Remote Action

Orchid
Getting Started Guide:

Work Smarter with Orchid

Table of Contents

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
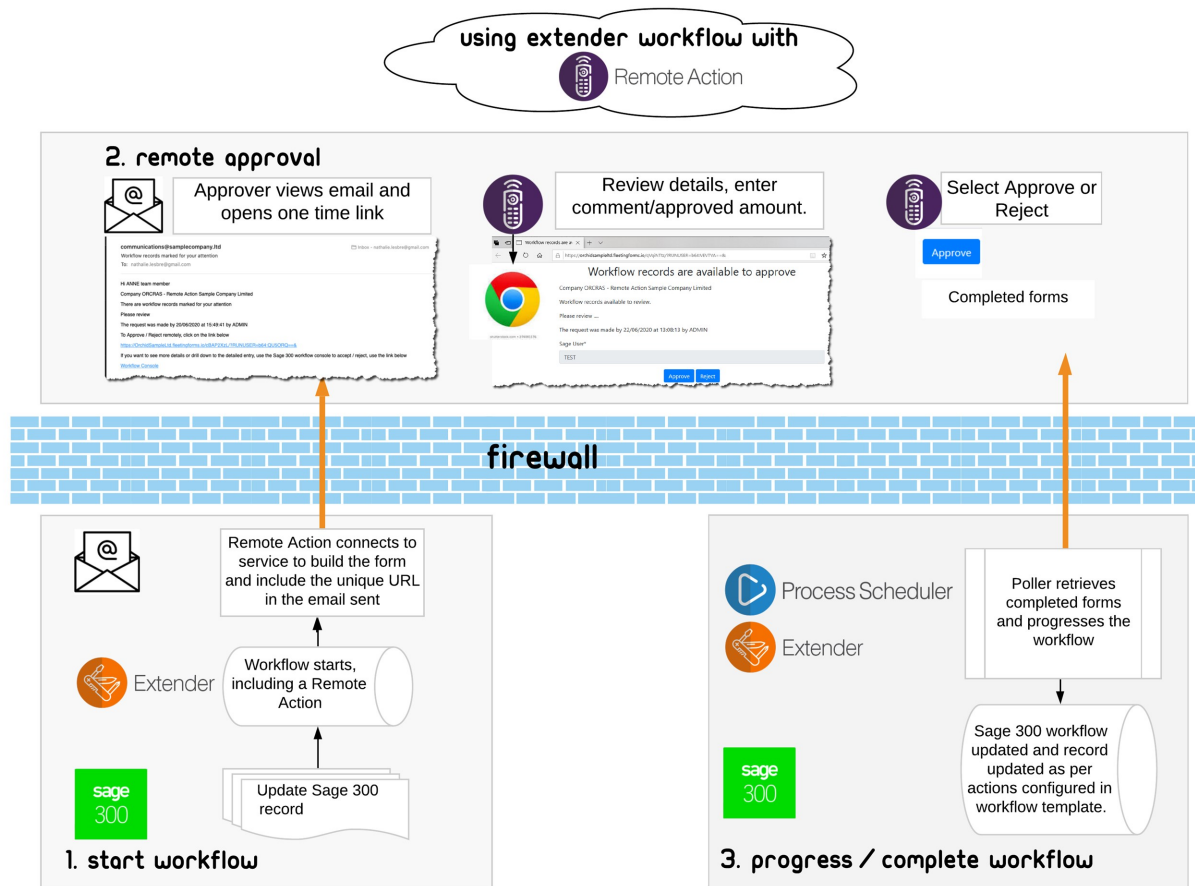
REMOTE ACTION SERVICE - GETTING STARTED

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: A/R Credit Limit approval with Remote Action Service on page 17

> **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 65
- In Extender Options > Email Tab, configure the SMTP Details as Remote Action service needs to email. Refer to Extender Email Tab
- Configure Workflow Users. Extender License and Workflow Users

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
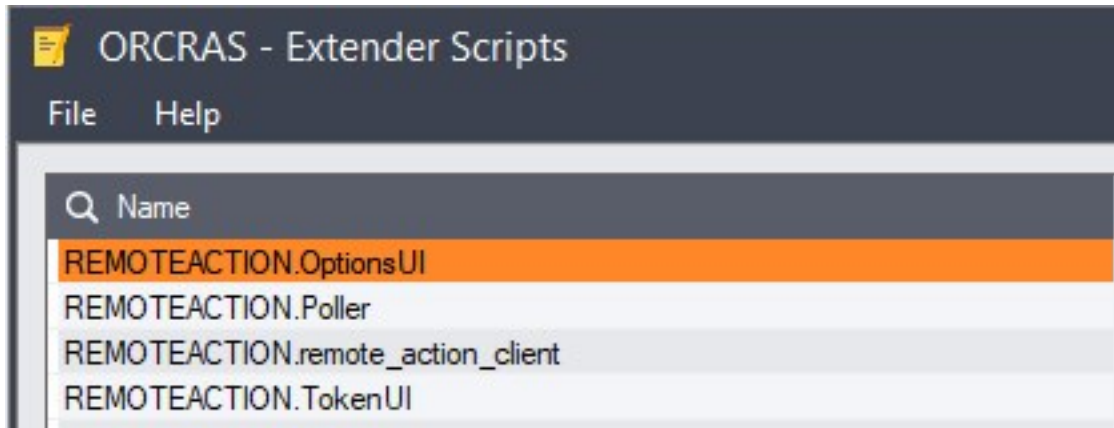
Workflow Actions

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.

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
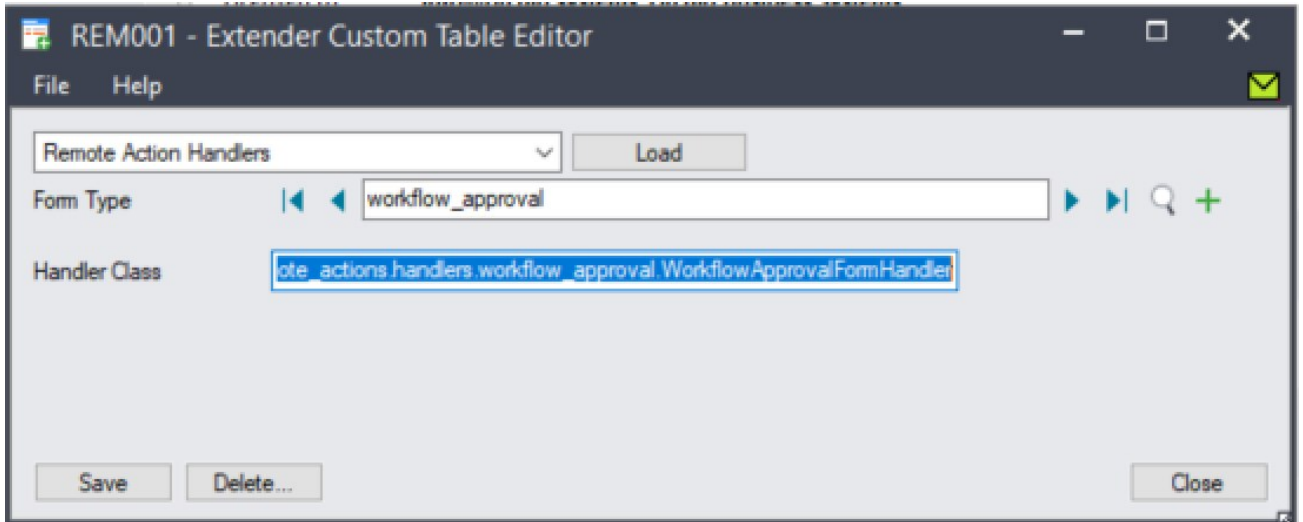
Install Process Scheduler

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 11

Configure Remote Action module

Step 1: Go to Remote Action menu, select Configure and enter the token provided.
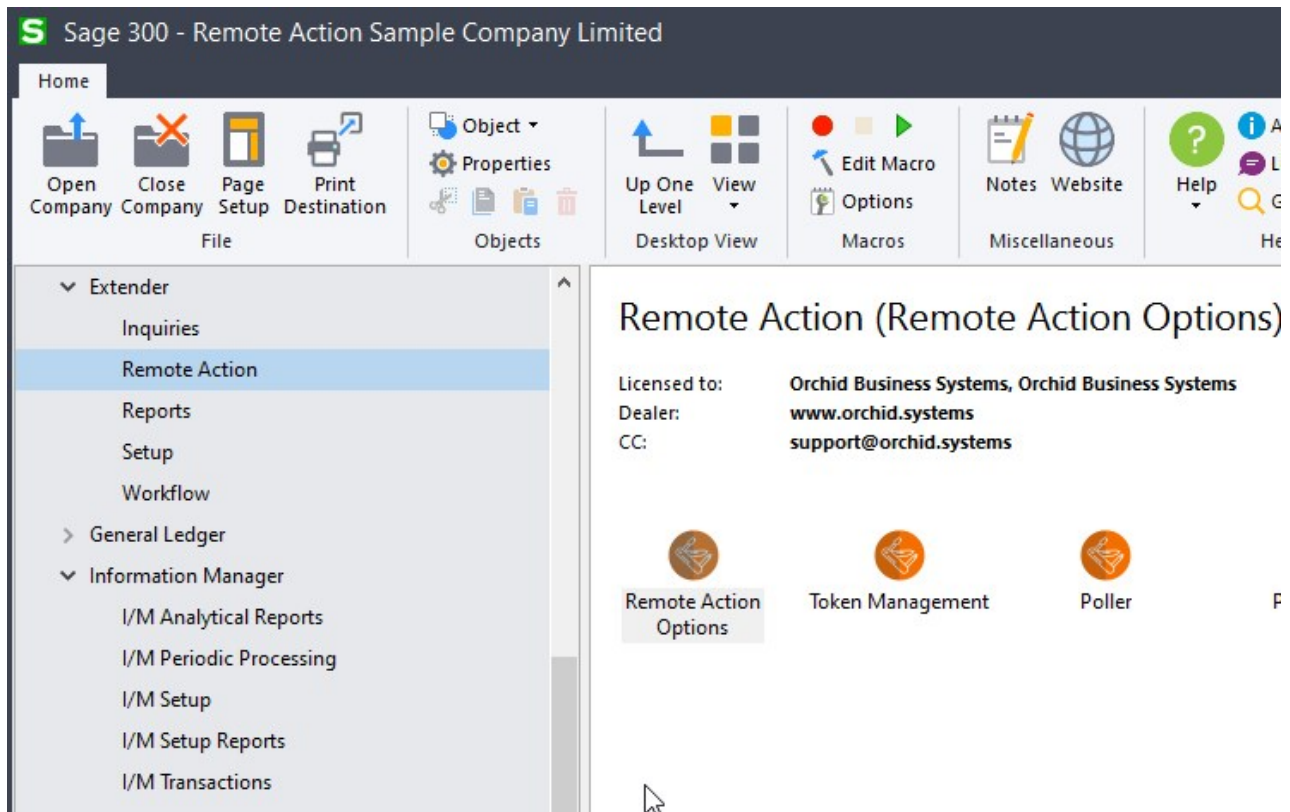
> **Note:** If you don't have a token, contact your Sage 300 Business Partner to enable the service.

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 on page 30.**

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 13**

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 workfow 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 poller automatically on page 24

Setting Up the Windows Scheduled Task - Task Scheduler on page 28

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 57

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 on page 30

> **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
<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> </p>
<p> </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. on page 59

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 on page 30, 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
<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 on page 59.

For more details on the form configuration, refer to Customize Remote Action Form on page 33

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.

Step Action						
Line Number		◀ ◀	10 ▶ ▶	+		Help
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				
Save	Delete					Close

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 :

Customize Remote Action Form on page 33

Remote Action Message Templates on page 11

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.
>
>

> **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 41

Advanced: How to configure actions

Refer to Amend Remote Form on page 35

> **Requirement!** Requires Extender Developer Edition.

A/R CREDIT LIMIT APPROVAL WITH REMOTE ACTION SERVICE

Overview

> A company wants to configure workflow using Orchid Extender to control who can approve A/R Customer credit limits. Refer to **A/R Credit Limit approval**.
>
> Some of the approvers need to approve without logging into Sage 300. They use Extender and a subscription to the Remote Action Service.

Prerequisites – 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.

Approver receives an email with a one time link to the Remote Action form.

> - Configure SMTP Email settings in Extender Options (**Extender Email Tab**)
> - Import the RemoteAction.vi module
> - Configure Remote Action Options. **Configure Remote Action module on page 9**

Using the Sample files

> Workflow Template example- You can import the RemoteActionExamples module from the Orchid website: Remote Action Examples
>
> > Step 1: Create 2 workflow colours: Sales and Urgent - (**Workflow Colours**)
>
> > Step 2: Add Workflow Users - **Extender License**
>
> > Step 3: Create a Workflow user group called FINMGR and assign users to it. (**Workflow User Groups**)
>
> > Step 4: Go to Extender Setup > Modules and import the file.
>
> > Step 5: Change Action 50 in Check step if you want to assign the workflow to another group/user.
>
> > Step 6: Review message templates (In the example workflow, the following templates are used: REMOTEACTIONEXAMPLES.CUSTCLEMAIL and REMOTEACTIONEXAMPLES.CUSTCLFORM when the credit limit changes (Check and Reassign steps), REMOTEACTIONEXAMPLES.CUSTCLAPPROVED when request is approved,
> > REMOTEACTIONEXAMPLES.CUSTCLREJECTED when request is rejected) and

REMOTEACTIONEXAMPLES.WFERRORNOTIF when an error occurs in the workflow (e.g. user doesn't have security rights) (**Message Templates on page 57**)

Step 7: Update the user's email address in Sage 300.

Step 8: Configure Process Scheduler to automate processing of completed forms. Configure Process Scheduler if required

Notes:

Attached to ViewEventsScriptsWorkflow AR0024 view, AMTCRLIMT field - refer to **Attach workflow to AR0024 {AMTCRLMT} Field on page 22**

It includes the Workflow template as well as the required message templates.

To configure workflow icons on screens, refer to **Configure Information Manager on page 22**

Requires Extender PU7.10 or above and subscription to Remote Action Service

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 the Remote Action components. Refer to **A/R Credit Limit approvals - Workflow template tutorial** for a detailed description of the A/R Credit Limit approval example.

For details, refer to Workflow Templates - Screen Guide on page 41
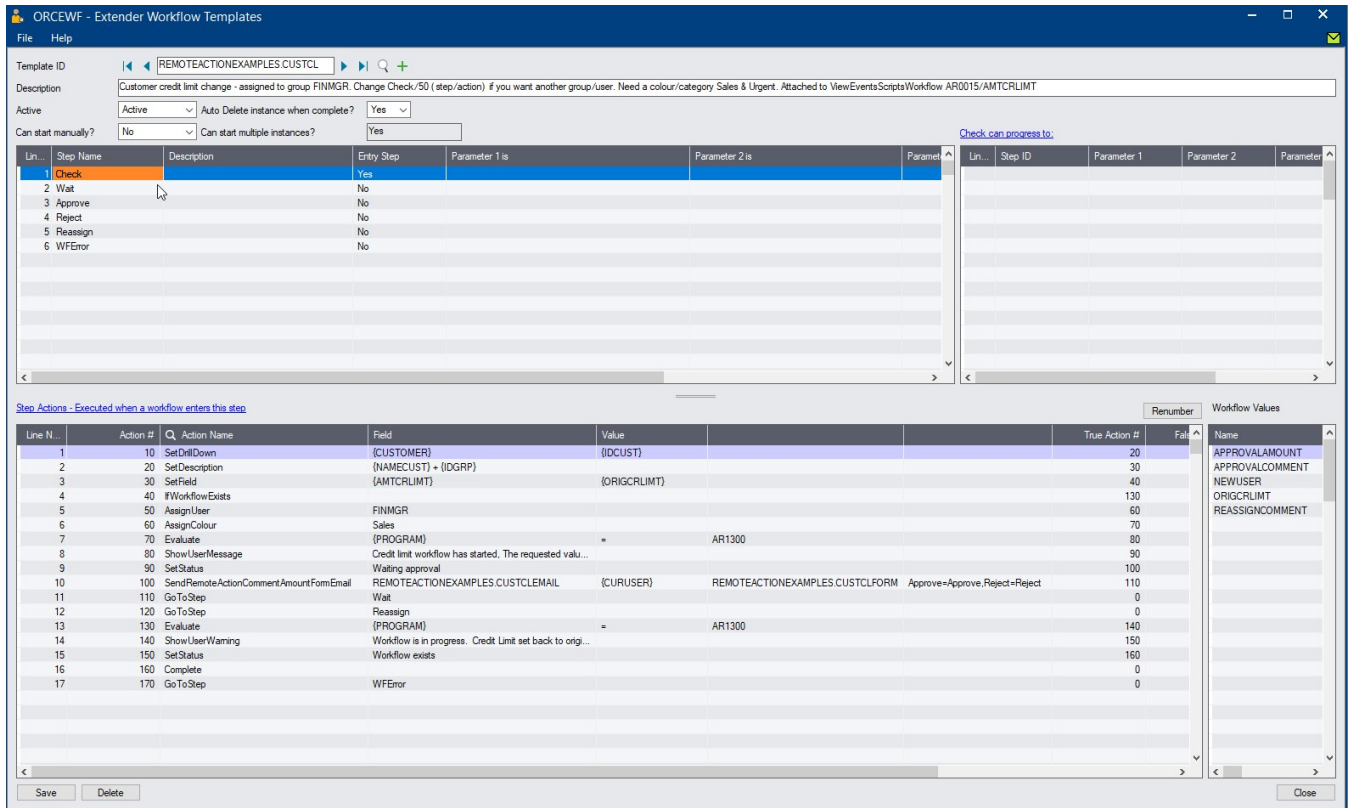
WORKFLOW CONFIGURATION

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.

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 with the one-time link to approve using Remote 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/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.

Values updated in the Remote Action forms are saved in {APPROVALCOMMENT} and {APPROVALAMOUNT} and can be used in the Approve/Reject step.

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.

To enable users to approve using Remote Action service, select one of the Remote Actions. In this example, we use SendRemoteActionCommentAmountFormEmail. The user can change the requested amount and enter a comment on the Remote Form.

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.

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

> **Important!** This step can be performed with Remote Action. Workflow value use the Remote Action names.

AddParameter: Add 2 fields:

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

AskForParameters: always required after AddParameter to display the popup screen and wait for user to enter Input. This doesn't popup when Remote Action poller progresses the workflow.

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

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

> **Important!** This step can be performed with Remote Action. Workflow value use the Remote Action names.

AddParameter: Add 2 fields:

- APPROVALCOMMENT: 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 and Scripts

Select AR0024 view, on the Workflow Tab, select the Customer Credit Limit workflow and "Check" as the Entry step.
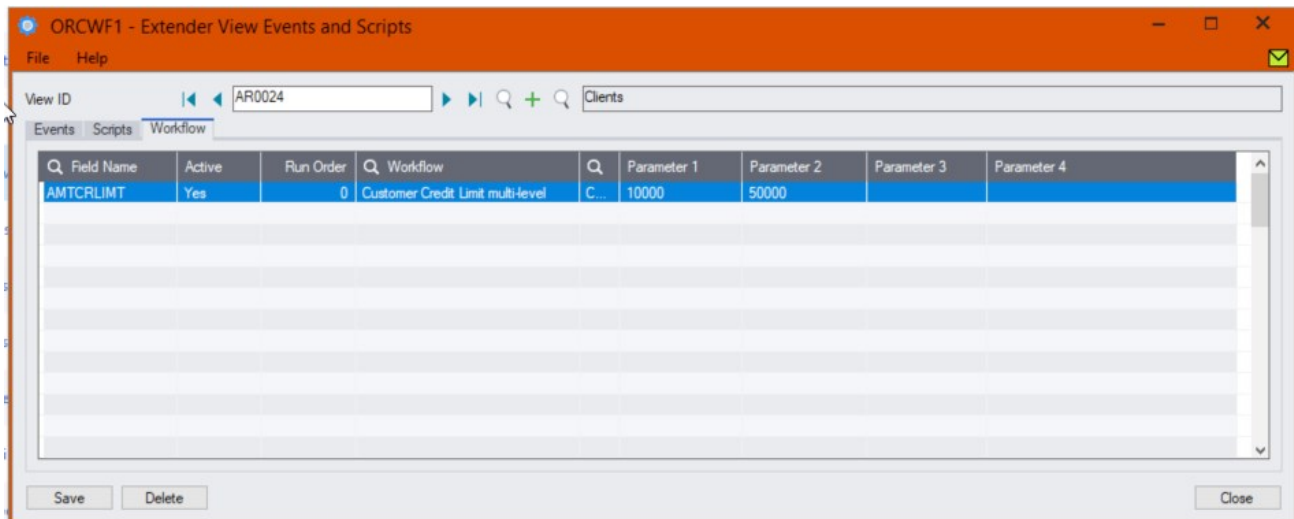
> **Tip:**
>
> You can also use up to 4 parameters configured in View Events and Scripts > Workflow Tab. Parameters need to be used in the Workflow template using SetValue.
>
> Using Parameters in Workflow

Configure Information Manager

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

Extender Workflow- Notes/DML/Extender Tray

Configure Process Scheduler to run Poller script.

Configure Process Scheduler, create a schedule to run the RemoteAction.Poller script.

Configure Windows Task Scheduler to automatically retrieve completed forms to update Sage 300 and progress the workflow. .

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 REMOTE ACTION FORM

View the email of users who can approve.

- Review the email content.
- Follow the link to the form
- Review the form
- Select Approve

> **Tip:** Note: If the user can logon to Sage 300, you can use the email smartlink to open the workflow console and view more details in Sage 300.

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 Workflow Users Overview

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".

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.

Configure Process Scheduler to run the poller automatically

If using Process Scheduler to automatically poll the Remote Action Service and progress the workflow in Sage 300, install and configure Process Scheduler. Refer to Process Scheduler Getting Started Guide for details.

Requirement! Process Scheduler Level 1 is the minimum required to run Extender Scripts. Level 2 and Level 3 will work too.

CONFIGURE PROCESS SCHEDULER IF REQUIRED

Install and activate Process Scheduler (Level 1 is the minimum required).

Process Scheduler Setup > Options > enter Sage 300 logon details

Process Scheduler Setup > Options > Email> enter SMTP details to send emails when imports are run.

PS Setup > Companies > Enter Sage 300 logon details for all companies that you want to run a script in.

Tip: Even if you only have one company, you need to enter details of a Sage 300 user who has security rights to perform the required tasks in Sage 300.

PS Setup > Email messages > create/import Email messages

One when schedule has errors connecting

One when the detail step is run

Refer to Process Scheduler help for details.

Steps for Setting Up Process Scheduler

PROCESS SCHEDULER > SETUP > SCHEDULES >

CREATE A NEW SCHEDULE

Choose Send email only if error – You will get an email if there is an error running the schedule (e.g. connecting to the database example below.
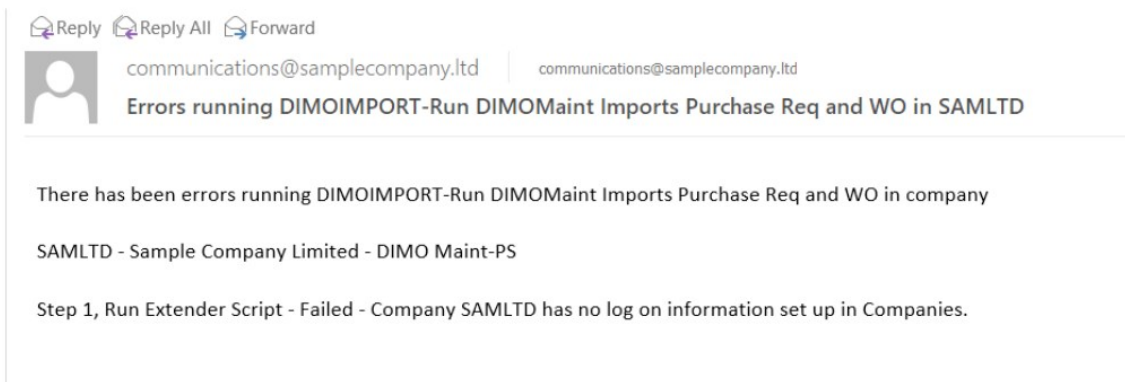
ADD STEPS TO SCHEDULE

Add 2 "Run Extender script" steps: One per company that is configured to use Remote Action in the workflow.

> **Tip:**
>
> To receive an email with the import results, choose Send e-mail Always and select a Message ID. If you only want to receive a notification on error,select "only if errors"

> **Note:**
>
> You can also create one schedule for each company.
>
> You can then create a third schedule to run all schedules so that you can create a single task in Task Scheduler.
>
> Or you can create multiple tasks in Task scheduler if you want to schedule the polling schedules at different times/schedules.

RUN SCHEDULE IN PROCESS SCHEDULER TO TEST

If you have configured Process Scheduler to send an email "Always", you will receive an email similar to the one below.
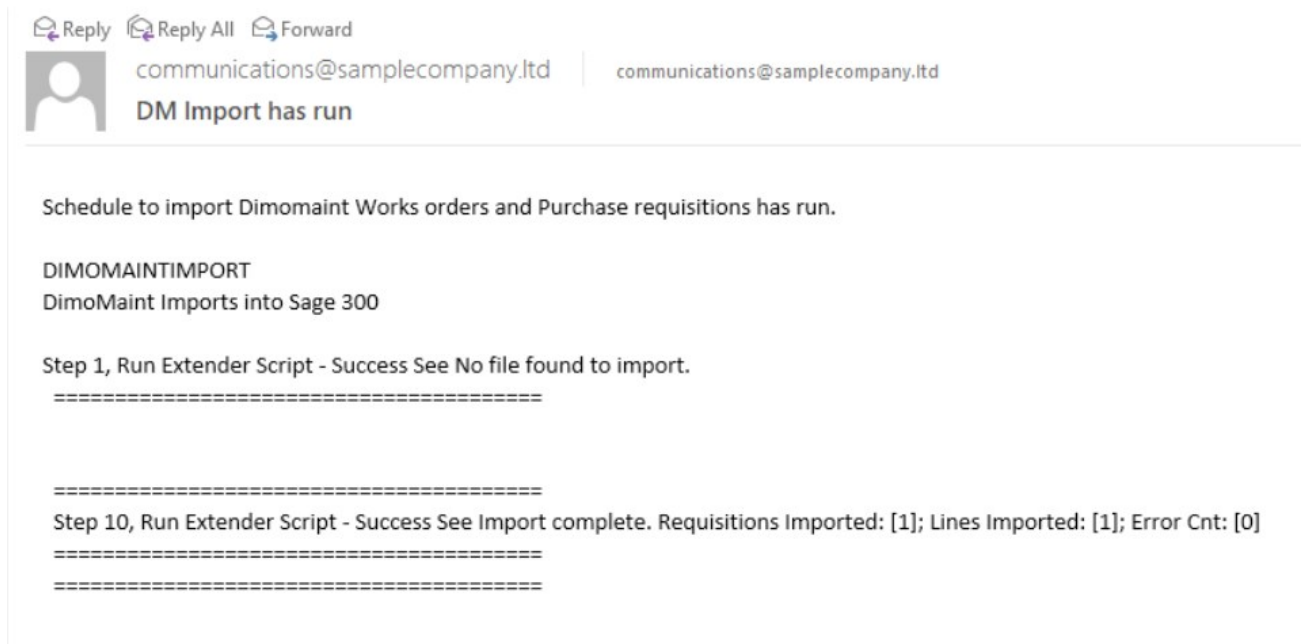
Configure Windows Task Scheduler

Task Scheduler below

TASK SCHEDULER

Configure Task Scheduler to run the import.

Refer to Process Scheduler documentation for more details.

Configure Process Scheduler to run the poller automatically
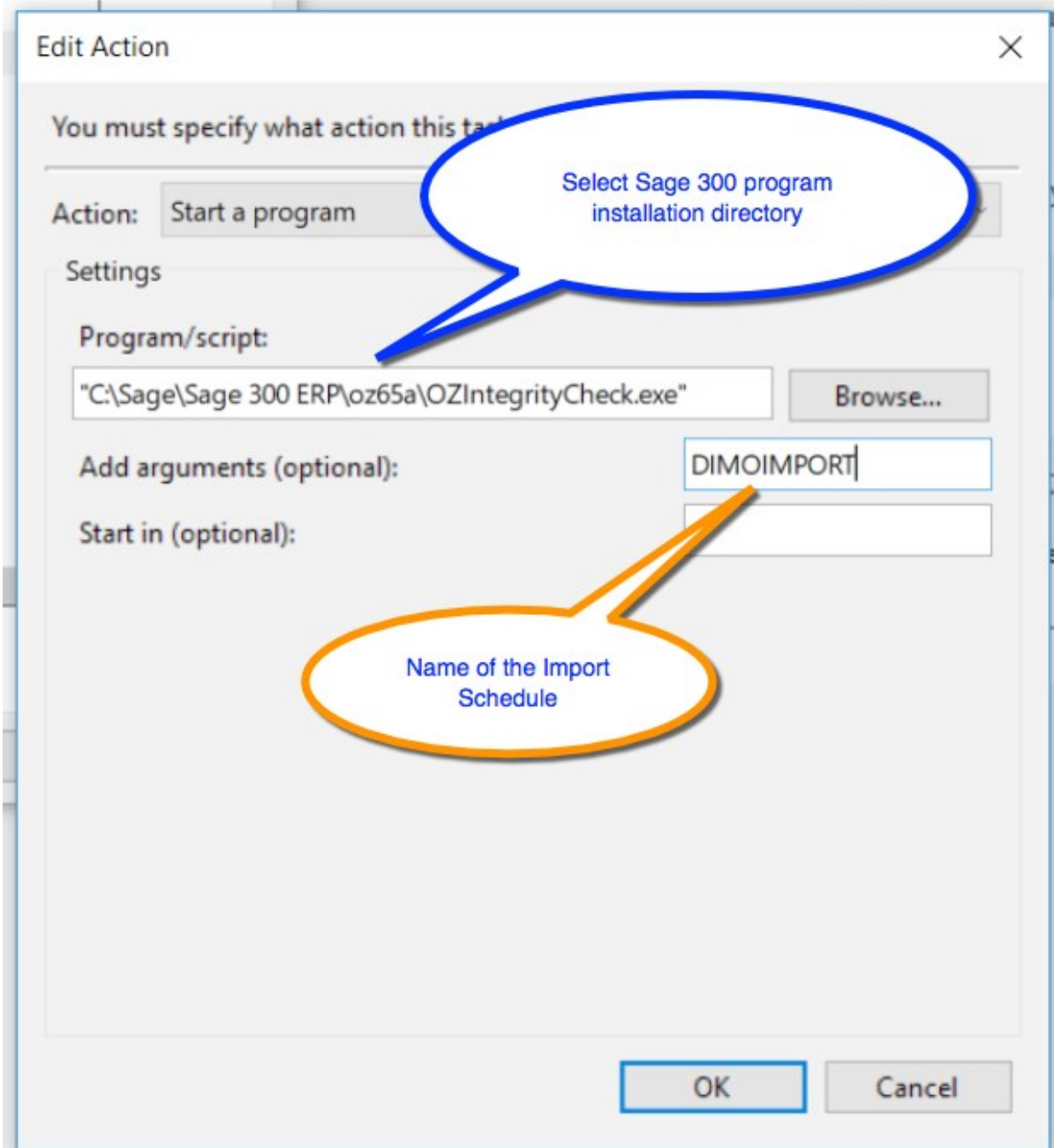
Use Remote Action Form

When the workflow starts and the step includes a Remote Action, the configured users receive an email with a one time link to the Remote Action website.

Follow the hyperlink to open the form and complete the request.

The approval form that can be completed from any computer, phone, or tablet connected to the internet.

The form may include:

- One or more Action buttons, such as Approve, Reject or Acknowledge
- A comment field
- An amount field, for example the approver may enter a new amount to replace the requested amount.

Components of the form are described here: Customize Remote Action Form on page 33

When you submit the form with one of the Action buttons, the form is completed and the website updated with the result of the submission.

To update Sage 300, the Poller needs to run. It can be run manually or automatically using Process Scheduler.

For details, view Poller script: how it works on page 35.

REMOTE ACTION ADMIN

Token

To use the service, you need a valid token.

When the token is saved, you only view the last few digits.

A token is equivalent to an activation code for the Remote Action service. It represents the username and password to your company's namespace on the Remote Action service.

If you don't have a token, contact your Sage 300 Business Partner to subscribe to the Remote Action Service.

The token will be generated with the Sage System Manager company name used in the Extender Activation Code.

When you have a valid token, your Namespace is displayed with the number of monthly requests included in the subscription.

Configure Remote action service

You can enter the path to the logo you want to show on the form. The website address needs to be a https link.

> **Tip:** The logo will be automatically shown on the remote action form. If using the form on a mobile device, make sure the log is not too wide.

You can also save the path to a stylesheet to be used by Remote Action service when building the form.

Optionally, in Support Email, enter an email address the approvers can contact for questions on using the form.

For details on the remote form, refer to Remote Action Message Templates on page 11

view requests usage
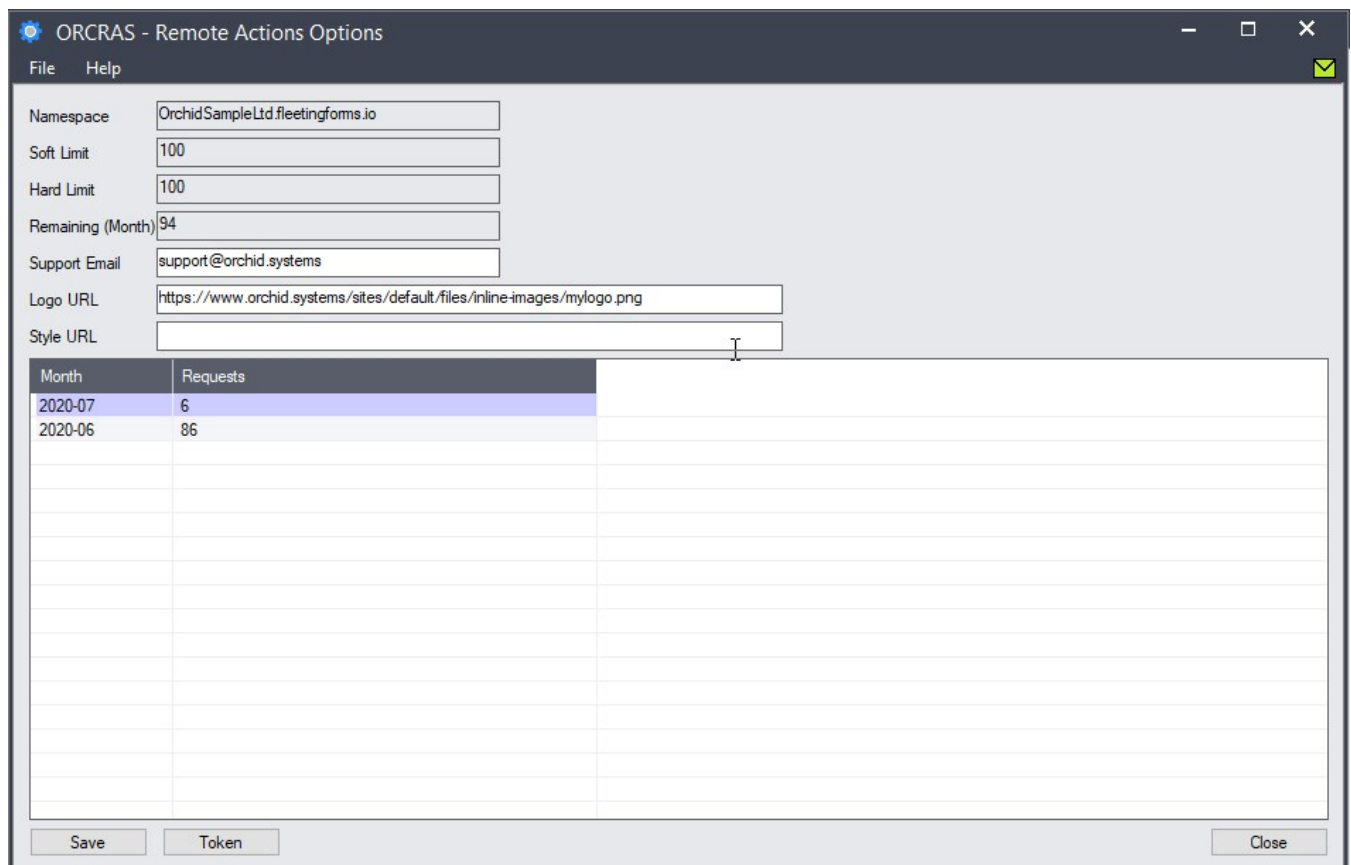
The screen shows how many actions you are entitled to and how many have been used in the current month.

Each time a form is generated, a request is used. Forms are generated when a workflow step starts and includes a workflow action calling the Remote Action Service to create a new form.

Warning! Unused Requests expire and do not roll over from one month to the next.

Note: The poller script connects to the Remote Action service to retrieve the completed forms, but doesn't consume any action.

Remote Action Options

TROUBLESHOOT REMOTE ACTION

Configuration and SETUP

1. Ensure the form message template has <body> tags if using HTML
2. Email notification must include {FORMURL} variable

Running

Review the Process Scheduler Logs regularly in case the remote forms have been approved on the console or by another user before poller runs.

In some cases, if the email is not sent successfully, you may need to progress the workflow on the console in Sage 300.

Technical Info on Remote Action

CUSTOMIZE REMOTE ACTION FORM

1. Logo

To add a logo to the form, go to the Extender> Remote Action > Remote Action Options and enter the website link to where the logo is available. Refer to Configure Remote action service on page 30

2. Form Buttons

Buttons on the forms are configured in the Workflow Template, where you add the Remote Action to a step.

The standard actions /forms have 2 buttons: Approve or Reject. You need at least one button for the form to be useful.

Progress To Steps and Form Buttons: Use parameter 4 to set the name of the Progress -to actions linked to the Approve and Reject buttons.

Labels and progress-to actions are passed as a comma separated list of button label, progress to step name pairs. To render three buttons, Allow, Cancel, Deny that progress to steps Allowed, Canceled, and Denied, provide the following argument:

<u>Form-buttons-actions</u>

```
# Example 1 - Approve and Reject Step, comma separated, Label=StepName
OK-Approve=Approve, No-Reject=Reject

# Example 2
Allow=Allowed,Cancel=Canceled,Deny=Denied
```

Important! Progress to Steps need to be valid steps in the workflow template.

3. FORM CONTROLS - Fields to capture user input -

Defined in the workflow action script. Some actions don't include any fields.

> a. For the 3 standard configurator actions, refer to Add Remote Action to Workflow Template on page 13
>
> b. To create a new form, refer to : Amend Remote Form on the facing page

Requested value is used to default the {APPROVALAMOUNT} field on the form.

User input from form-controls end up as Workflow values after Poller is run. {APPROVALCOMMENT} and {APPROVALAMOUNT} for the standard actions.

4. Form Title

Form Title comes from the Message Template Subject. It can include variables that are replaced by the Sage 300 value at runtime.

5. Form text, including values from Sage 300 records

> a. Configured in the Message template
>
> b. Default Form message template is included in remoteaction.vi module
>
> c. Typically one for each approval type so that you can add fields fromview the workflow is attached to

6. Form style

You can use HTML in form. Only most common HTML tags have been whitelisted at this stage, such as <b>, <i>, <strong>

Contact support@orchid.systems if you are trying to use some HTML tags that don't work.

You can use stylesheet defined in Remote Action Options. Refer to Configure Remote action service on page 30

POLLER SCRIPT: HOW IT WORKS

The RemoteAction.poller connects to the Remote Action Service to retrieve and process completed forms. For each form, it progresses the workfow 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.

> **Note:** The poller script connects to the Remote Action service to retrieve the completed forms, but doesn't consume any action.

To configure Poller and Process Scheduler, refer to Configure Process Scheduler to run the poller automatically on page 24

AMEND REMOTE FORM

You can configure some elements of the remote form in the Message Template. Refer to Remote Action Message Templates on page 11 for details and examples.

> **Requirement!** To create new remote forms requires Extender Developer Edition.

Refer to https://remote-actions.readthedocs.io/src/customize_a_form.html# for details.

Customize a Form

> **Note:** If you need to customize the form, first create a copy of one of the standard Remote Action scripts workflow scripts. If you amend the standard actions, your changes may be overwritten in a future product update.

Change field properties:

You can change the field label: for example, change "Comments" to "Notes"

In Configurator actions, fields are set to Required.

You can change the setting 'required' : False

Add new fields to the form.

Field types used in the Configurator actions include Text and Amount.

To add a new field, give it a name and set its properties.

Dynamic Initial Values

You can change the initial value

<div>

RemoteAction-Form-Control

```
# if you change the name property, create a workflow value with the same name
form_controls = [
                {
                    'name': 'APPROVALCOMMENT',
                    'type': 'textarea',
                    'label': 'Comments',
                    'required': True,
                }
            ]
```

</div>

Technical Info on Remote Action

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
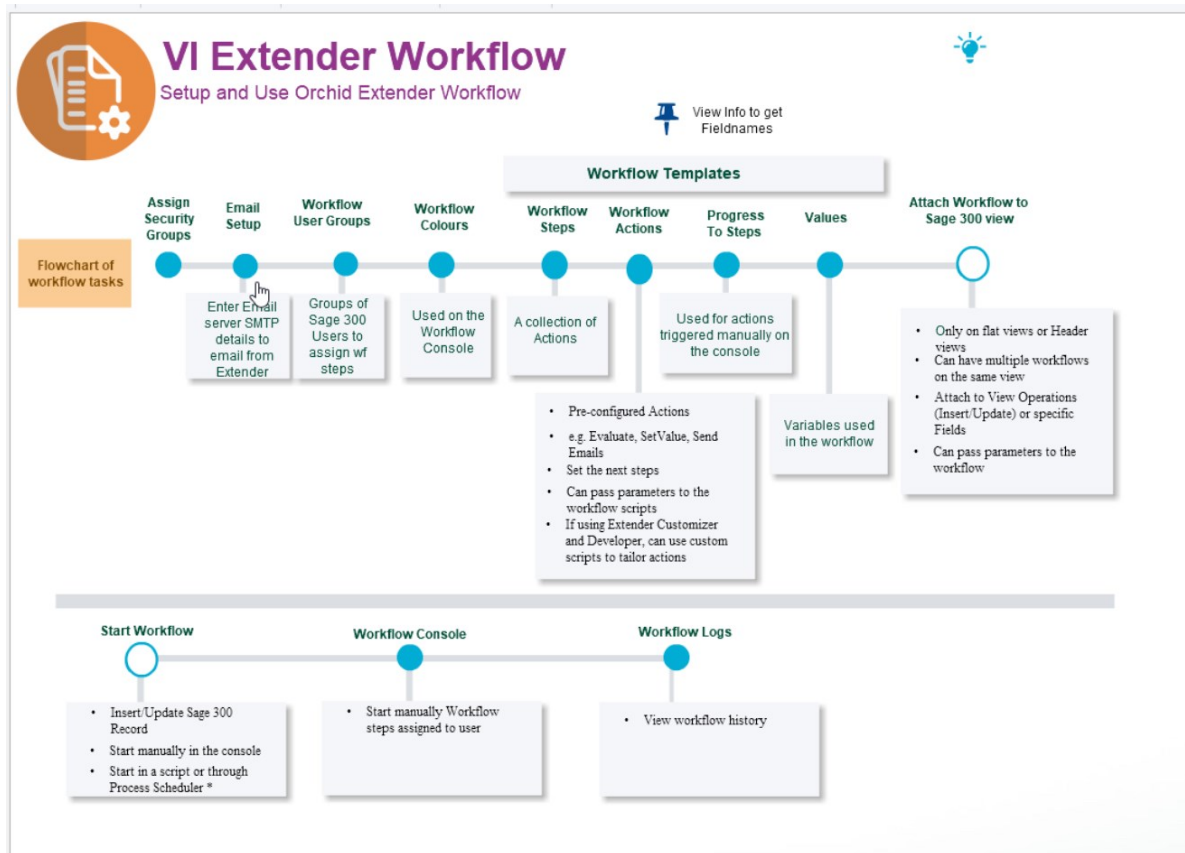
SETUP WORKFLOW IN EXTENDER

Step 1. Use the icons in the Extender Setup folder to configure workflow:

Step 2. Setup Extender **Adding Security** in Sage 300 Administrative Services.

Step 3. Configure Workflow Users.

Refer to Extender License

Step 4. If you want the workflow to send emails,

- Configure Extender emails . Refer to Options on page 64
- 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 41

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

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 **Workflow Users Overview**,

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 toSage 300 screens
- Refresh the Tray

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 Tutorials**

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 Tutorial - Setup a Workflow Template for A/R Credit Limit approvals

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 Tutorial - Setup a Workflow Template for Retail O/E Orders approvals

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 Workflow Users Overview,

You configure which screens can start workflow in Information Manager Setup > I/M Options.

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

See example Tutorial - Setup a Workflow Template to set a Customer On-Hold and email the sales person.

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

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 Tutorial - Setup a Workflow Template to set a Customer On-Hold and email the sales person.

- 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 approvals - Workflow template tutorial.

> **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 and Scripts

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 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.

> **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

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

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 work-flow.

> **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 Work-flow User Group	Select a user group. To configure a new user group, refer to Workflow User Groups.	
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. **Tip:** You can add a Workflow Action to assign the workflow to ADMIN if the first AssignUser action returns False	

AddParameter	Stores input collected in the workflow Parameters are added to the Values of the workflow	Name: can be used in other actions (such as set field or sendEmail) Parameters Label: description user will see when prompted Type: Parameter types can be: > text(size=xx) > integer > number.0 - eg 10.1 > number.00 - eg 10.12 > number.000 - eg 10.123 > user - a user or user group > date Default Value: Optional - Parameter values (as entered by the user) are saved as workflow values and available on the console. Parameters can be added to email templates. Use {PARAMNAME} in the email template.	
AskForParameters	Step will stop at that step and wait for user input. True Action should be the action you want to perform when user has submitted the input.	No parameter. Execution continues at the AskForParameters True Action step #. If the user selects "Cancel" on the UI, the action returns False. **Tip:** Configure the actions in the template if you want different process flow if a user enters input or clicks Cancel. This action is not active when the workflow is progressed through a script, for example the Remote Action poller.	
AssignColour	Assigns a color to	Select a color using the Finder.	

	a workflow instance in the Wokflow Console	To configure colors, refer to **Workflow Colours**	
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 **Notes:** 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-erateAPPay-mBatchListing	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**	
GetOptField	Used to read Optional Field Value to use in workflow	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	

		Parameter 2 = Optional Field Name	
		Parameter 3 = Workflow Value	
GoToStep	Go to another work-flow 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 oper-ation.	This only applies to Master file and Transaction views. When a batch is "Deleted", the status is set to "Deleted", the Delete view oper-ation is not run. **Tip:** 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 oper-ation	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. **Tip:** Use the Number of Entires field on the Batch if you need to trigger a work-flow when a batch is inserted (Number of entries = 0)	

IsUpdate	Returns True if the workflow is part of an UPDATE View operation (vs an INSERT)	Can be used when a workflow is attached to an UPSERT View operation or a View Field. You may have different actions when a new ON HOLD order is inserted vs when an existing order is updated to "On hold"	
Reassign	Reasssign a user to another user/group Displayed in the workflow console.	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. **Example:** If you want to send an email when a workflow is reassigned, add your own Reassign Step.	
PostBkEntry	PostBkEntry	The PostBkEntry posts the bank entry configured in the Workflow Instance ID. Use in a workflow template associated with the Bank Entry View. Approver needs rights to post Bank Entry in Sage Security	
PostBatch	PostAPAdjustmentBatch PostAPInvoiceBatch PostAPPaymentBatch PostARAdjustmentBatch PostARInvoiceBatch PostARReceiptBatch PostARRefundBatch PostGLBatch ProvPostGLBatch	The Post_Batch actions post the relevant batch. Batch number entered as Parameter 1. The approver needs rights to Post the batch in Sage security.	
SendEmail	Sends an email to	Parameter 1 = Email template - You can	User

	the user / user group or email address configured in Parameter 2.	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.	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 attach-ment	Extender Message template - Can include variables from the view the work-flow is attached to Email address configured in Parameter 2: refer to SendEmail action above. Set the path and filename of the attach-ment in a Workflow value and enter the workflow value name in P4. Ensure the path is set to UNC format and the users have access to it.	
SendEmailToStarter	Sends an email to the user who star-ted 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.	Parameter 1 is the field name that is used as the KEY field in the vid-rilldown.ini file. Parameter 2 is the value you want to set. For example {IDCUST} for the customer number from an ARCUS workflow. For details, refer to Drilldown in work-flow.	
SetField	Sets a configured field to a value. Field can be any field on the view that the Workflow will be attached to	• Use Extender Extender View Info to identify the Field name • e.g. AMTCRLIMIT for an A/R Customer workflow • Add the field name between curly brackets {}. • Use values defined in the workflow or a set value (e.g. 1 to set OnHold to true/se-	

		lected)	
		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.	
		Example: To prevent a change to the credit limit, you use SetField to restore the value to the previous value using SetField and {ORIGINAL_AMTCRDLMT}	
		Note: You can update 2 fields with SetField . This is useful when updating SalesPerson and SalesPercentage on OE Order.	
SetOptField	Set an optional field value	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	
		Parameter 2 = Optional Field Name	
		Parameter 3 = Optional Field Value	
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 workfow instance. Displayed on the console, on the worklfow logs and in the workflow reports.	
SetValue	SetValue will add a row to the workflow instance values grid.	Parameter 1 is the field name that you want to give to the Value.	
		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.	
		Use the field name between curly bracket to store the new amount (e.g. {AMTCRDLMT}	

		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.	
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.	Parameter 1: Text to display. **For information** The message can include Variables, such as Workflow fields or Values from the workflow. 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. field: "{PROGRAM}" operator: "=" value: "AR1300" (RotoID of the screen that should display a message).	
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.

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 and Scripts) and on the Workflow Template Action setup (when using a SendEmail action) (for details, **Workflow Templates - Screen Guide on page 41**).

> **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 on the facing page

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
```

MESSAGE TEMPLATE VARIABLES

A variable is a string of characters in an email message or IM Note that is replaced with a specific term or value when the message is sent or the I/M Note is created.

> **Example:** In an email message to the Accounts Receivable manager where a customer's credit limit has been changed by the Sage 300 user "Anne", the line "the customer's credit limit has been changed by {USER}" will be replaced with "the customer's credit limit has been changed by ANNE" when the message is sent.

Common Message Template Variables

You can use the following common variables in all email messages and I/M Notes

Value to Insert	E-mail Message Variable
The type of event : "Insert", "Update", "Delete"	{OP}
The user id who triggered the event/Logged on user	{USER}
Sage 300 Database ID	{ORG}
Sage 300 Company Name	{CONAME}
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. Refer to Poller script: how it works on page 35	{RUNSER}
The year of the event being triggered	{YYYY}
The month of the event being triggered	{MM}
The day of the event being triggered	{DD}
The hour of the event being triggered	{12HOUR} or {24HOUR} {HOUR} is equivalent to {24HOUR}
The minute of the event being triggered	{MINUTE}
The second of the event being triggered	{SECOND}
Use 12 hour time format and Select AM/PM	{12HOUR} to show a 12 hour time format {AM} prints either "AM" or "PM" {am} prints either "am" or "pm"
Use 24 hour time format	{24HOUR}

> **Example:**
>
> If the change was done by ANNE by an Update on 21st December 2014, at 14:05:55, the following email or IM Notes template
>
> > This change was done as part of an {OP} by {USER}.
> >
> > The change was done on {MM}/{DD}/{YYYY} at {12HOUR}:{MINUTE}:{SECOND}{AM}
>
> Would result in:
>
> > This change was done as part of an update by ANNE.
> >
> > The change was done on 12/21/2014 at 2:05:55PM
>
>
> To use 24 hour format,
>
> The change was done on {DD}/{MM}/{YYYY} at {24HOUR}:{MINUTE}:{SECOND}
>
> The change was done on 21/12/2014 at 14:05:55

View Fields for Message Template Variables

You can use any of the View Fields to which the event has been attached in all email messages and I/M Notes created by Extender. To include a field in the subject of the email and/or in the body of the email/IM Note , use the field name in braces/curly brackets "{}".

Furthermore, to include both the before the event and after the event field values, you can prefix the field name with "ORIGINAL_"

> **Note:** To use the original values in a message template used in the workflow, you need to set some variables in the workflow values panel (on the bottom right hand-side in the workflow template setup).

> **Example:** When using the AR Customer view (AR0024 / ARCUS), you can use this to include the Customer Code and Customer Name values, as well as the Before and After value for the Credit Limit. Customer {IDCUST} {NAMECUST} credit limit has changed from {ORIGINAL_ AMTCRLIMT:%d2.2} to {AMTCRLIMT:%d2.2}

> **Tip:** To see the available View Fields for any view, use Message Template Variables to see a list of available views per module, and fields per view.

Note:

You can control the text and number formatting in Message Templates used to create I/M Notes.

NUMBER FORMATTING:

Number of decimal places for Number values:

Variable	Comment	Example
{FIELD:d2}	number with commas, specify number of decimal places after d	{AMTCRLIMT:d2} = 24,000.00
{FIELD:D0}	number without commas, specify number of decimal places after D	{AMTCRLIMT:D0} = 24000

TEXT FORMATTING - FOR I/M NOTES ONLY:

Variable	Comment	Example
{FIELD:%C}	Converts the text to Uppercase	{NAMECUST:%C} = MR RONALD BLACK

USING AR CUSTOMER VIEW (AR0024) AS AN EXAMPLE

Value to Insert	E-mail Message Variable
Customer ID	{IDCUST}
Customer Name	{NAMECUST}
Credit Limit – new value	{AMTCRLIMT:D2}
Credit Limit – original value before the change	{ORIGINAL_ AMTCRLIMT:D2}

For example, if the change was done on customer 1200 Ronald Black by amending the credit limit from 19,000 to 20,000 by ANNE, the following :

The credit limit for Customer {IDCUST} {NAMECUST} has changed from {ORIGINAL_ AMTCRLIMT} to {AMTCRLIMT}.

Would result in:

The credit limit for Customer 1200 Ronald Black has changed from 19000 to 20000.

Workflow fields available in Message templates

When using a Workflow. SendEmail action, values from the workflow instance are available to use.

Some values are populated when using SetValue in the workflow templates. Some values are updated automatically by the workflow, when the workflow steps are invoked.

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}

All view fields for the views attached to the workflow -

View fields can be made available in the workflow templates in 2 ways:

1. Workflow is attached to a view in Extender Setup > View Events and Scripts

2. Use the SetValue action, Field= {VIEWID} and Value= AR0024 (use Extender View Info to get the View ID that you require)

All values configured in the workflow template.

Values can be added to the Values section of Workflow template if you need to set a default value.

Values can also be set in any action, using SetValue The value is then stored with each instance of the workflow, for each step.

Use {VALUENAME} in the Message template to include the workflow instance value.

To use Original and new values in a message template used in the workflow:

To use the original values, you need to set some variables in the workflow values panel to store the original value(on the bottom right hand-side).

Test example with EFT Vendor EL0006

1. Create a value in the values panel. I used ORIGINALEMAILTO set it to {ORIGINAL_EMAILTO}. This saves the original value before the first step of the workflow starts.

2. Optionally, if you need to use it in the workflow, you can use the value in the Values panel.

3. In Email templates, you can use both values, the one in the Values panel and the one in the workflow action

## Workflow Parameters

If you use the AddParameter and AskForParameters actions in a workflow templates, users will be prompted for input before the next action takes place.

You can use {PARAMETERNAME} in the email template.

Action = AddParameter, Name= HoldReason, Label = Reason customer put on hold, Type = text(sizee=60), followed by AskForParameters action.

Remote Action

Include {FORMURL} in the Email template to include the unique link to the Remote Action form to progress the workflow.

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 configured to use Python 3.4

Staring with Extender PU9.00, users have the option to use Python 3.8.8.

> **Note:** This is particular relevant for developers who want to use Python packages that only support more recent versions of Python.

> **Important!** Changing the Python version applies to all scripts in all Sage 300 databases setup on the same server. Make sure you have tested all customizations in all databases on a test environment before switching to the new version in your production environment.

If you select Cancel after reviewing the warning messages, the version doesn't change.

When upgrading from Python 3.4 to Python 3.8.8

Extender doesn't install the following libraries with Python 3.8.8: requests, requests_oauthlib and urllib3.

If you are using those libraries, you need to install them manually or use the @ pip functionality in the script to download the required libraries.

Refer to using @pip functionality in the scripts. Importing Python libraries in a script

Email Tab: enter Email server details

For details, refer to Email Tab

Email Server / Username and password:

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:** To add port 587 to the SMTP server, add `:587` after the server address - `smtp.office365.com:587`

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

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.

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