

**Example:** Used to Approve A/R Credit limit

SendRemoteActionCommentFormEmail: includes a comment field only.

SendRemoteActionFormEmail: No user input is captured. Form only includes the buttons configured in the workflow template.

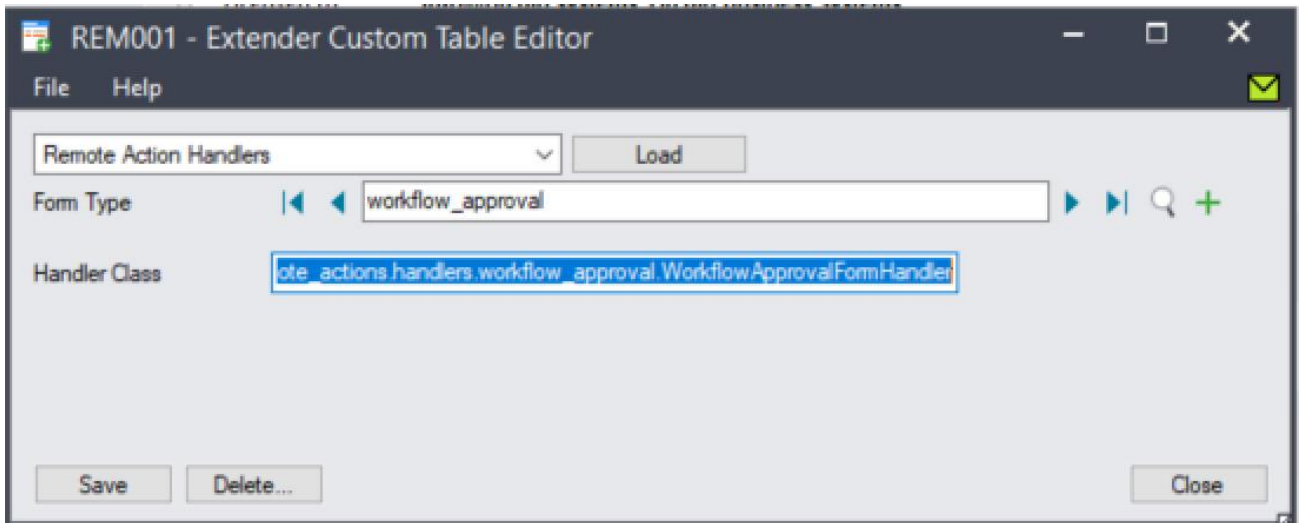
```
Workflow.SendRemoteActionCommentAmountFormEmail  
Workflow.SendRemoteActionCommentFormEmail  
Workflow.SendRemoteActionFormEmail
```

### Custom Table and Configuration record

Remote Action includes a default handler in the Remote Action Handlers custom table for use with the workflow. This is created when you install Remote Action module. In some rare cases, if the configuration record is missing, you may need to add it manually.

Form Type: workflow\_approval

Handler Class: remote\_actions.handlers.workflow\_approval.WorkflowApprovalFormHandler

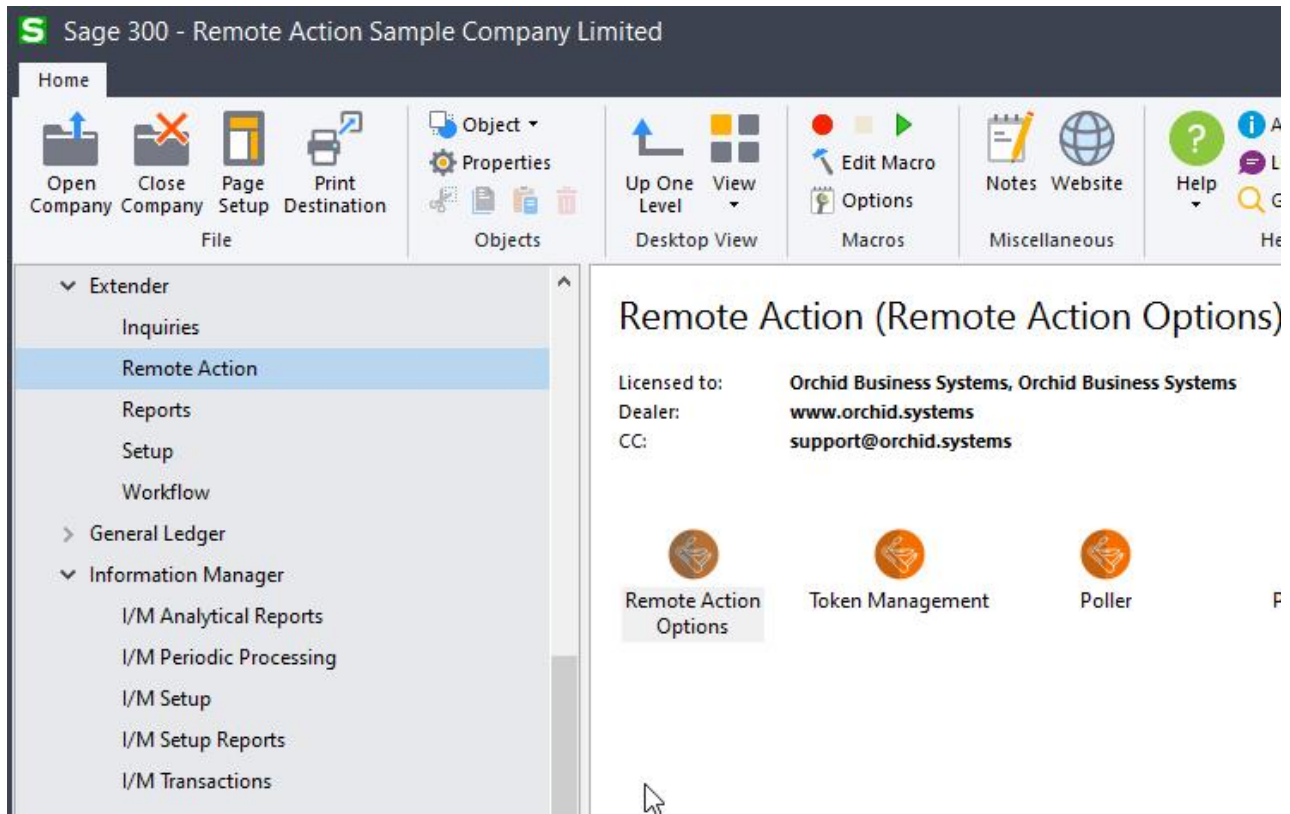


## Install Process Scheduler

Although this is optional, it is highly recommended to automate the retrieval of the completed remote action forms. Refer to Running the Poller with Process Scheduler on page 215

## Configure Remote Action module

Step 1: Go to Remote Action menu, select Configure and enter the token provided.



**Note:** If you don't have a token, contact your Sage 300 Business Partner to enable the service.

Step 2: Run Remote Action Option - Optionally, enter a website address for the logo you want to see on the form and an email address to be displayed on the form. For details, refer to Remote Action Admin.

Step 3: Add Extender Message templates to configure the notification email and the remote form content. For details, Remote Action Message Templates on the facing page

Step 4: Include one of the Remote Action in a workflow template - For details, Add Remote Action to Workflow Template on page 217

## Configure Remote Action poller

To process the remote requests into Sage 300, you can run the Extender RemoteAction.poller script. The script is in the Extender > Remote Action menu

**Note:** The script can only be run manually by the ADMIN user.

### POLLER DESCRIPTION

Poller is an Extender script designed to process all completed requests and bring the action results into Sage 300 to progress the workflow.

The RemoteAction.poller connects to the Remote Action Service to retrieve and process completed forms. For each form, it progresses the workflow according to the details submitted by the user on the Remote Action form.

For example, if the user approves the workflow request, the workflow status is updated as per the Approve step configured in the workflow template.

If the poller encounters any error, for example another user has already approved the workflow, using their Remote Action link or using the Extender console, the poller will log an error.

## Running the Poller with Process Scheduler

In most cases, you configure Process Scheduler to run the script and use Windows Task Scheduler to update the data automatically as often as required.

Setting Up Process Scheduler - Configure Process Scheduler to run the imports automatically

Setting Up the Windows Scheduled Task - Task Scheduler

### **Tips:**

The user configured in Process Scheduler Companies needs to have "Modify all workflow" rights in Sage Security Groups as it needs to progress the workflow records. It also needs to have all the Sage security rights to perform the actions in the Approve/Reject steps (e.g. Post batches, update Customer or Vendor).

It is important that an admin user reviews the Process Scheduler Logs regularly.

## REMOTE ACTION MESSAGE TEMPLATES

Remote action service uses Extender message templates in two ways:

1. Configure the email notification sent to the users who need to approve the record / acknowledge the alert.
2. Configure the remote form that users navigate to from the email

Refer to Message Templates on page 102

The Remote Action module includes two default message templates.

REMOTEACTION.WFAPPROVALFORMEMAIL and REMOTEACTION.WFAPPROVALFORM

You can create new message templates for the different workflows that use Remote Actions.

**Tip:** Name the message template with a module ID to facilitate installation between test and live servers.

## Email message templates

Message templates can include variables including field names of the Sage 300 views the workflow is attached to.

To send a Remote Action link, the email message selected in the workflow template action needs to include a special variable {FORMURL} to build the unique link for remote action. This requires an active Internet connection and an active subscription to the Remote Action service. See details in Remote Action Admin

**Tip:** If the token is invalid or the subscription to the service has expired, {FORMURL} cannot be replaced.

### Sample HTML Email Template with {FORMURL}

```
<html>
<body>
<p>Hi {CURUSER} team member</p>

<p> <b> Company {ORG} - {CONAME} <b></p>

<p>There are workflow records marked for your attention</p>

<p>Please review</p>

<p>The request was made on {DD}/{MM}/{YYYY} at {HOUR}:{MINUTE}:{SECOND} by {USER}</p>

<p>To Approve / Reject remotely, click on the link below</p>

<p>{FORMURL}</p>

<p>If you want to see more details or drill down to the detailed entry, use the Sage 300 work-
flow console to accept / reject, use the link below</p> <p><a href="orchid:
{ORG}/VI1015/&amp;All=Assigned%20only%20to%20&amp;me">Workflow Console</a></p>
<p>&nbsp;</p>
<p>&nbsp;</p>

</body>
</html>
```

**Tip:** When using Remote Action to progress the workflow, make sure the message template used to notify users that the workflow has been progressed (request approved or rejected), includes {RUNUSER}. Refer to When using the Remote Action Service, user {RUNUSER} as the workflow {USER} is the user who runs the poller script or the user configured in Process Scheduler.

## Form template

The message template subject becomes the form title.

The message template body becomes the content of the form.

If you have configured a logo in Remote Action Admin, the logo is displayed at the top of the form.



**Note:**

You can use HTML Tags in the Remote Form message template. Commonly used HTML Tags have been white-listed in the service.

If you use HTML message template for the form, it must include HTML and BODY Tags.

Sample HTML Form Template

```
<html>
<body>
<p>Company {ORG} - {CONAME}</p>

<p>Workflow records available to review.</p>

<p>Please review ....</p>

<p>The request was made on {DD}/{MM}/{YYYY} at {HOUR}:{MINUTE}:{SECOND} by {USER}</p>
</body>
</html>
```

The form message template (both subject and body) can include variables to display values from Sage 300. Refer to [Message Template Variables](#).

For more details on the form configuration, refer to [Form Description](#)

## ADD REMOTE ACTION TO WORKFLOW TEMPLATE

### Remote Action includes three standard actions

**Requirement!** The standard actions can be used with Extender Configurator (as well as Developer).

Select the appropriate action to build the form and email the link to the approver (Workflow user or user group)

`SendRemoteActionCommentAmountFormEmail`: Select this workflow action to include a comment (up to 250 characters) and an amount field on the form.

Both fields are mandatory. The amount field defaults to the Requested value in the workflow

`SendRemoteActionCommentFormEmail`: Select this workflow action to include an amount field on the form. The amount field defaults to the requested value in the workflow.

`SendRemoteActionFormEmail`: Select this action if you don't need to capture input from the approver. The Form includes only the buttons configured in P4.

```
Workflow.SendRemoteActionCommentAmountFormEmail
Workflow.SendRemoteActionCommentFormEmail
Workflow.SendRemoteActionFormEmail
```

## action parameters

All actions require 4 parameters in the workflow template.

The screenshot shows a 'Step Action' configuration window with the following fields and values:

- Line Number: 10
- Action #: 100
- Action Name: SendRemoteActionCommentAmountFormEmail
- Email template: REMOTEACTIONEXAMPLES.CUSTCLEMAIL
- To: {CURUSER}
- Form template: REMOTEACTIONEXAMPLES.CUSTCLFORM
- Form button lists: Approve=Approve,Reject=Reject
- True Action #: 110
- False Action #: 120
- Comment: Send email & create form

*Email Template (P1):* Select the message template to send the email including the FORMURL link to users who need to approve the record.

*To (P2):* Enter a valid Sage User or Workflow User Groups -

**Requirement!** Users need an Extender Workflow named user licence to progress the workflow and use the Remote Action Service.

*Form Template (P3):* Select the message template used to build the remote form. Message subject is Form Title and Message Body is Form content.

*Form button lists (P4):* Enter a comma separated list of Labels=Stepname pairs. The stepname needs to be a valid workflow step. You need at least 2 buttons on each form.

**Example:**

OK-Approve=Approve,Not-OK=Reject - The form will show 2 buttons: OK-Approve and Not-OK  
The workflow template includes 2 steps: Approve and Reject.

For details, refer to :

Form Description

Remote Action Message Templates on page 215

## user input

User input captured on the remote forms is saved in workflow values

Comment field = APPROVALCOMMENT

Amount field = APPROVALAMOUNT

To use the values in the workflow templates, you need to use workflow values with the same name, for example in the SetField action, you can update a Numeric field on the record with the {APPROVALAMOUNT} workflow value.

**Example:**

**EXAMPLE WITH AR CREDIT LIMIT**

The example workflow uses the SendRemoteActionCommentAmountFormEmail . In the Approve step, the workflow updates the A/R Customer credit limit field to the value entered on the form.

The form defaults to the requested value, but the approver can overwrite.

The screenshot shows a workflow console with a table of steps and a detailed view of step actions. The 'SetField' and 'SetValue' actions are highlighted with an orange oval.

Lin...	Action #	Action Name	Parameter 1	Parameter 2	Parameter 3
1	10	#WorkflowUI			
2	20	AddParameter	APPROVALAMOUNT	Approved Credit Limit	number:0
3	30	AddParameter	APPROVALCOMMENT	Approver's comment	text(size=60)
4	40	Ask For Parameters			
5	50	SetField	{AMTCRLIMIT}	{APPROVALAMOUNT}	
6	60	SetValue	{TOVALUE}	{APPROVALAMOUNT:2}	
7	/0	setStatus	Approved		
8	80	SendEmail	REMOTEACTIONEXAMPLE.CUSTC...	{STUSER}	FINMGR
9	90	Complete			
10	100	GoToStep	Wait		
11	110	GoToStep	WFEError		

**Notes:**

Step with user input - you can configure Remote Action to collect user input. When the same step can be used on the Workflow console in Sage 300 and using Remote Action, the parameters entered on the remote form are saved in the workflow when the requests are processed in Sage 300 by the poller script (or Process Scheduler). In such scenarios, the users are not prompted to enter data in Process Scheduler.

**Useful reference**

Refer to Workflow Templates - Screen Guide on page 132

Advanced: How to configure actions

Refer to Amend Remote Form

**Requirement!** Requires Extender Developer Edition.

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Office: 2/273 Alfred Street, North Sydney  
New South Wales 2060 Australia

Phone: +612 9099 1077  
Email: [info@orchid.systems](mailto:info@orchid.systems)

[www.orchid.systems](http://www.orchid.systems)



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