HCL Domino Volt

Workflow

Presented by James Kneip
Leap/Volt Services Consultant, SME

And Ken Krause
Understudy to James ☺

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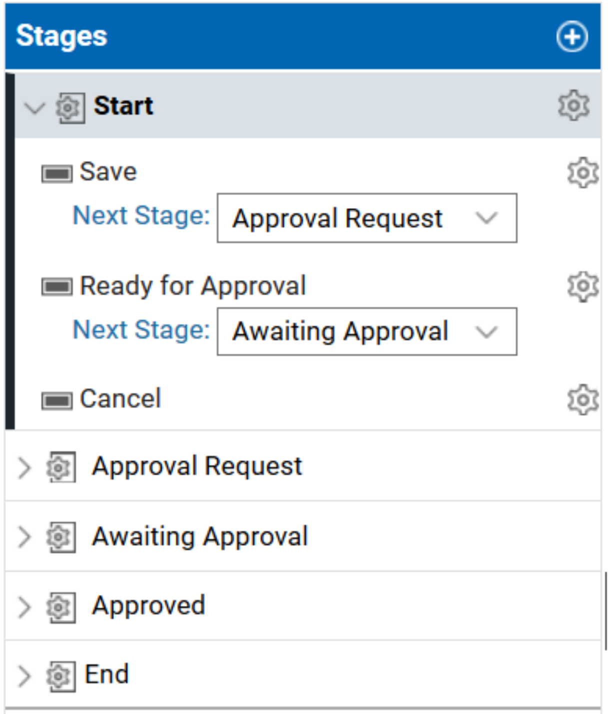
Agenda

- Understanding Workflow Concepts
- Stages
- Stage Action Buttons
- Stage Activities
- Conditional Workflow
- Access Control

Workflow Concepts

HCL Domino Volt takes an approach to exposing workflow capabilities by using the concept of a Stage, where a Stage describes the following:

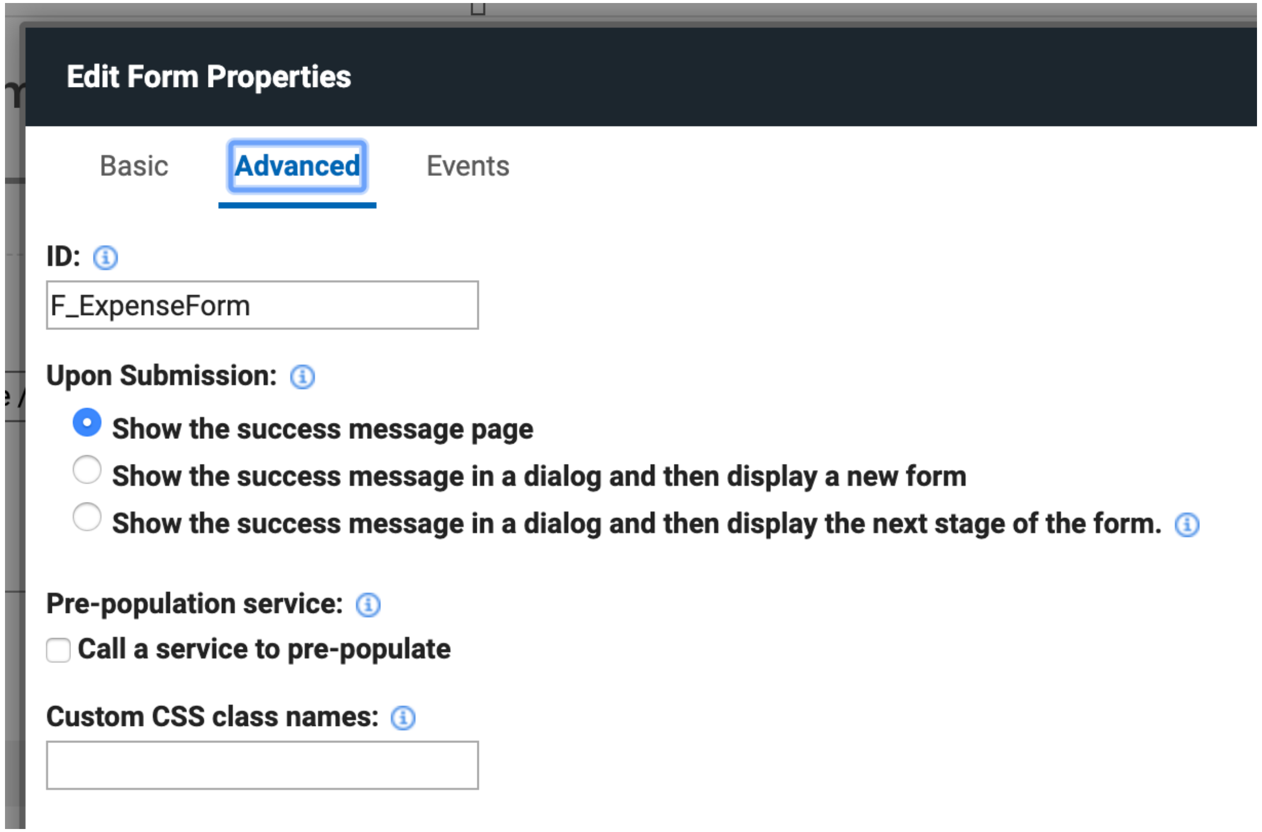
- A Stage describes the behavior of the form while it's in the stage (i.e. what portions of the form are visible and/or read-only while the form is in this stage).
- A Stage describes the flow, so what other stages can be navigated to from this stage.
- A Stage also describes who has access rights to the form while the form is in the stage.



Workflow Concepts

Each Volt Application can have a different action upon submission:

- Show the success message page
- Show the success message and then display a new form
- Show the success message and then display the next stage of the form



Workflow Concepts

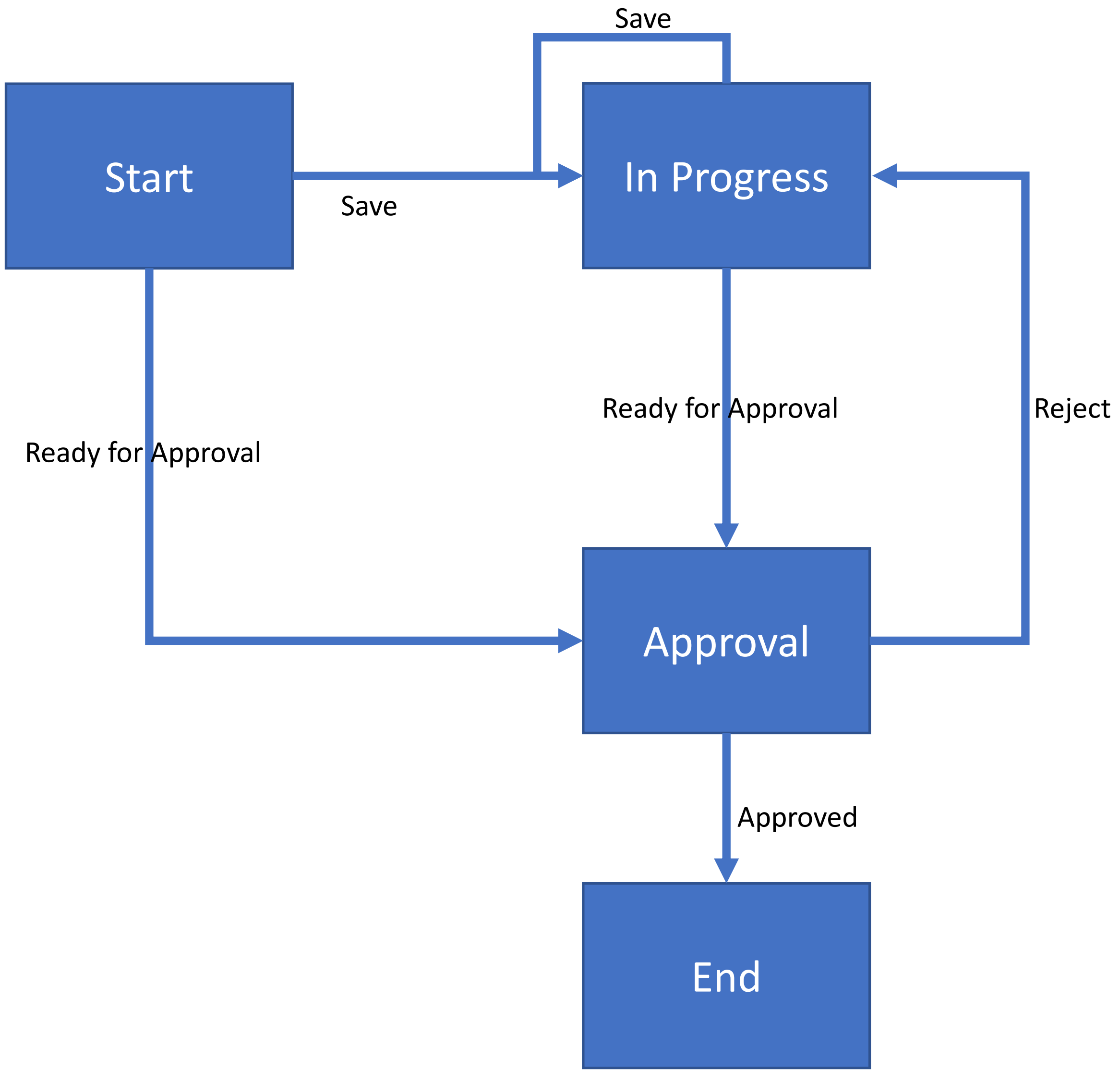
Defining multiple connected Stages creates a workflow, where each stage defines its own form behavior, access rights, and navigation flow.

For example, in Volt terms, a single approval workflow might have an “Approval Request” stage, an “Awaiting Approval” stage, and an “Approved” stage.

Where each of the stages defines its own access rights, navigation flow, and form behavior.

Stage	Form Behavior	Navigation Flow	Access Rights
Approval Request	Request Section: visible Approval Section: hidden	Submit button puts form in 'Awaiting Approval' stage	Employees: create and update
Awaiting Approval	Request Section: read-only Approval Section: visible	Approve button puts form in 'Approved' stage. Reject button puts form in 'Approval Request' stage	Managers: update Employees: view
Approved	Request Section: read-only Approval Section: read-only	none	Managers: view Employees: view

Stages in Workflow



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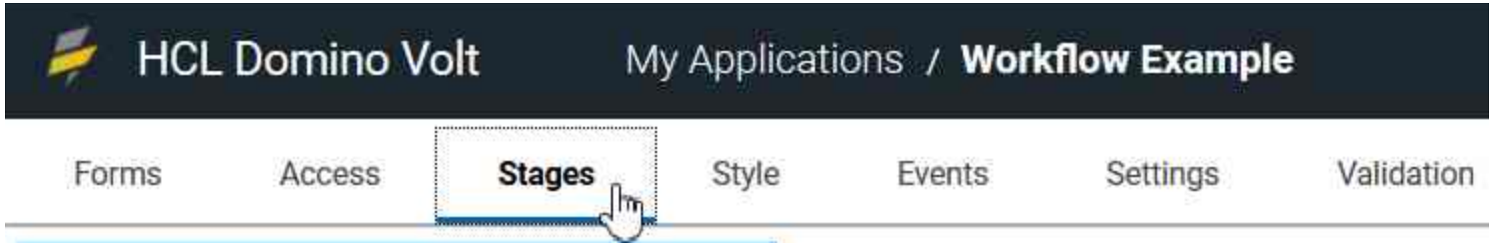
Stages

The **Stages** tab is where you define the form behavior and navigation flow, where the **Access** tab is where you define the access rights.

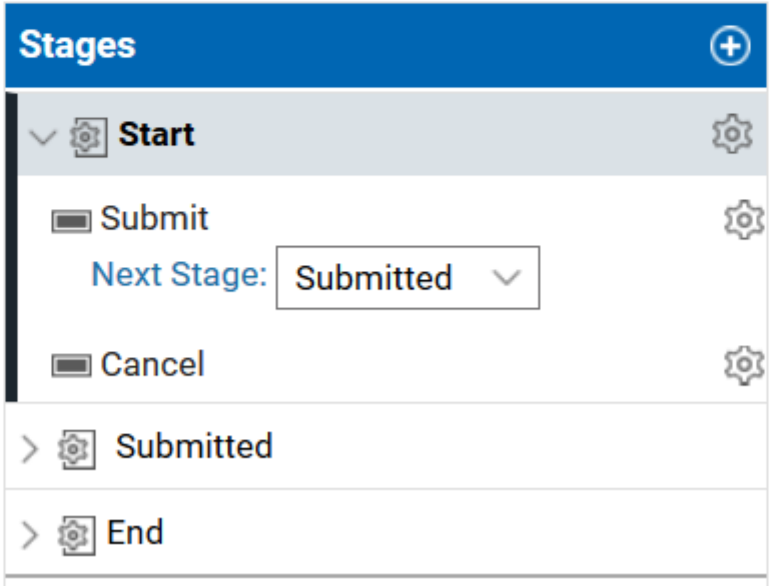
Let's first review the **Stages** screen.   To navigate to the **Stages** screen, you click on the **Stages** tab:



Stages

This screen will look very similar to the Forms tab, but now on the far left, you'll no longer find a palette, but you'll find the currently defined **Stages** for this application.

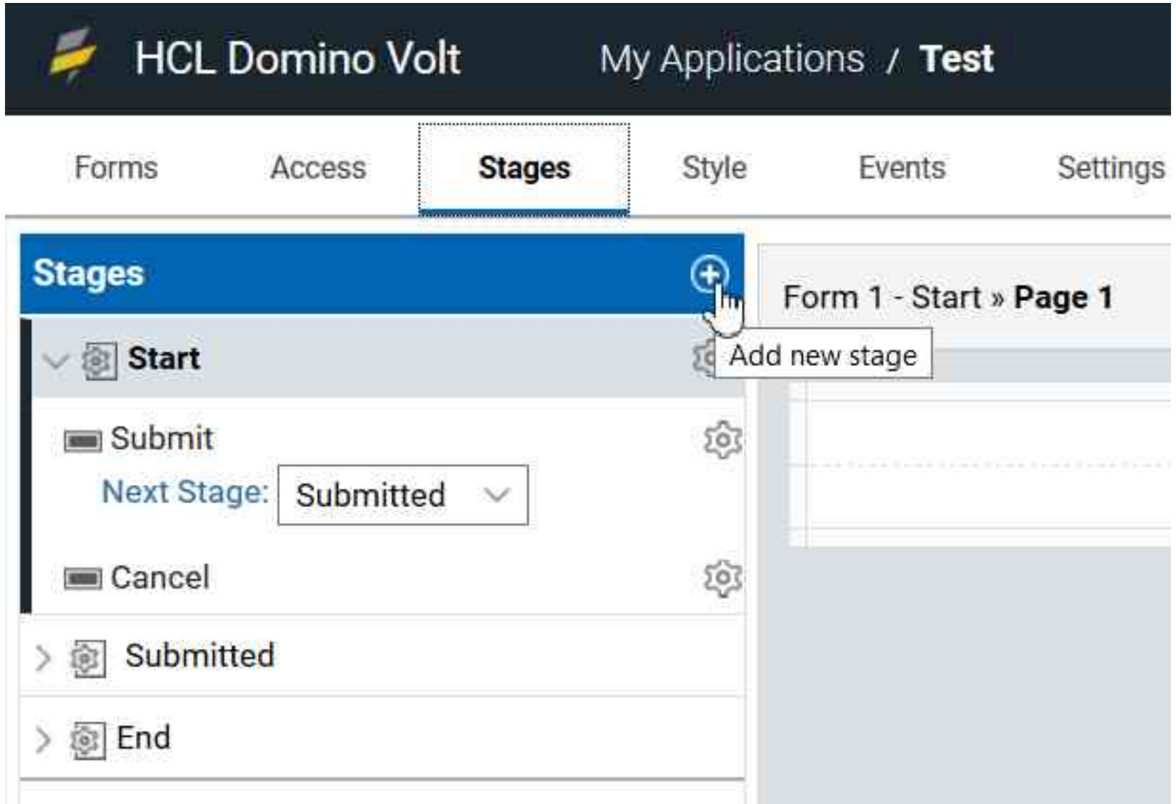
Every application includes a **Start, Submitted** and **End** stage (they are automatically added for you).



- The **Start** stage is defines how the form behaves when its brand new. The **Start** stage is special in that no other stage can transition back to this stage
- The **End** stage defines how the form behaves when the form is complete, and at the end of the workflow. The **End** stage is special in that once the application is in the End stage, the application cannot transition out of that stage – it's workflow is done, and the data cannot be changed

Stages

To add additional stages, click the **Add new stage** button:



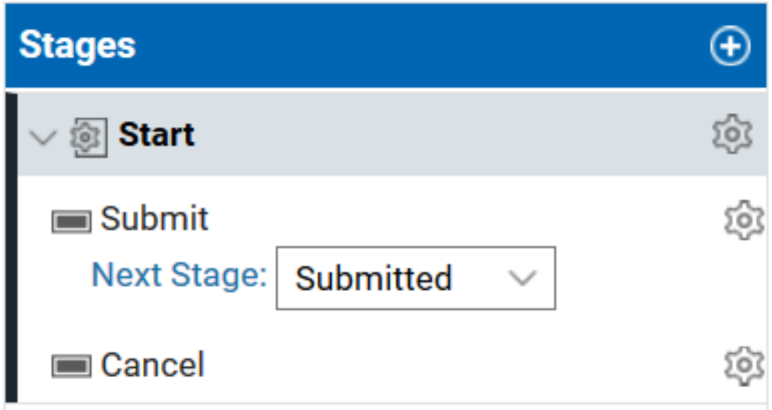
This creates a new stage with the default name of 'New Stage Name'

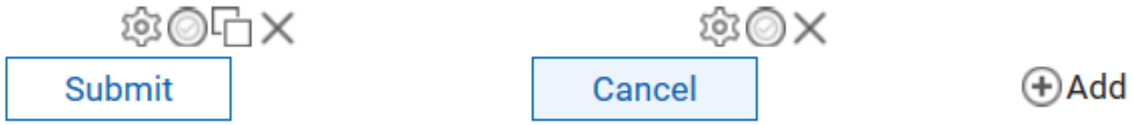
To change the name of a stage, click on the stage and then click on the properties dialog button

Stage Action Buttons

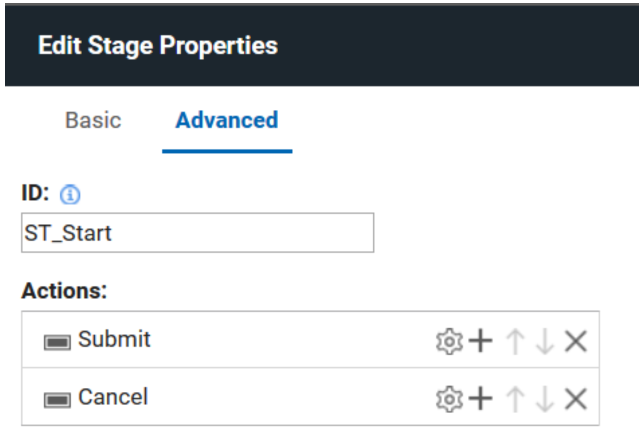
Stage action buttons (i.e. submit) control the navigation flow of an Volt application

When a **Stage** is selected, the action buttons of that stage are shown both at the bottom of the screen and underneath the **Stage** itself. Each stage has its own set of stage action buttons)



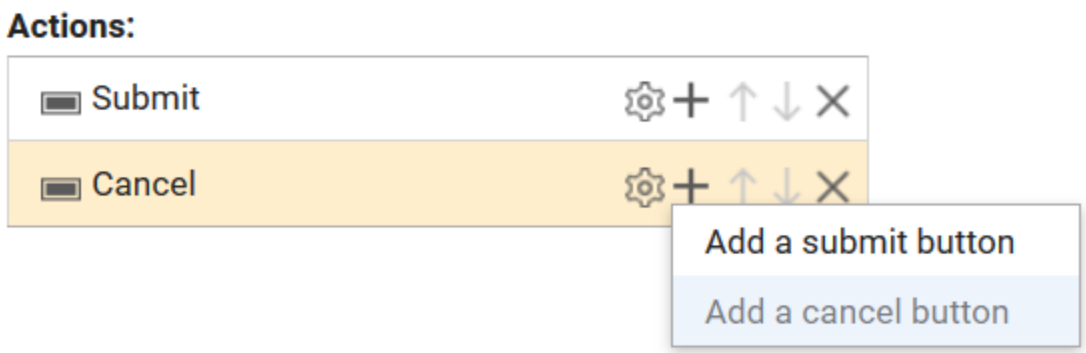


The stage action buttons can also be accessed via the **Advanced** tab of the **Stage** properties dialog

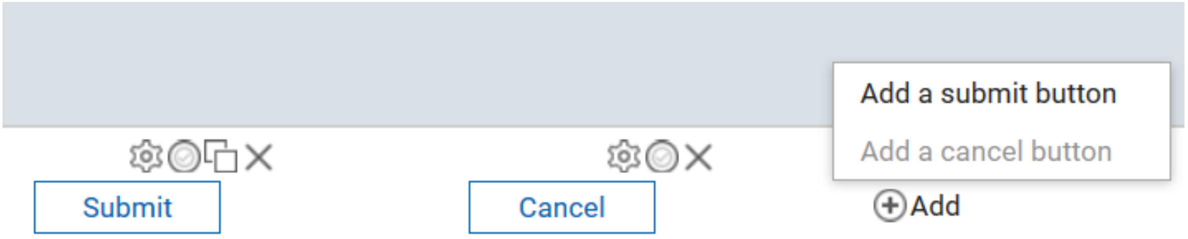


Stage Action Buttons

You can add additional action buttons to a stage, by clicking on the Add action button. You will be prompted for what type of action button to add.



Alternatively, you can add additional stage action buttons via the Add stage button at the bottom of the **Stages** screen



Every stage (other than the End stage) starts with a Submit action button and a Cancel action button.

Stage Action Buttons

When adding a new stage action button, there are 2 different types available:

- Submit: submits the form data and transitions the application to the specified stage
- Cancel: closes the form and does not save the data.

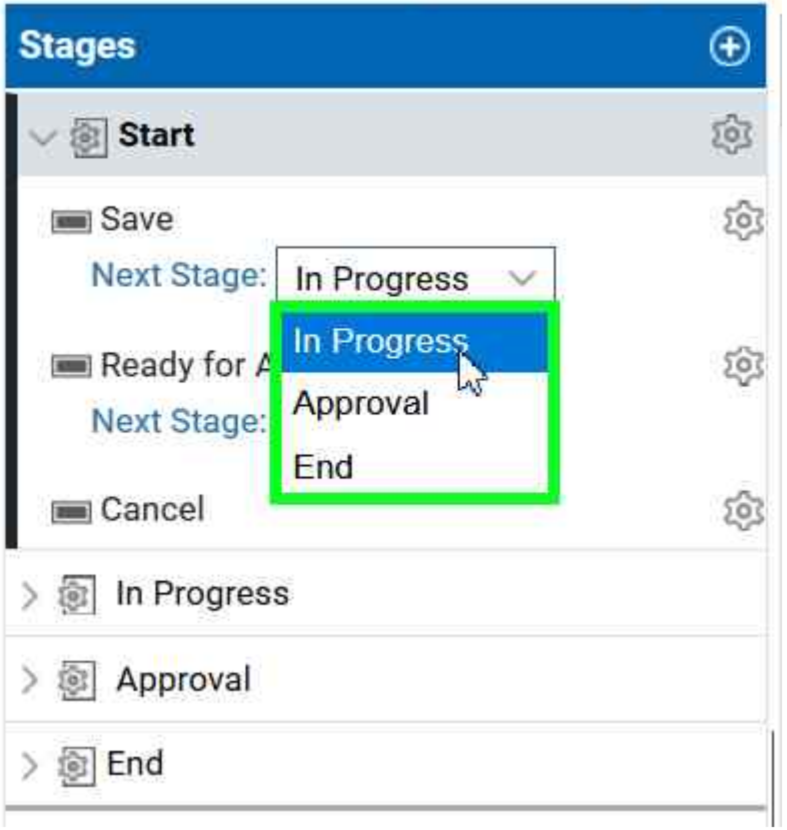
A submit action button specifies which stage the form should go to next if this button is pressed.

You can create as many submit action buttons as you need.

For example, you could have an “Approve” submit button that puts the form into the “Approved” stage, as well as a “Reject” submit button that sends the form back to the initiator.

Stage Action Buttons

To set what stage a given submit action button should go to, choose the stage from the Stage list.



Even though the stages can be ordered in the Stages list, this has no effect on the workflow. The order in which users go through the stages defined in an application is entirely dependent on the submit action buttons and which stage they say is next in the workflow.

Stages

When you select a stage, the **Form UI** in the middle of the screen is made available so that you can specify the form behavior when the form is in that stage.

There are two types of form behavior that can be controlled via this **Stages** screen:

- Editable
- Visible

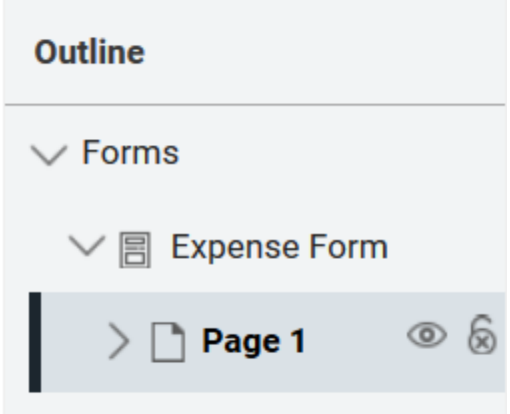
By default, form items are visible and editable. By "form item", we're referring to **fields**, **check-boxes**, **drop downs**, **sections**, etc. Most parts of a form can have their editable or visible property controlled from stage to stage.

Stages

Do this by simply clicking the buttons on the upper right corner of the desired item:

- To make an item read-only in a stage, click on the button that looks like a lock
- To make an item hidden in a given stage, click the button that looks like an eye

The Outline is also made available on the far right so that one can specify the form behavior at the page level. For example, if you wish to make an entire page invisible in a given stage.



Once you've set the form behavior for a given stage, you can select another stage (by clicking on it), and then set the form behavior for that stage.

Stage Action Buttons

There are properties associated to a given stage action button:

- title
- submit activities
- action completion message
- action completion re-direct URL
- next stage
- ID
- hover help text
- custom CSS class names

The Action Completion Message is a message that is shown to the user in a dialog after the submission is successful. If this is left blank, then no message is shown.

The Action Completion Redirect URL can be used to transition the user to another web application after submitting the form.

Stage Activities

There are 2 types of activities:

Send an Email: this is mostly used to notify the user(s) that are supposed to act next on the form. For example, an email notification could be sent to a manager notifying them one of their employees has submitted an approval request

Call a Service: this allows Volt applications to share data with external services

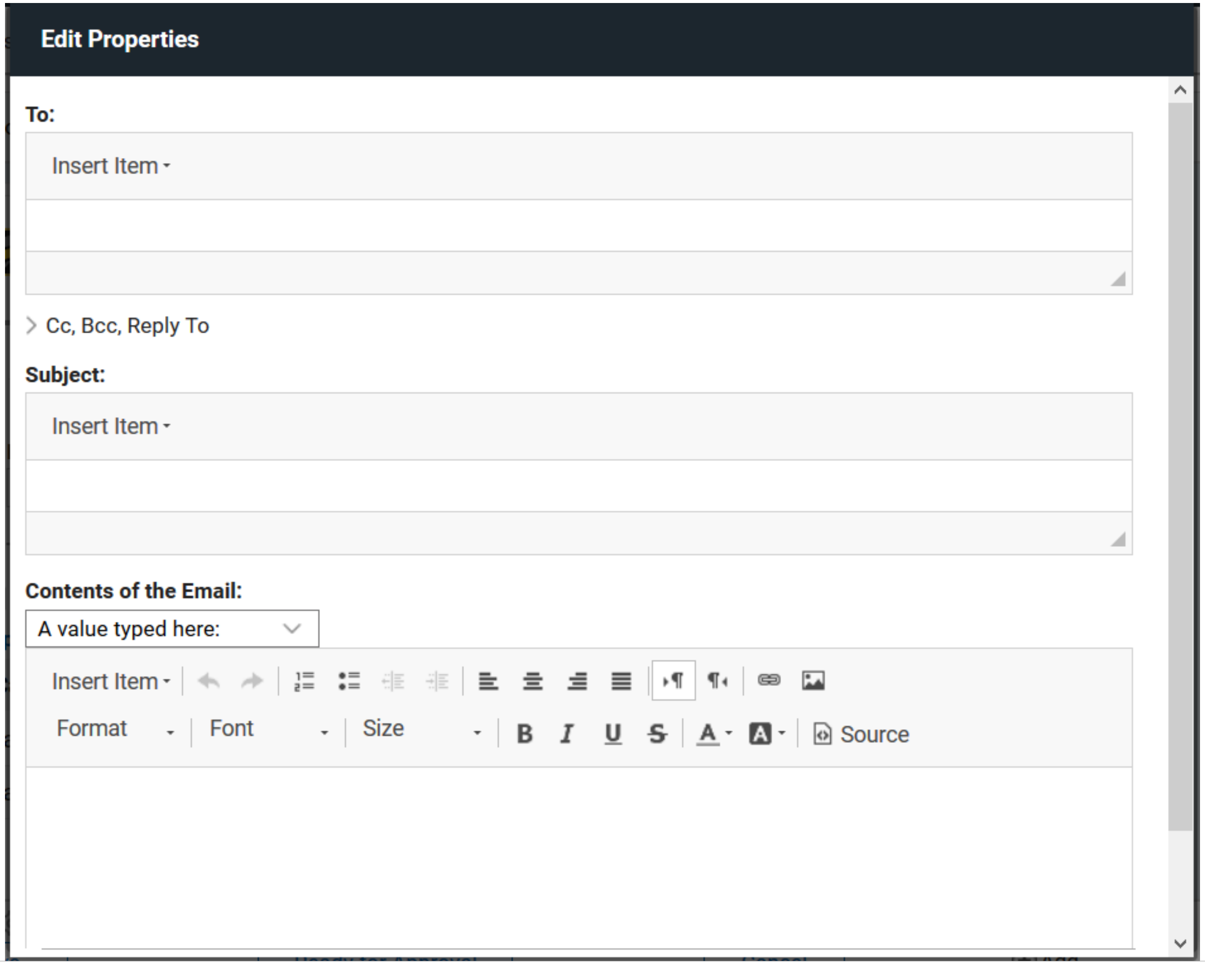
Stage Activities

Sending Email Notifications – Creating an email notification is easy with Volt.

Simply add a “Send an Email” activity in a submit action button, and you'll be presented with the following dialog allowing you to specify the contents of the email.

You can specify the email address of the recipient of the email in the To line, a Subject, and provide rich text content in the body of your email.

You can also use the “Insert Item” picker to allow you to pull information from the form and include it in the email.

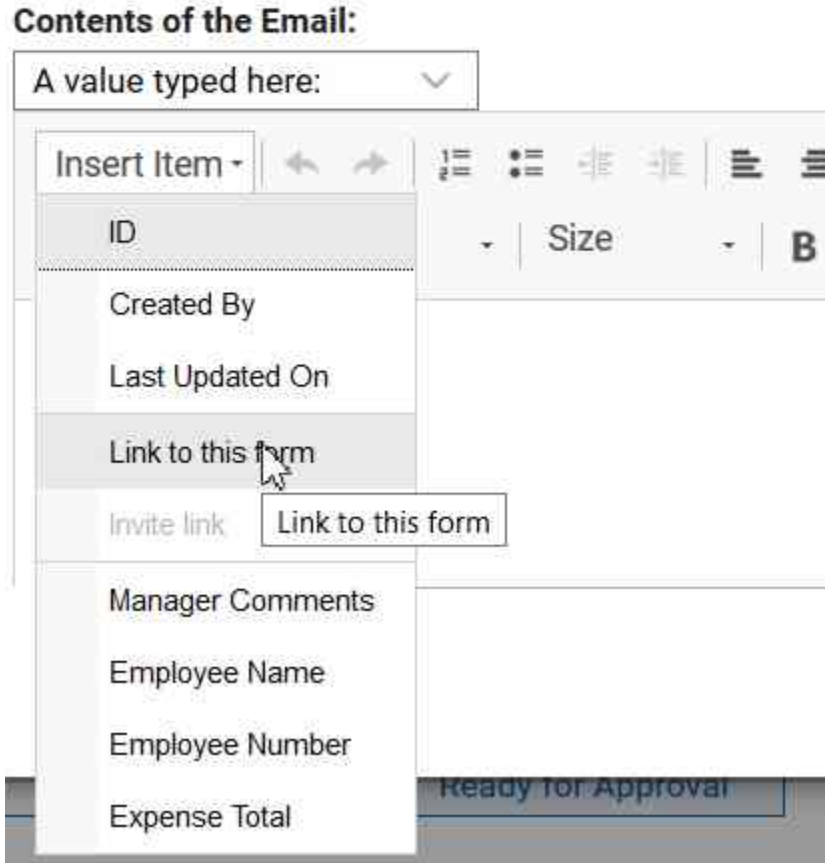


Stage Activities

You can enter custom text as well as choose fields from the form. To do this, use the “Insert Item” picker, and it will be added to the email.

Items pulled from the form are surrounded by { }

You can also include a link back to the form, so the recipient can quickly access the form. This is also done by using the “Insert Item” picker.

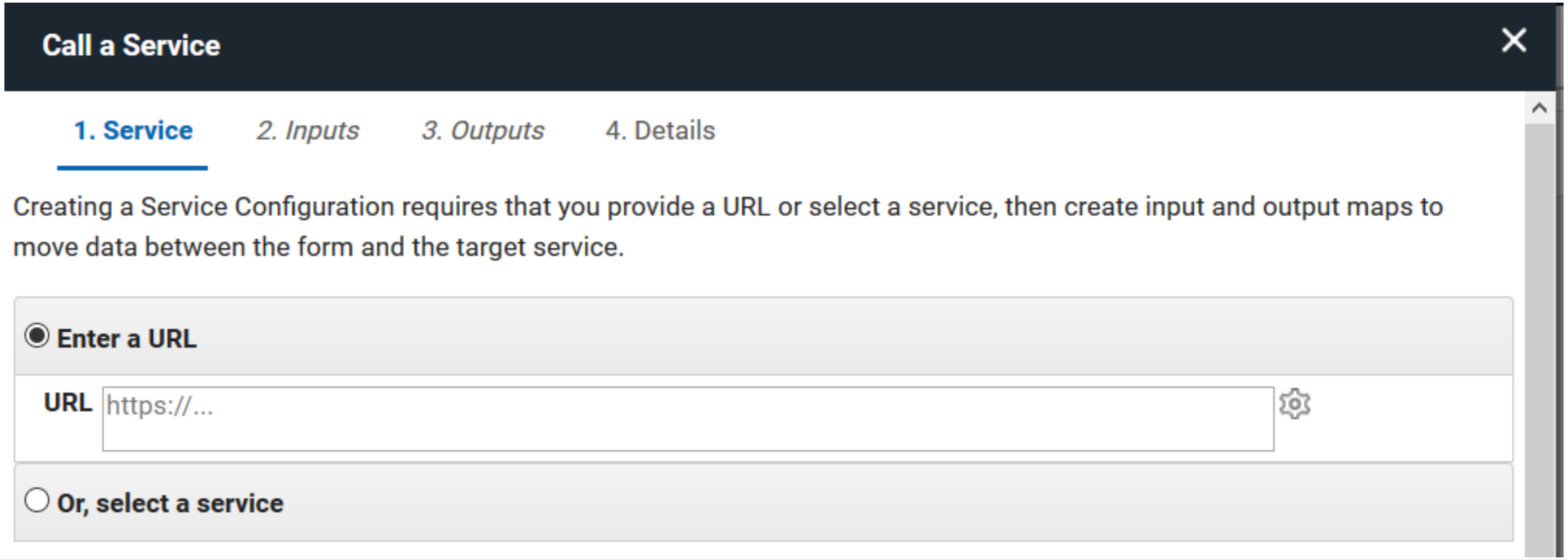


Stage Activities

Call a Service

During a submit action you may want to call a service. The service can be for a third-party, or another VOLT application.

Any service defined as an activity of a submit button will be executed before the form is submitted. If the service call fails, then the form submission will be cancelled.



Conditional Workflow

You have learned:

- Each stage can have many submit action buttons
- Submit action buttons control the navigation of the workflow

Add the 2 facts above with the fact that submit action buttons can also have Rules applied to them, and you can create conditional workflow.

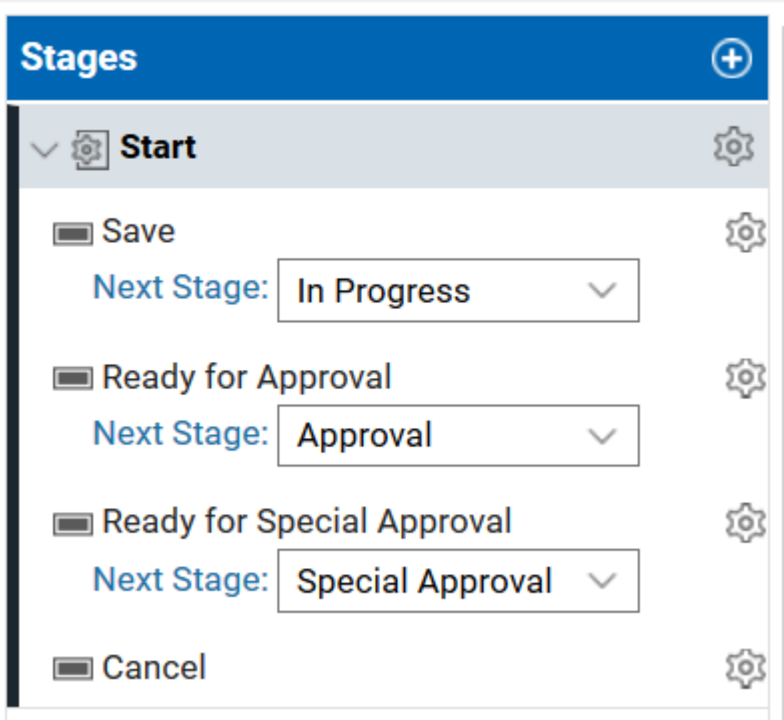
To apply a Rule to a submit action button, click the rules icon in the upper-right corner of the button (on the canvas) on the stages tab.

Conditional Workflow

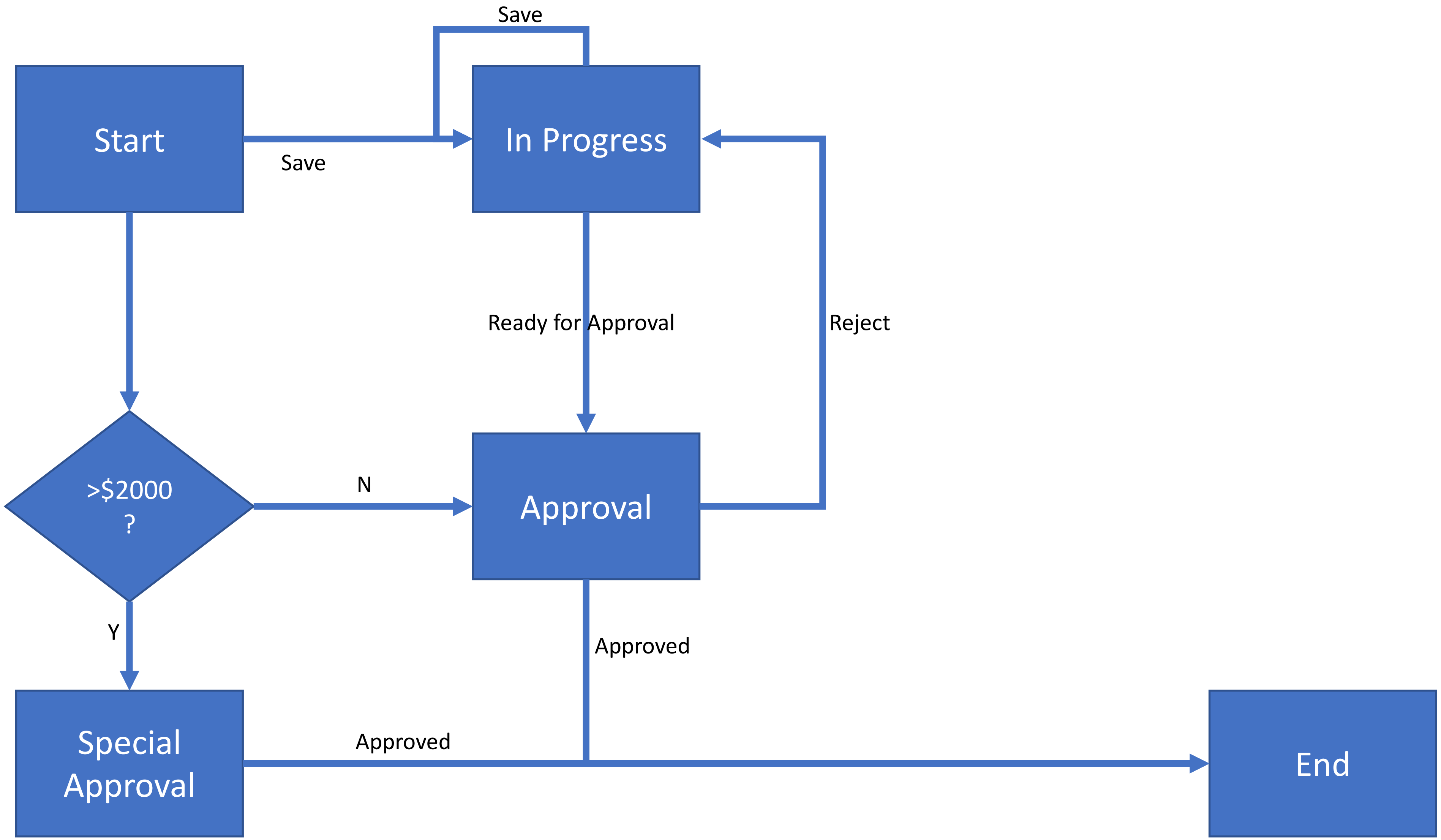
For example:

Let's say you have a workflow that dictates that an employee needs to get special approval if the expense request is greater than $2000.

For this we would add an 'Special Approval' stage to our application and add two submit action buttons to the 'Start' stage.

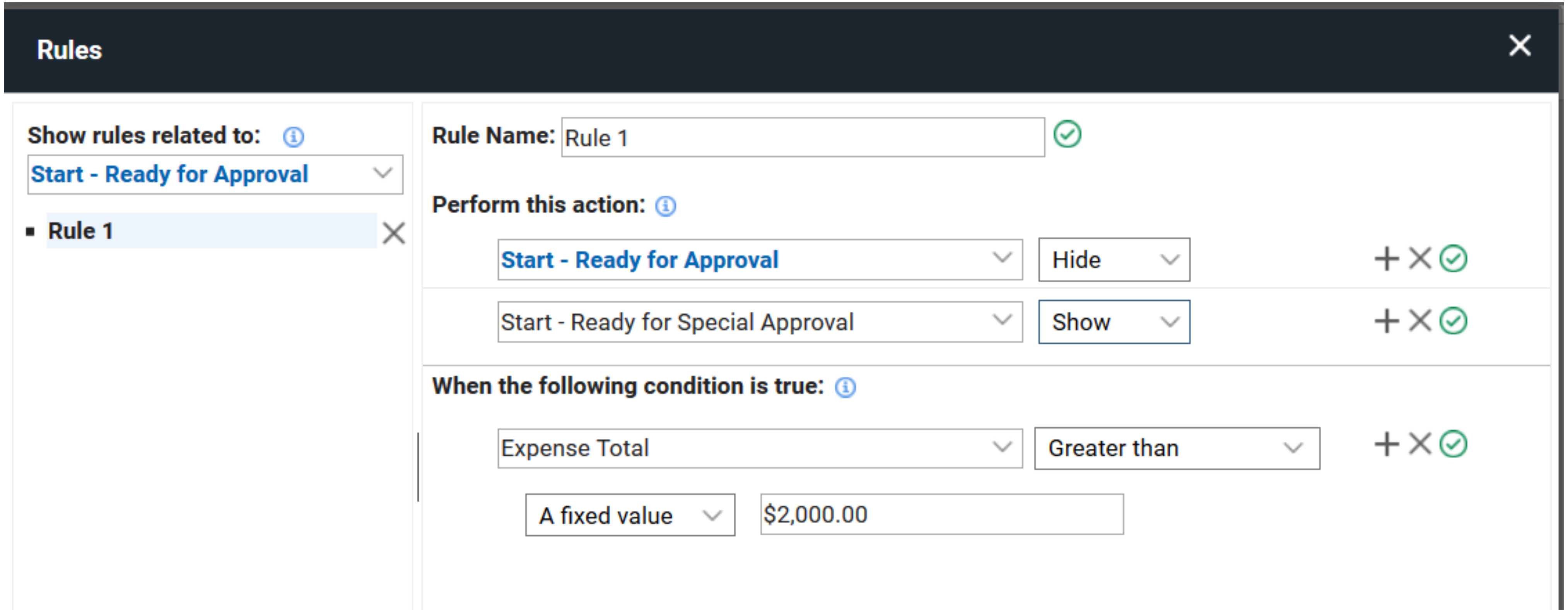


Stages in Workflow



Conditional Workflow

Then you can create your rule as needed



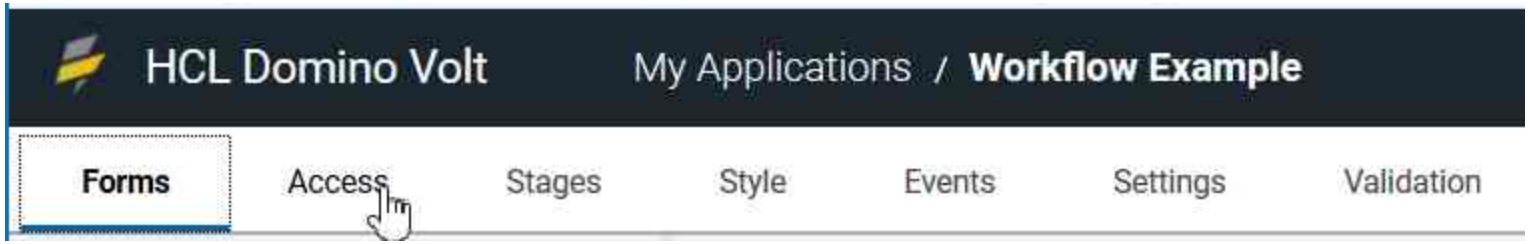
Access Control

To review, a Stage describes the following:

- The behavior of the form while its in the stage. i.e. what portions of the form are visible and/or read-only while the form is in this stage.
- The flow. What other stages can be navigated to from this stage.
- Who has access rights to the form while the form is in the stage.

So far, we've only talked about controlling the 'form behavior' and 'the flow' for a given stage, this section will discuss the access rights.

To set the access rights for an application, you need to launch the Access screen by clicking on the Access tab.

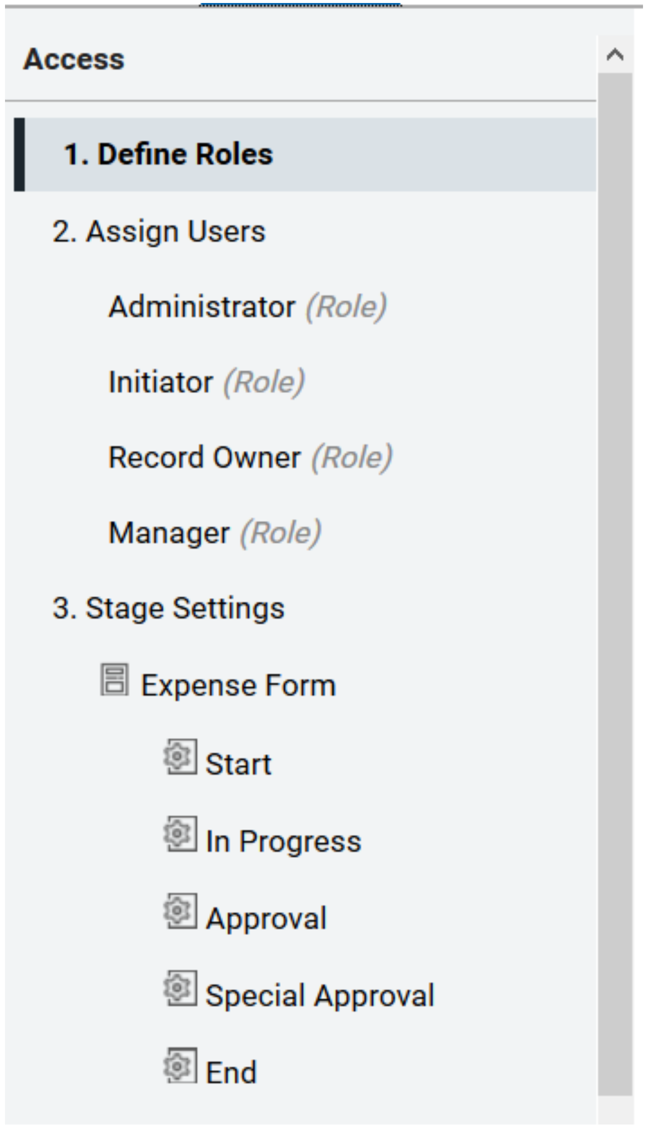


Access Control

On the Access screen, you can define roles, assign users or groups to those roles, and then assign permissions to those roles on the stages of this application. You can also specify who has access rights to be able to design or edit this application.

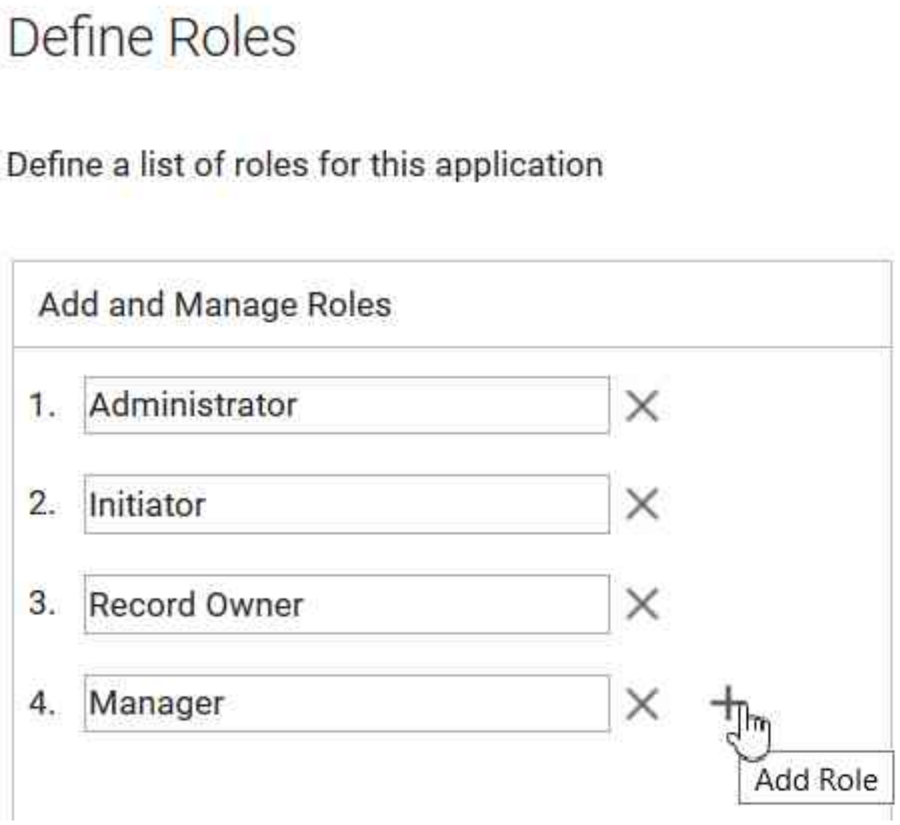
When you create a new application, the following Roles are created automatically:

- Administrator: those users who should be given administrative rights on this application.
- Initiator: those users you want to allow to submit the initial form (i.e. those users who can start a workflow).
- Record Owner: the user who submitted the initial form

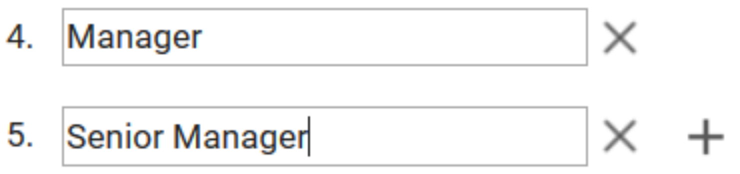


Access Control

Most applications have a simple single-submit workflow, so these default roles are created to handle that case.   If you need to define additional Roles, then you can click on the Add Role button



This creates a new role, where you can change the name of the role to be more meaningful.

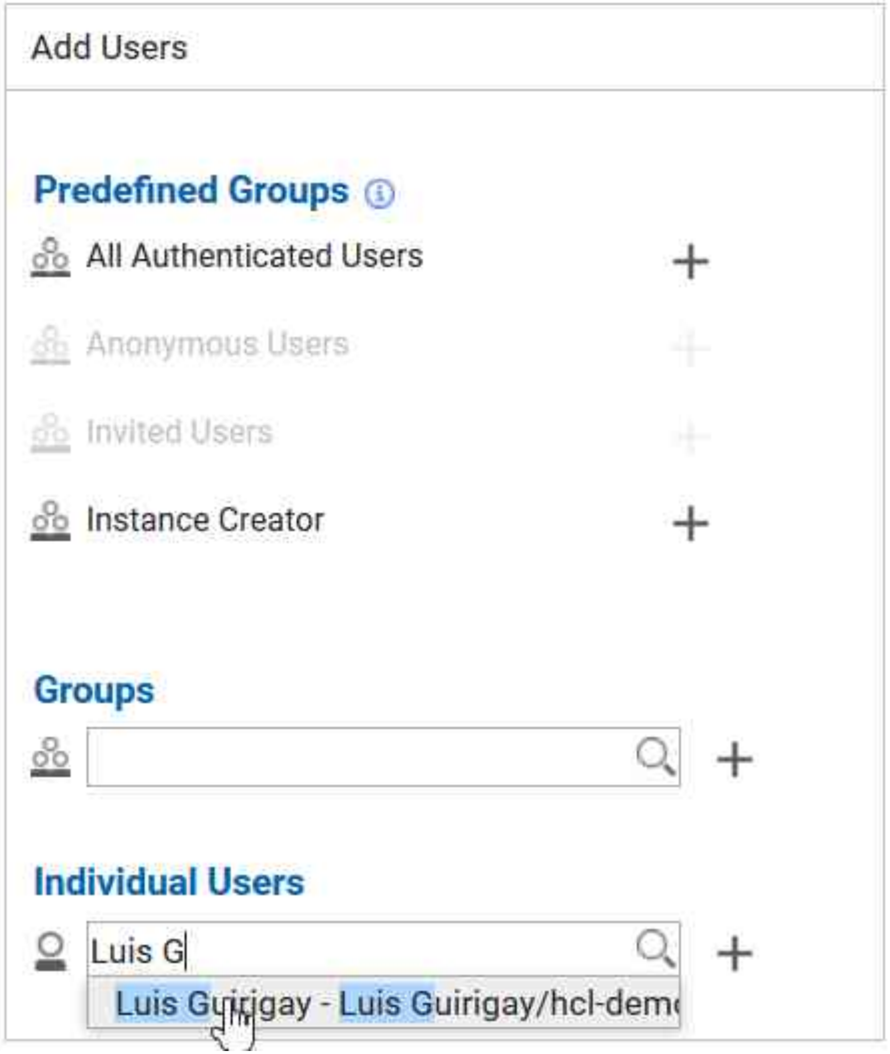


Access Control

Once you've defined the desired roles, you can click on the Assign Users link of the role to start assigning users to that role.

To assign users to a role, you add them to the Role Members shown above on the far right.

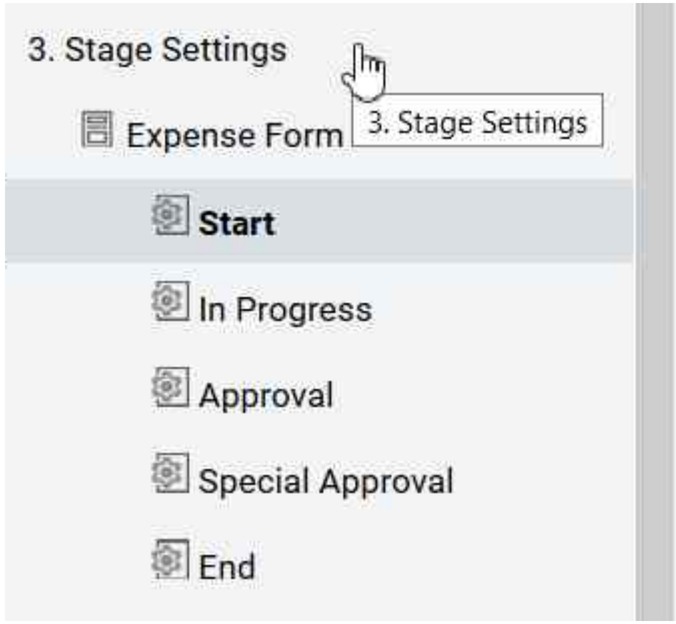
By default, the Initiator Role has 'All Authenticated Users' as members of this Role.



Access Control

Once you've specified all the users and groups that belong to your Roles, you can specify the access permissions those Roles have in the various stages of your application.

You do this by clicking on a Stage in the Stage Settings list



Expense Form - Start

Roles	Create	Read	Update	Delete
Administrator	☐	☐	☐	☐
Initiator	☑	☐	☐	☐
Record Owner	☐	☐	☐	☐
Manager	☑	☐	☐	☐
Senior Manager	☐	☐	☐	☐

Access Control

Here we can assign permissions for how we want to allow your roles to be able to effect a given stage.

In the 'Special Approval' stage, it's likely we'd only want Senior Managers to be able to update the form, but we'd likely still want to allow the Record Owner to have read-only access.

Expense Form - Special Approval

Roles	Create	Read	Update	Delete
Administrator	☐	☑	☑	☑
Initiator	☐	☐	☐	☐
Record Owner	☐	☑	☐	☐
Manager	☐	☐	☐	☐
Senior Manager	☐	☑	☑	☐

Summary

HCL Domino Volt gives you the ability to:

- Create Stages with a form.
- Setup a form to change its behavior based on the current Stage.
- Send notification emails upon submission of a form.
- Perform conditional workflow.
- Define Roles, assign users, and setup Access rights.

Additional Resources

- Domino Volt Wiki (https://hclwiki.atlassian.net/wiki/spaces/HDV/overview)
- HCL Leap Wiki (https://hclwiki.atlassian.net/wiki/spaces/HL/pages/462131/Introduction+to+HCL+Leap)
- Domino Volt Documentation (https://help.hcltechsw.com/domino_volt/1.0/index.html)