TopQuadrant

Custom Workflow Templates

What is a Workflow?

- Workflow – a sequence of steps to revise a collection.
- States – the status set that a workflow can be in.
- Transitions – describes the change from one state to another (from, to, events to execute)
- Actors – who can change a state.

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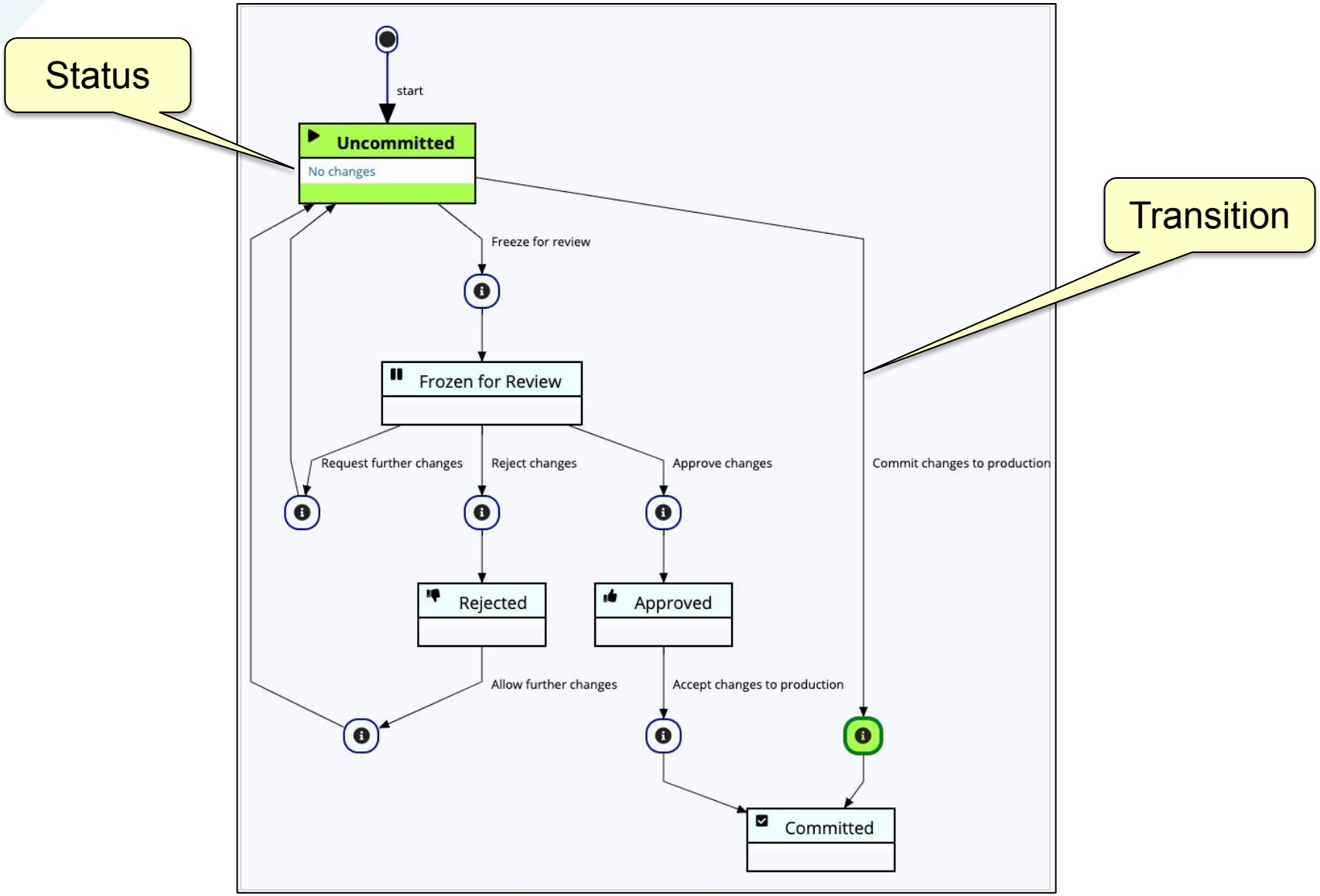
What is a Workflow?



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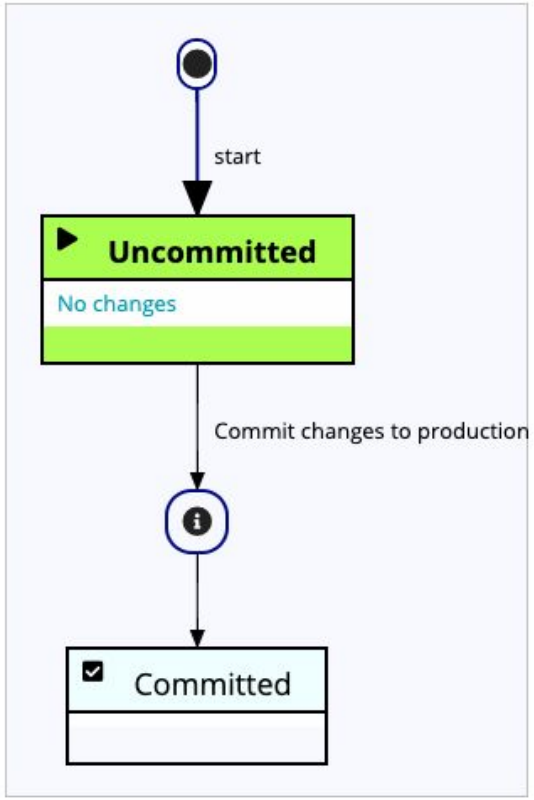
What is a Workflow?

No Review Workflow



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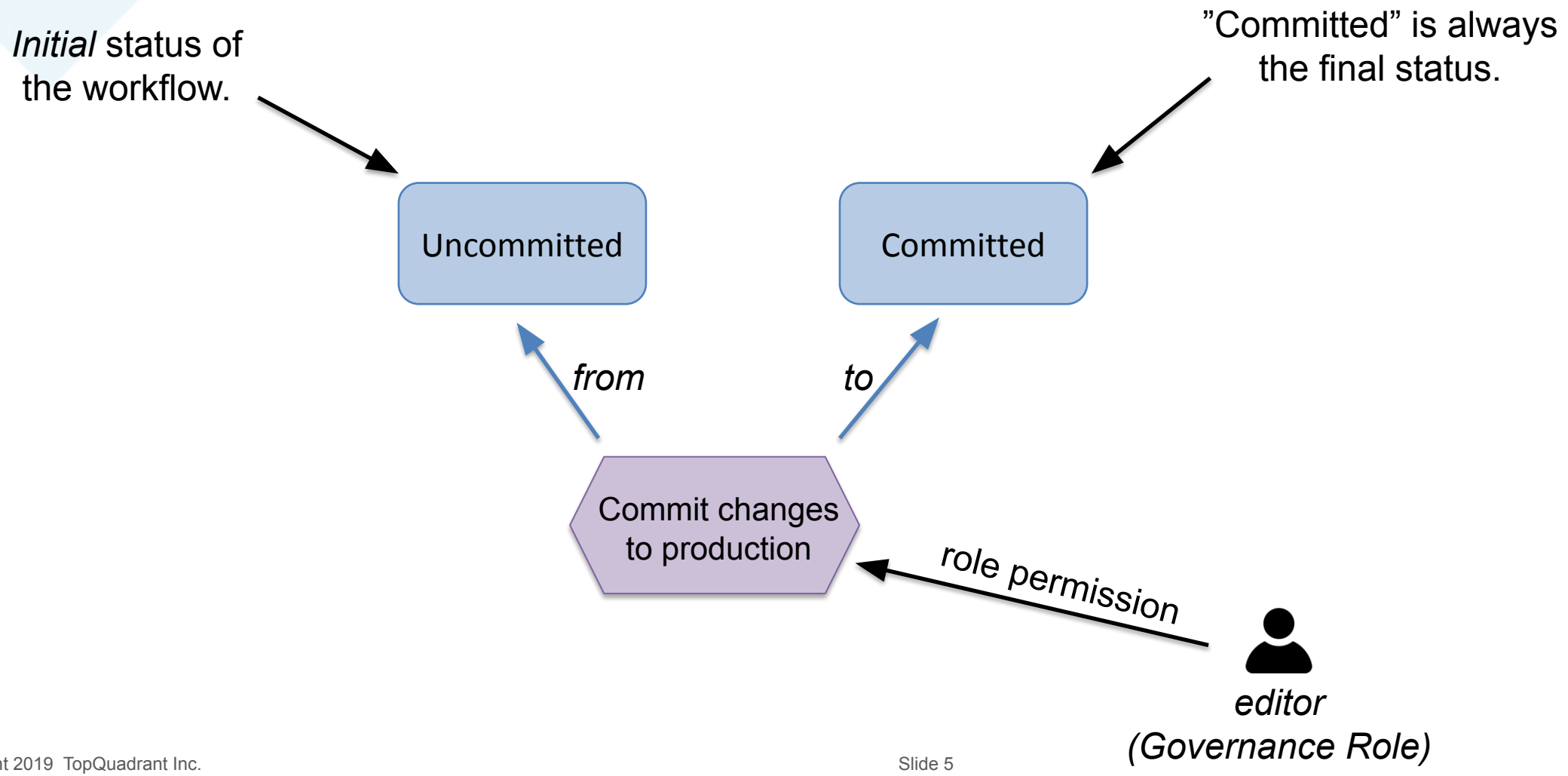
What is a Workflow?

No Review Workflow



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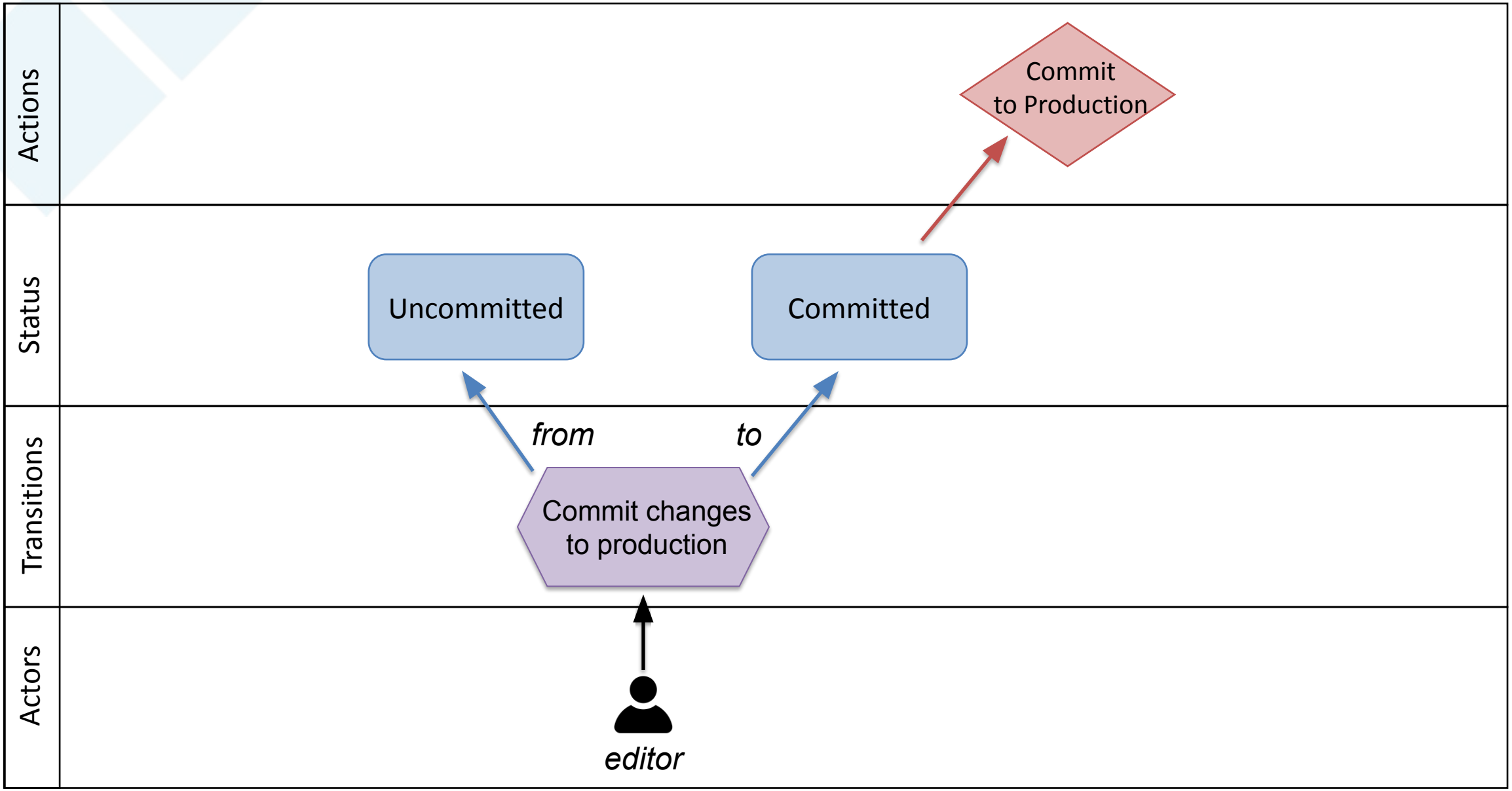
No Review Workflow



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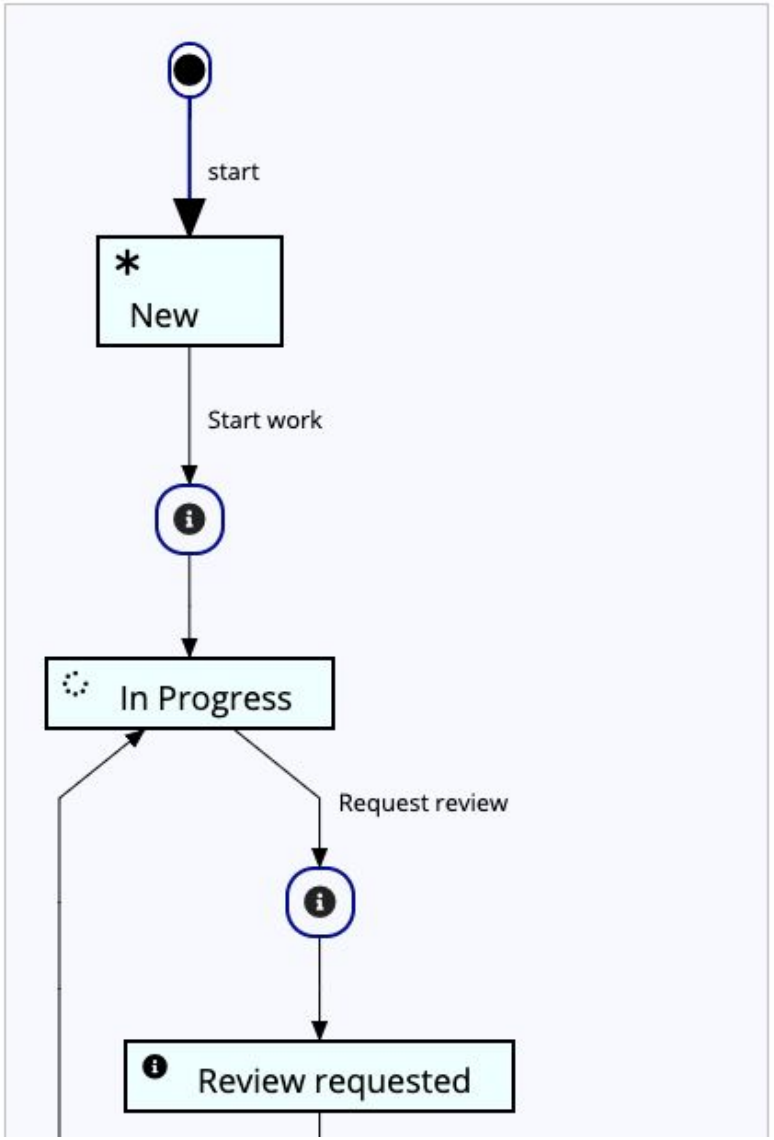
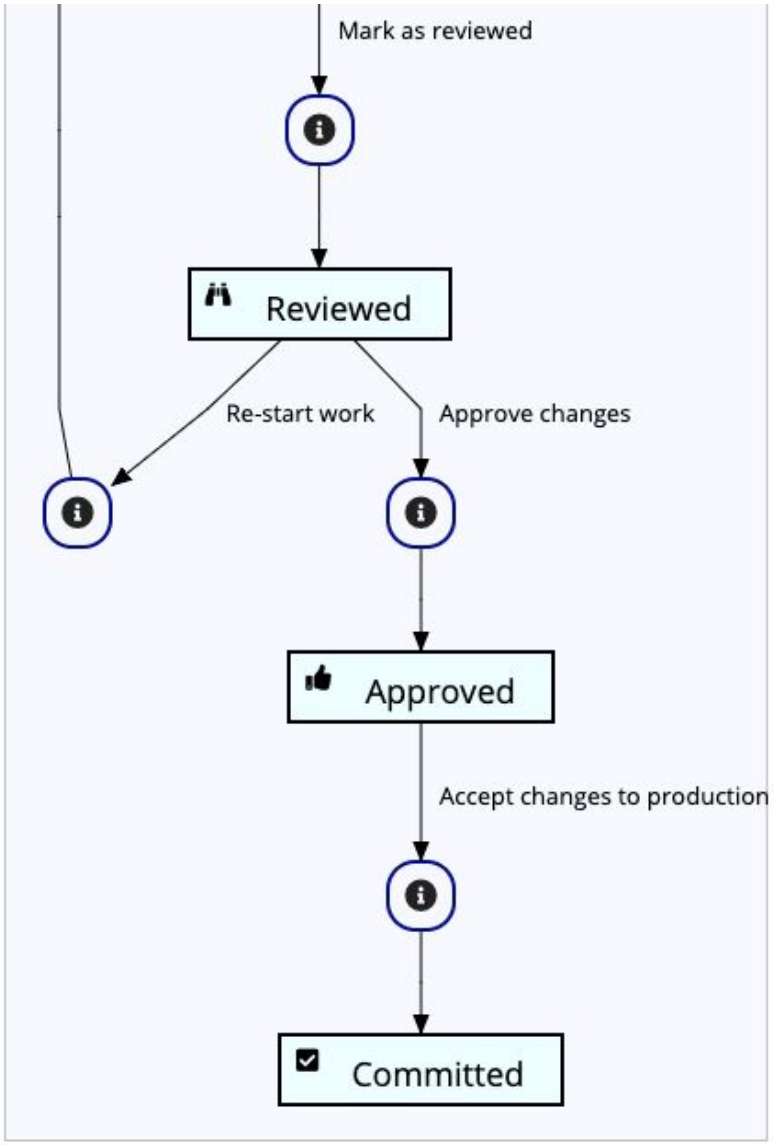
What is a Workflow?

Glossary Workflow





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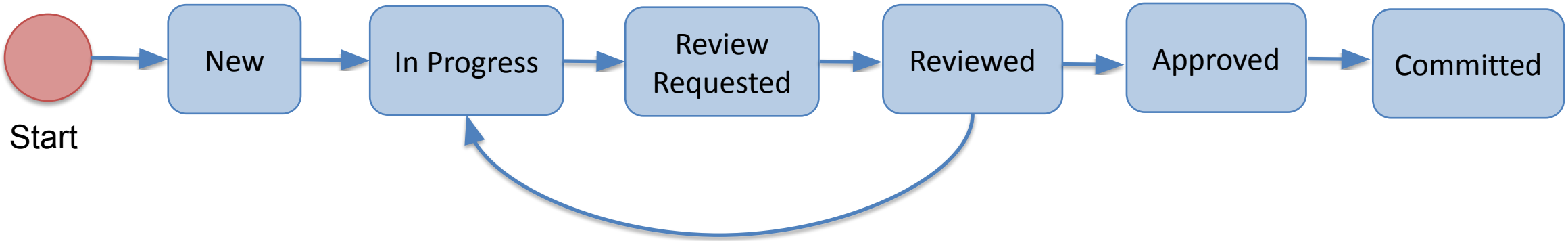
What is a Workflow?

Glossary Workflow



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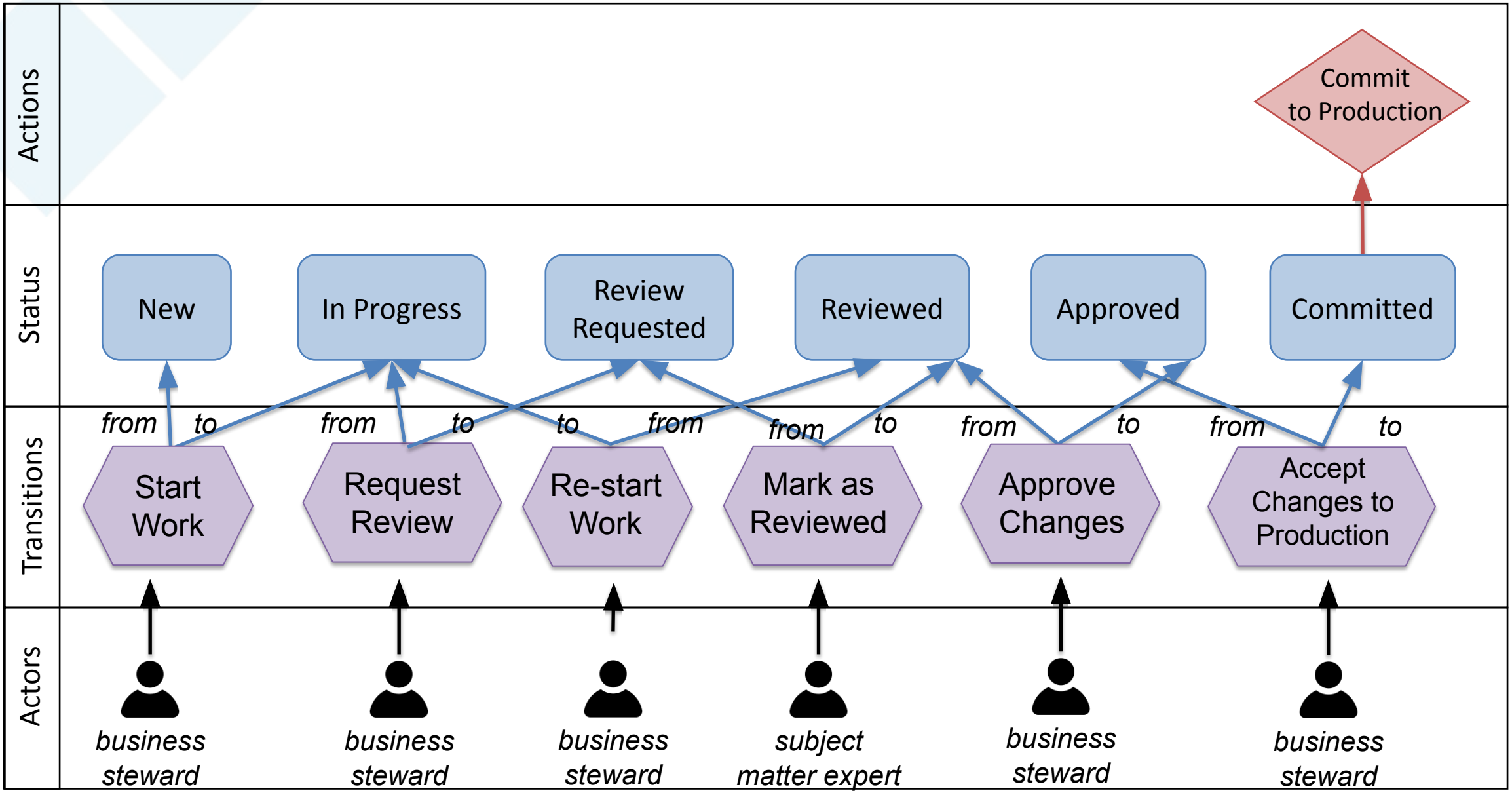
Glossary Workflow



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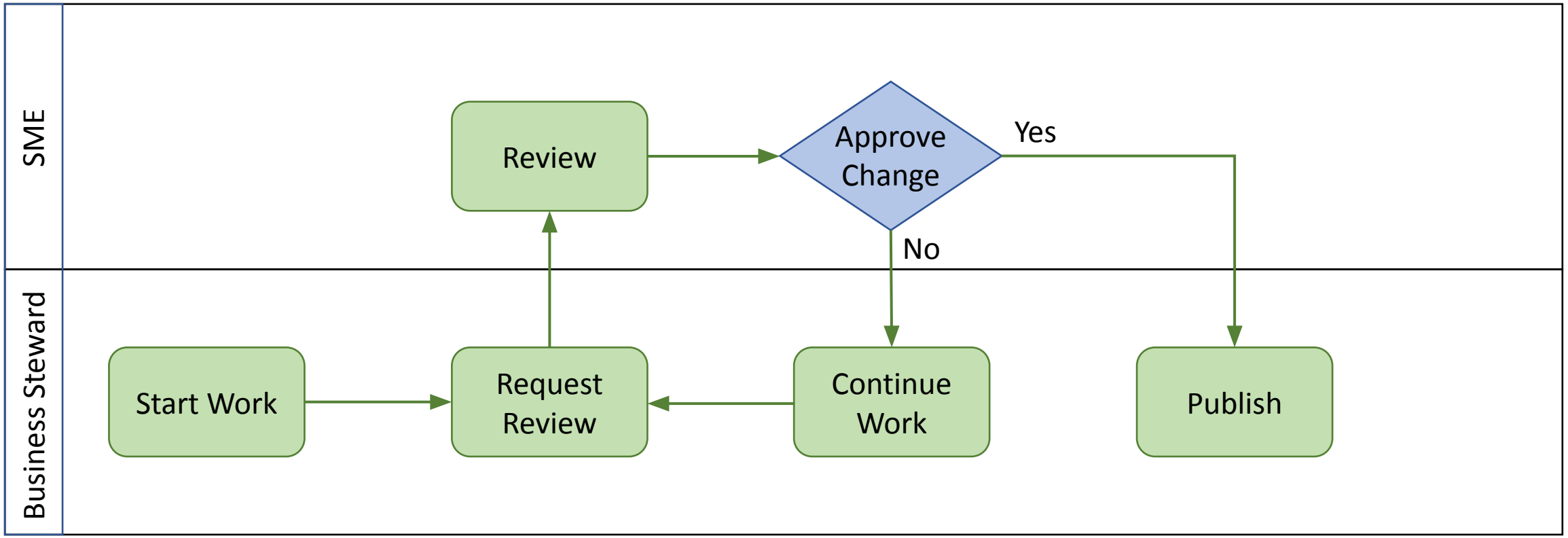
Glossary Workflow

Swimlane Perspective

In simples cases you can convert between the two.



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Creating a Workflow Template

Creating an EDG Workflow

- What is your process?
  - is your workflow similar to a sample workflow? (download from: https://archive.topquadrant.com/wp-content/uploads/2020/02/Workflows6.3.txt)
- What are your governance roles?
  - do you need additional roles? (see *"Custom Governance Roles"*)
- Are notifications or special processes required?

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Creating a Workflow Template

Creating an EDG Workflow

1. Decompose your processes into Actors, Transitions, Status, and Actions.
2. Create EDG governance roles as needed for Actors (optionally disable any unused governance roles).
3. Create Status entities.
4. Create Transition entities, connect to Status entities and governance roles.

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Creating a Workflow Template

Creating an EDG Workflow

5. Test and refine.
6. Create Actions as needed.
7. Test and refine again.

Requirements

1. Will need a multi-user setup.
2. Governance roles will need to be accessible to your workflows.

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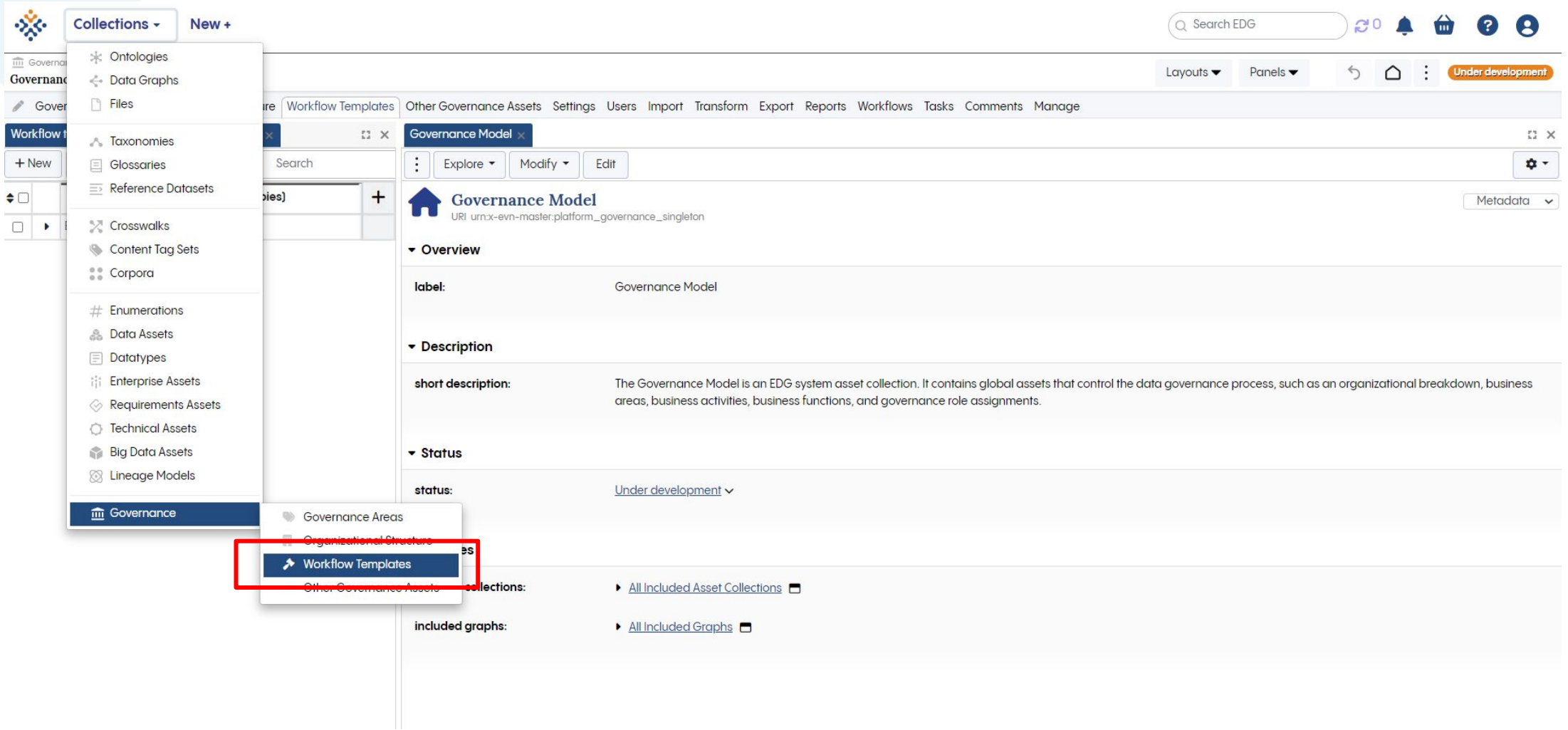
Creating a Workflow Template: Create a New Ontology

Go to **Workflow Template** in **Governance**



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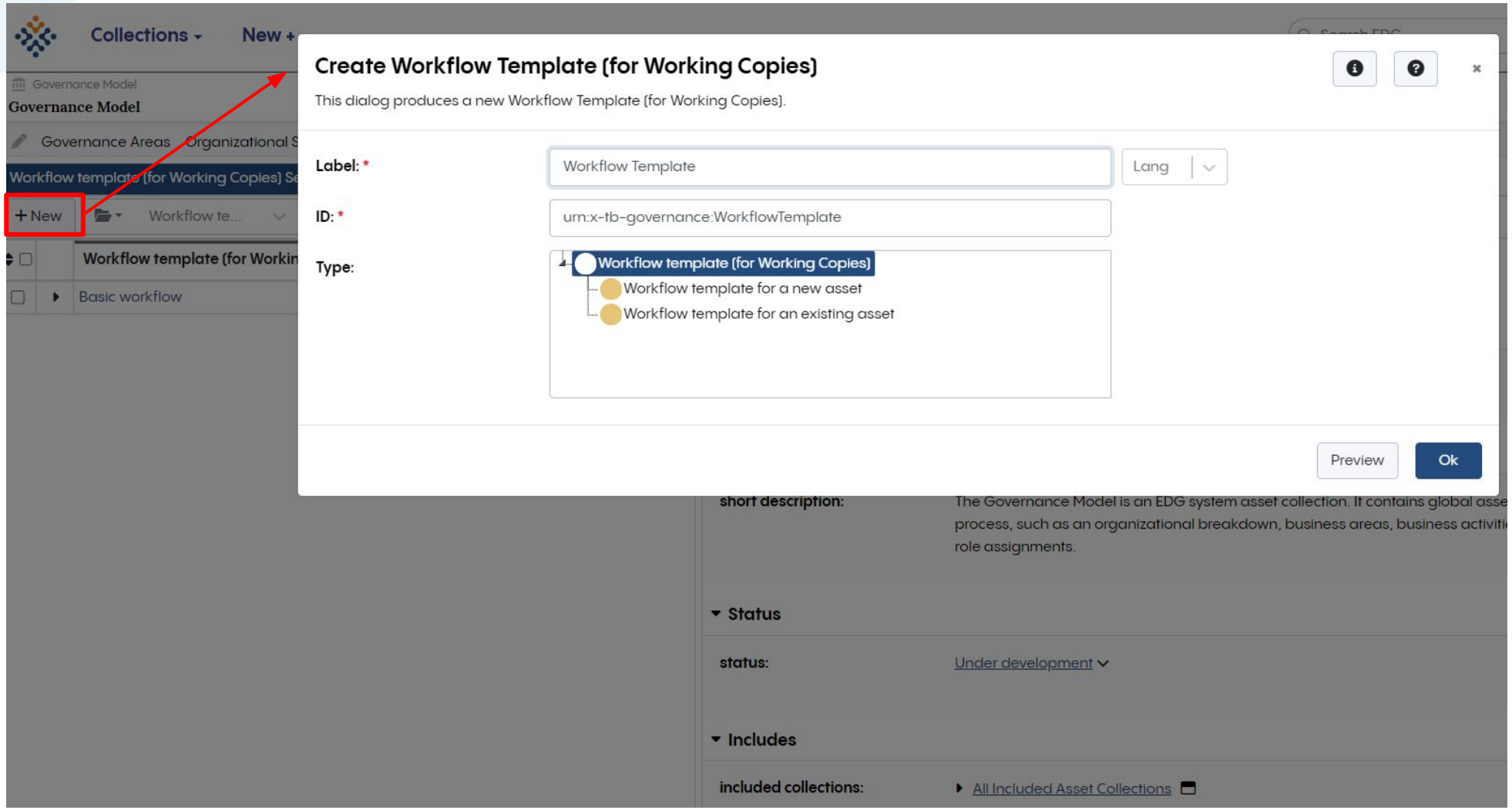
Creating a Workflow Template: Create a New Ontology

Click **New** and call it “Workflow Template”



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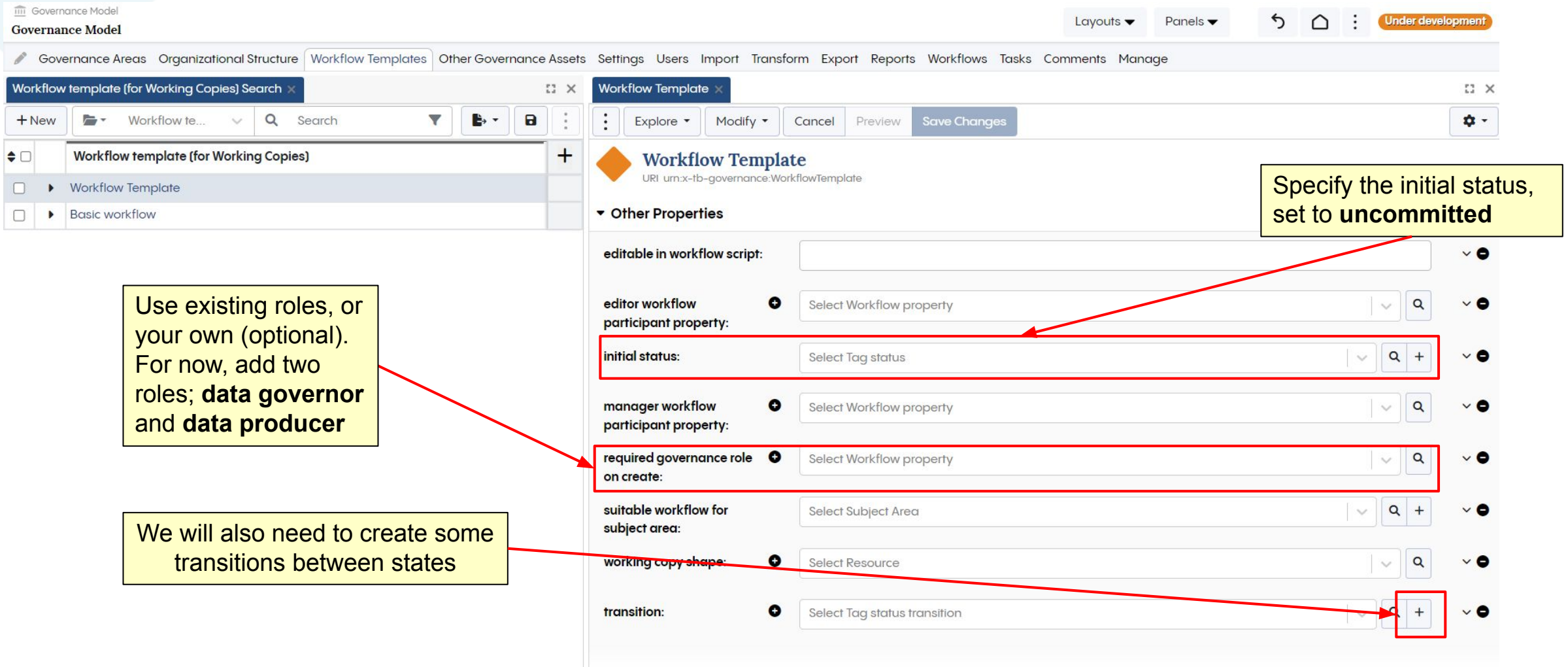
Creating a Workflow Template: Configure our template instance

Workflow Template



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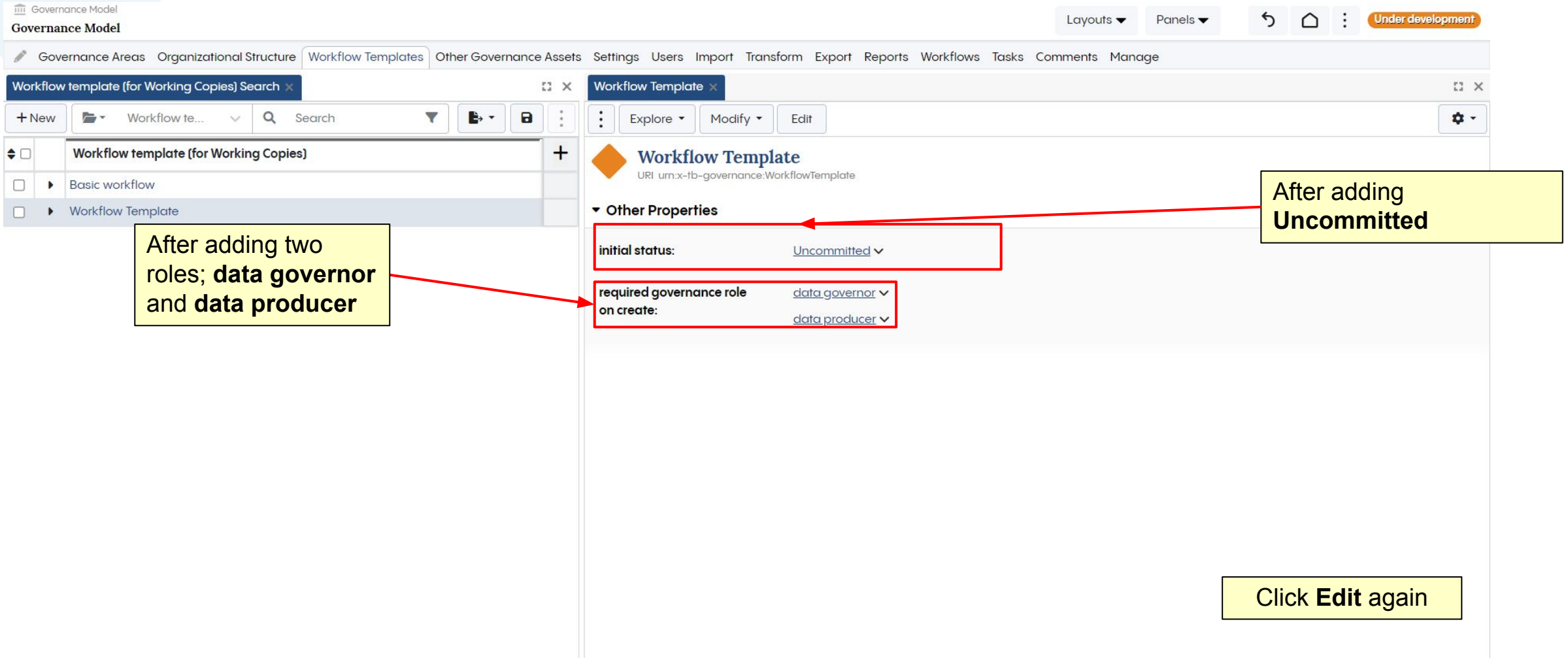
Creating a Workflow Template: Configure our template instance

Workflow Template



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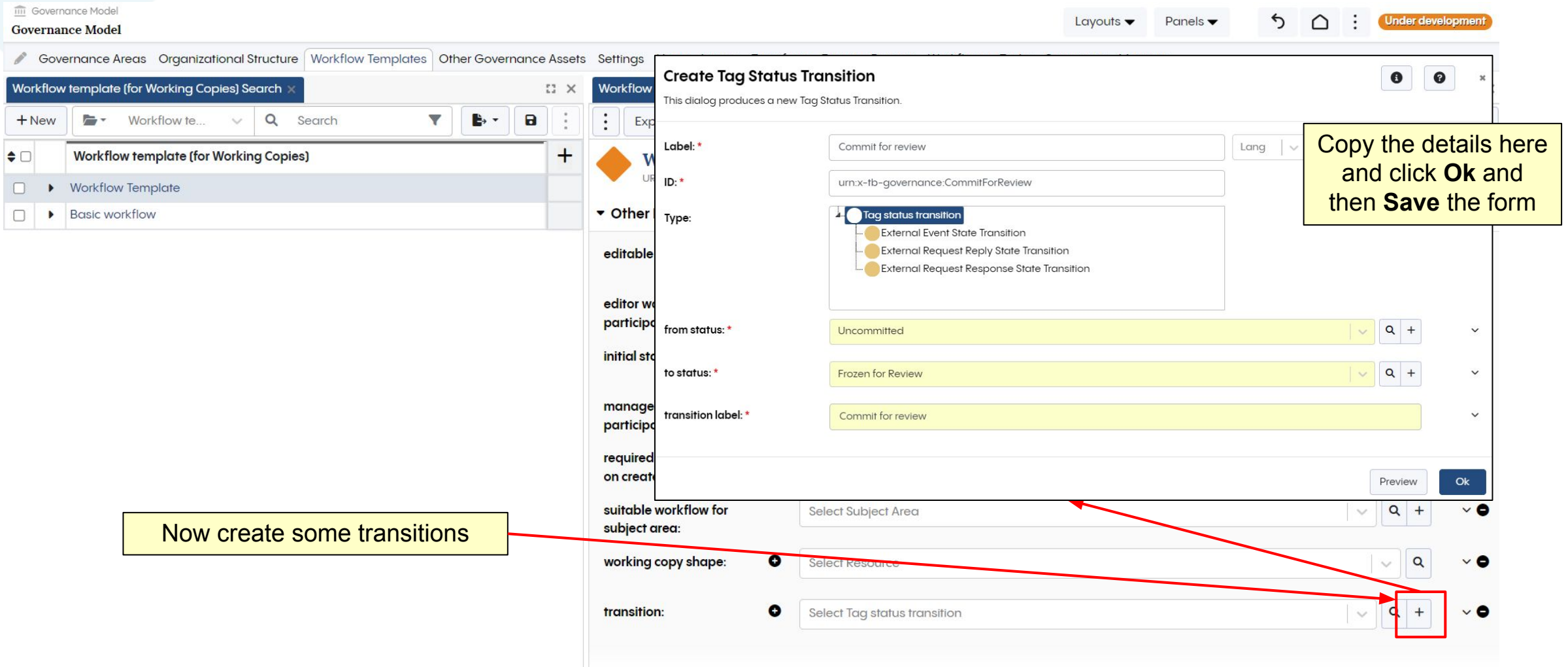
Creating a Workflow Template: Create transitions

Workflow Template



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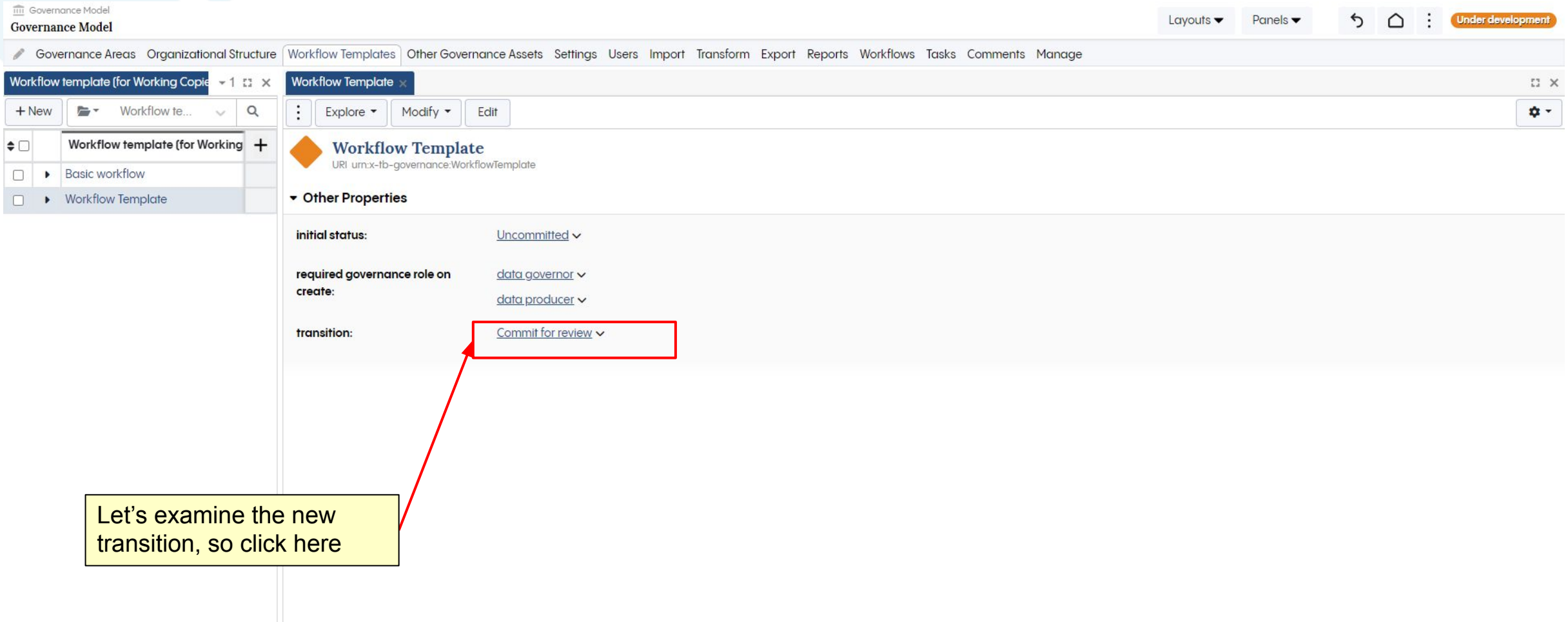
Creating a Workflow Template: Edit transitions



Let's examine the new transition, so click here

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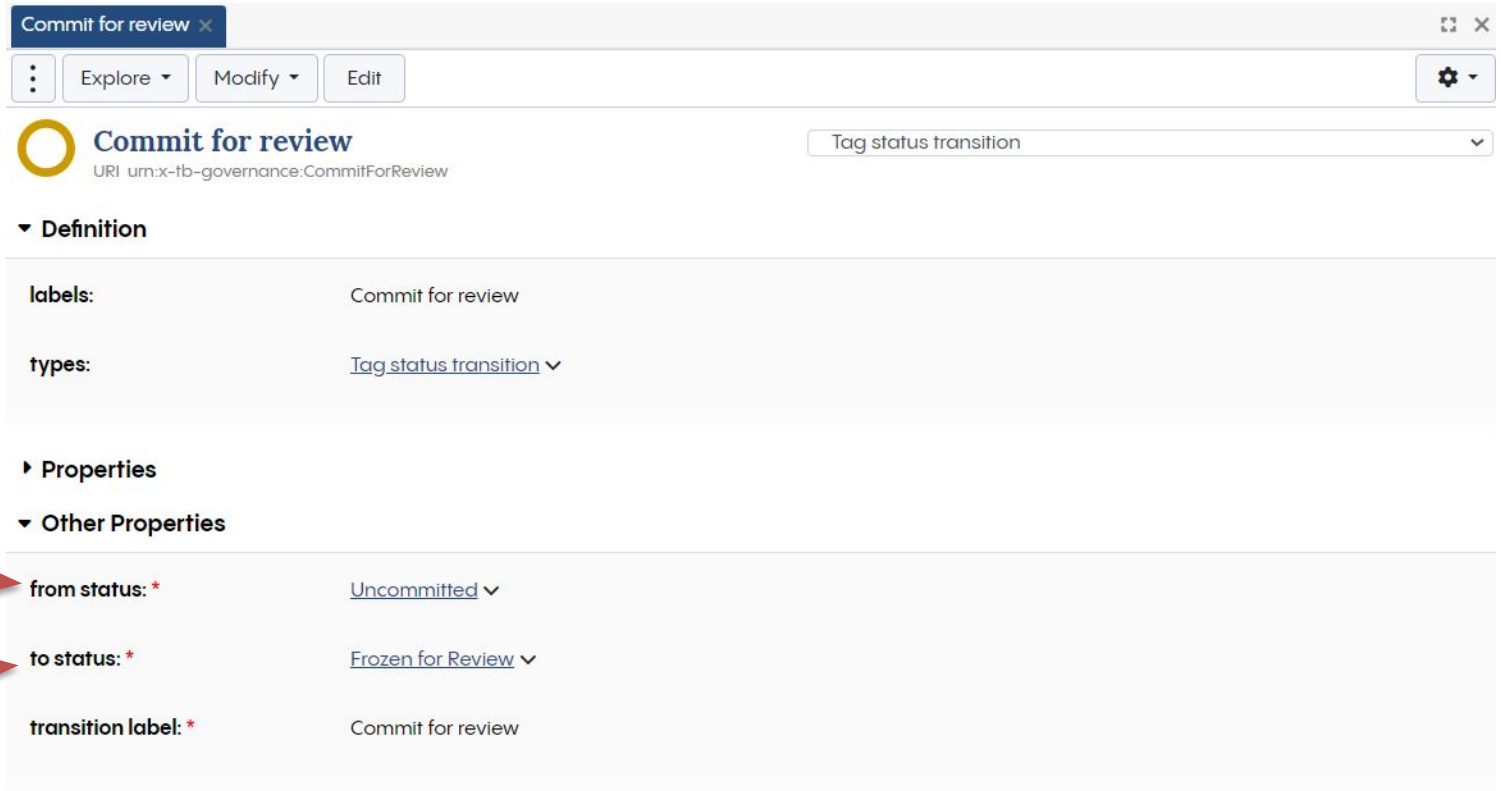
Creating a Workflow Template: Edit transitions

A transition defines the “from” and “to”, restriction and actions



From Status

To Status

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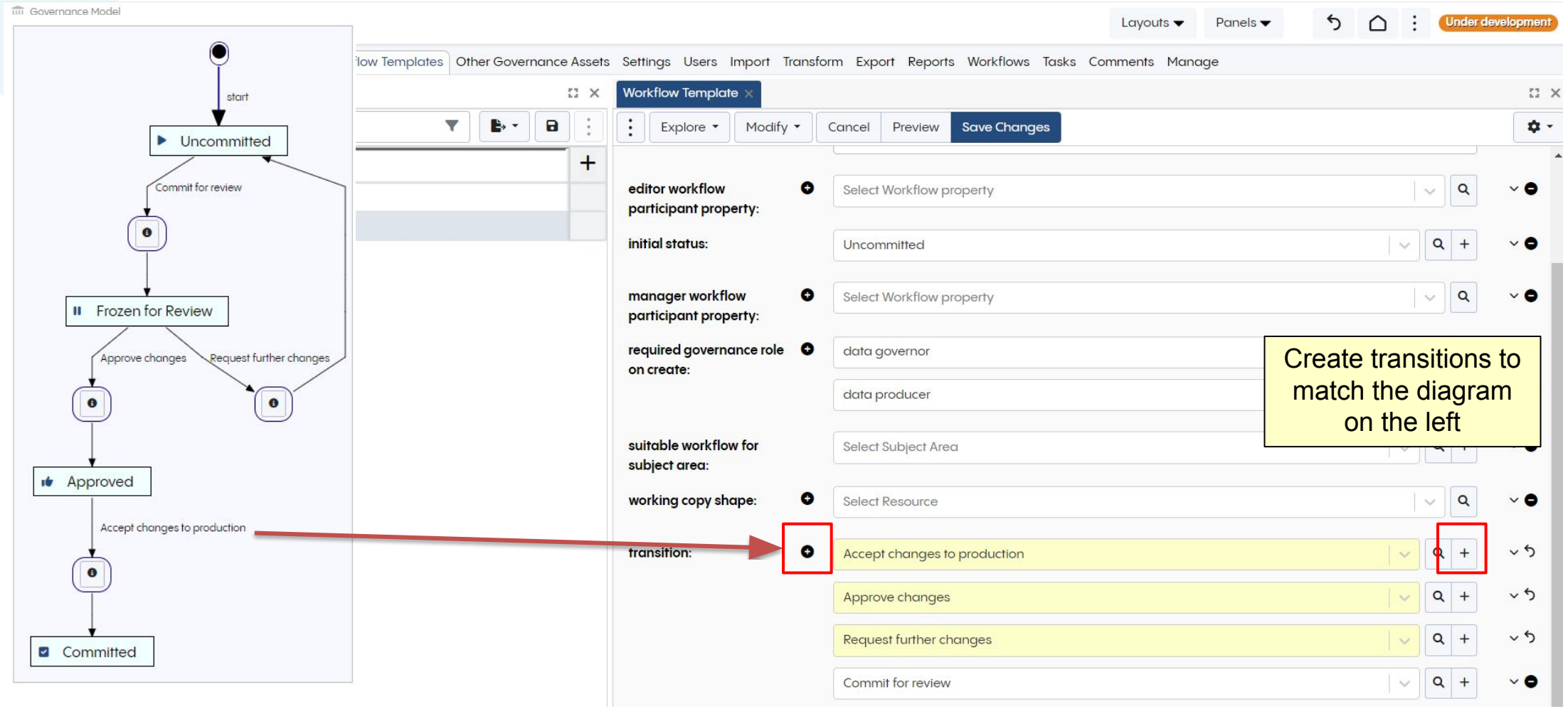
Creating a Workflow Template: Add transitions to template

Workflow Template



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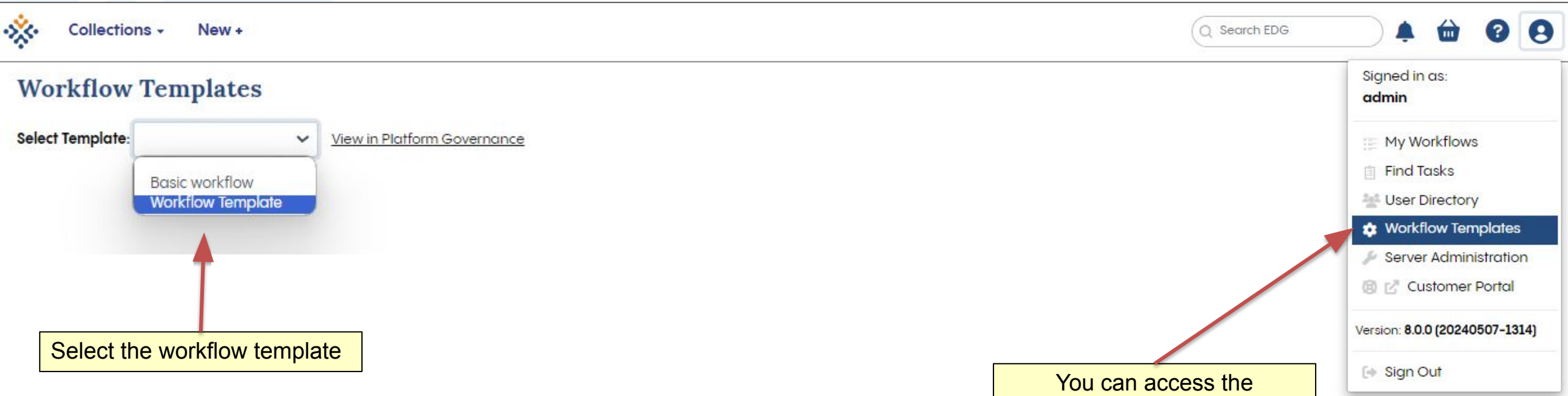
Viewing Templates



Select the workflow template

You can access the "Workflow Templates" option under the user menu

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Viewing Templates

Your template should look like this, and if you select diagram, this should reflect the transitions you have added

Workflow Templates

Select Template: Workflow Template | View in Platform Governance

Workflow Template **Workflow Template**

Diagram View

This workflow template consists of the following states:

Uncommitted (editable)

This is the initial status.

It means that changes are being made or are expected to be made. Any change created so far is "work in progress" and has not been written to the production copy.

Possible Transitions:

- To Frozen for Review

Approved (not editable)

It means that the changes have been approved.

Possible Transitions:

- To Committed

Frozen for Review (not editable)

It means that the changes are being reviewed. Edits are not permitted while in this state, but comments can still be posted.

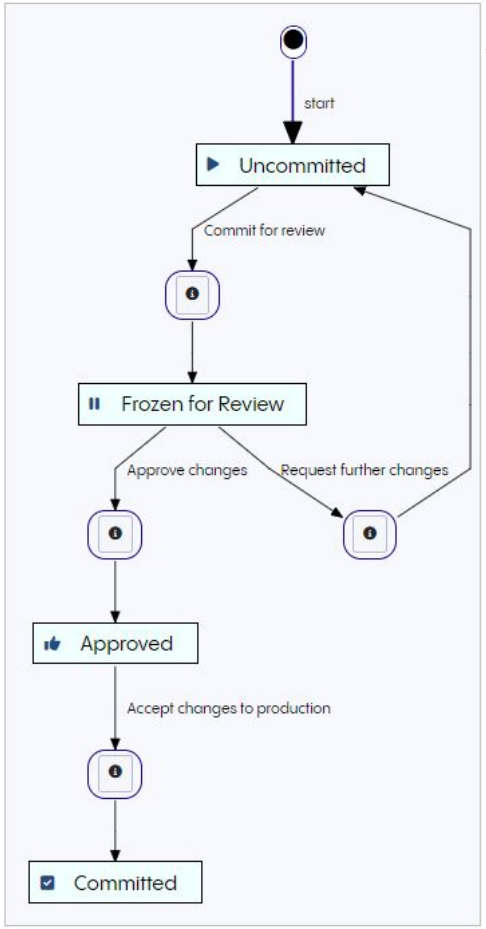
Possible Transitions:

- To Approved
- To Uncommitted

Committed (not editable)

This is a terminal status with no possible transitions into other statuses.

It means that the changes have been written to the production copy and no further edits are possible.



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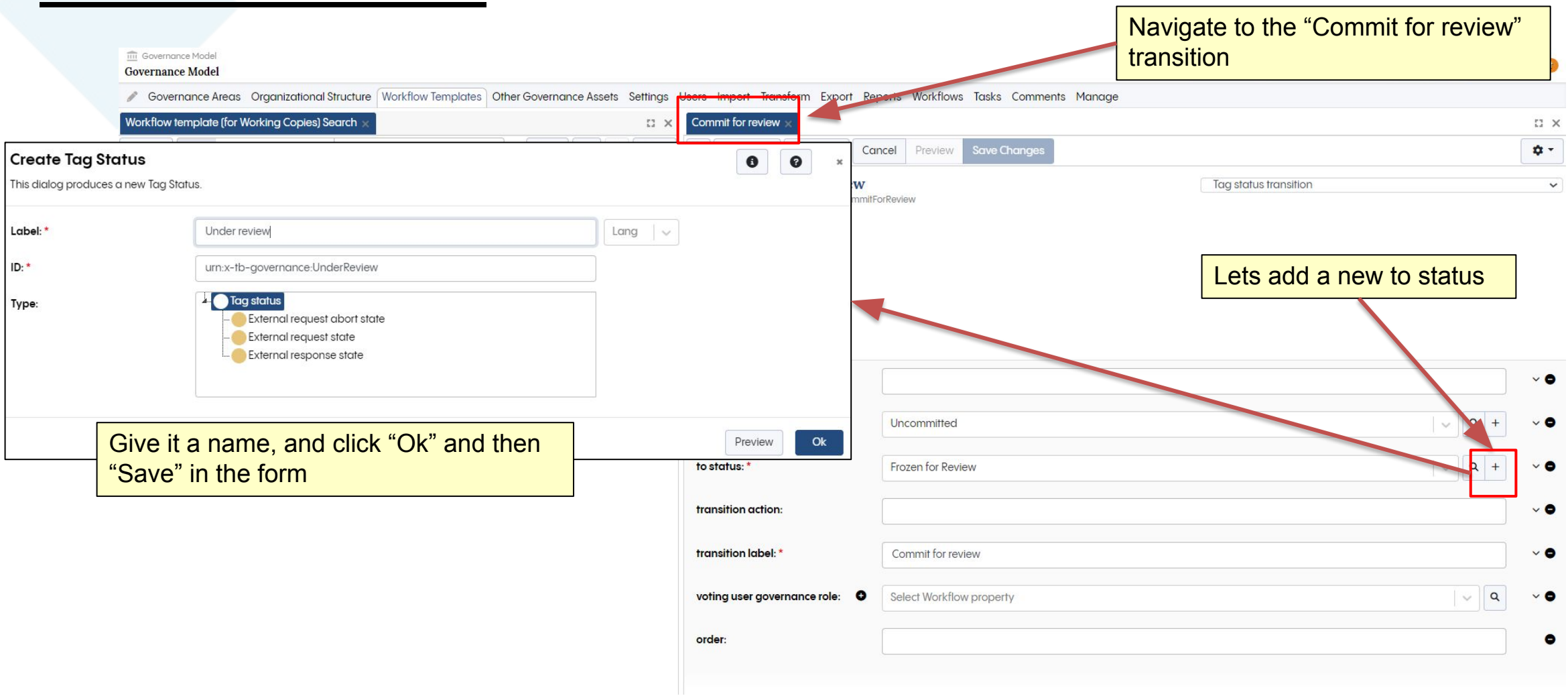
Creating a Workflow Template: Create a Tag status

Workflow Status



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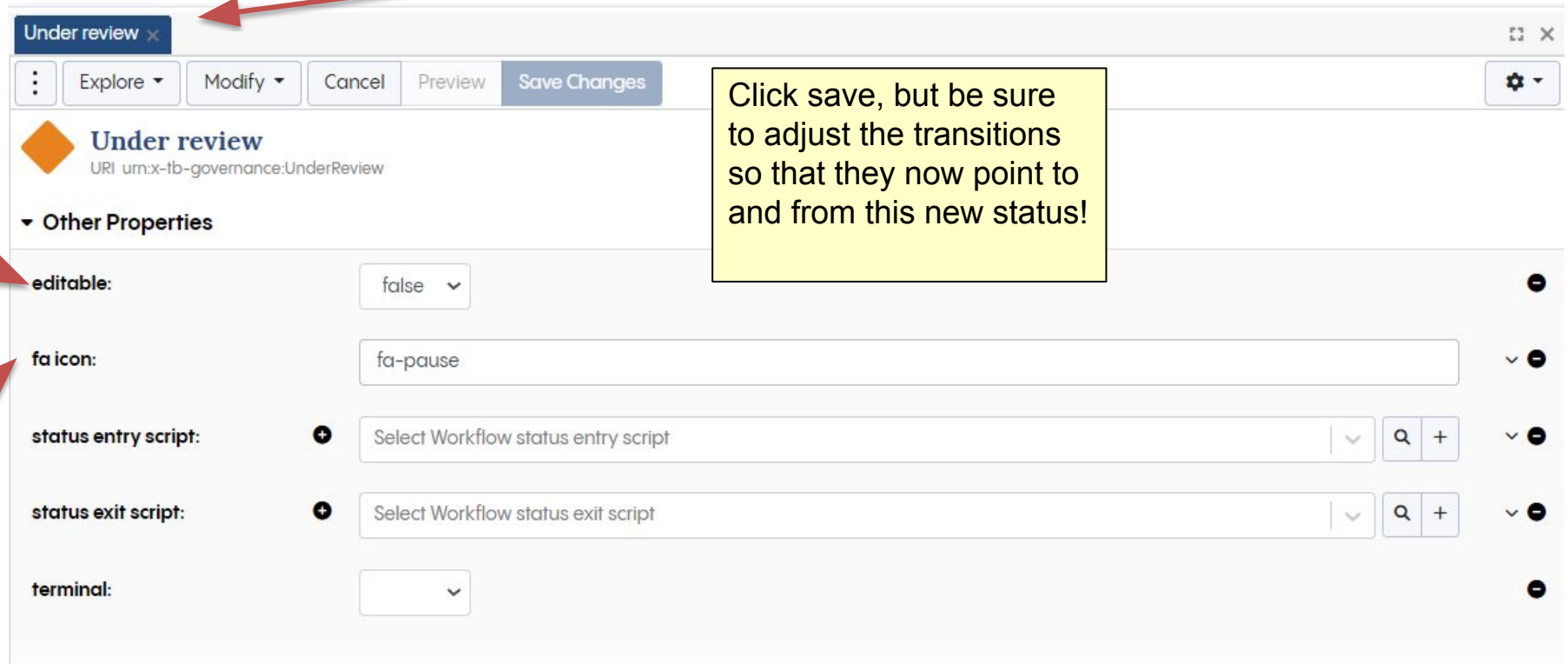
Creating a Workflow Template: Tag status

Workflow Status

The “Under review” status.



Click save, but be sure to adjust the transitions so that they now point to and from this new status!

The **editable** field can make the workflow content “read only” while under the status.

Optional icon from the “Font Awesome” library.

Visit Font Awesome for available icons: https://fontawesome.com/icons/

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Creating a Workflow Template: Restricting transitions

Workflow Status

Approve changes | Source Code of Approve changes

Cancel | Save Changes

```
@prefix afn: <http://jena.hpl.hp.com/ARQ/function#> .

<urn:x-tb-governance:ApproveChanges>
  a teamwork:TagStatusTransition ;
  teamwork:fromStatus <urn:x-tb-governance:UnderReview> ;
  teamwork:toStatus teamwork:Approved ;
  teamwork:transitionLabel "Approve changes" ;
  rdfs:label "Approve changes" ;
.
```

Commit for review | Source Code of Commit for review

Cancel | Save Changes

```
@prefix afn: <http://jena.hpl.hp.com/ARQ/function#> .

<urn:x-tb-governance:CommitForReview>
  a teamwork:TagStatusTransition ;
  teamwork:fromStatus teamwork:Uncommitted ;
  teamwork:toStatus <urn:x-tb-governance:UnderReview> ;
  teamwork:transitionLabel "Commit for review" ;
  rdfs:label "Commit for review" ;
.
```

Make it so only those with data governor role can approve changes

```
<urn:x-tb-governance:ApproveChanges>
  a teamwork:TagStatusTransition ;
  teamwork:fromStatus <urn:x-tb-governance:UnderReview> ;
  teamwork:toStatus teamwork:Approved ;
  teamwork:transitionLabel "Approve changes" ;
  rdfs:label "Approve changes" ;
  teamwork:requiredGovernanceRole edg:dataGovernor ;
.
```

Make it so only workflows with changes can be submitted for review

```
<urn:x-tb-governance:CommitForReview>
  a teamwork:TagStatusTransition ;
  teamwork:fromStatus teamwork:Uncommitted ;
  teamwork:toStatus <urn:x-tb-governance:UnderReview> ;
  teamwork:transitionLabel "Commit for review" ;
  rdfs:label "Commit for review" ;
  teamwork:requiresChanges  true ;
.
```

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Viewing Template

Your template should look like this, and if you select diagram, this should reflect the tag status you have added and the new restrictions.

Workflow Templates

Select Template: Workflow Template | View in Platform Governance

Workflow Template **Workflow Template**

Diagram View

This workflow template consists of the following states:

Uncommitted (editable)

This is the initial status.

It means that changes are being made or are expected to be made. Any change created so far is "work in progress" and has not been written to the production copy.

Possible Transitions:

- To Under review if the following conditions are satisfied:
  - Working copy requires changes: true

Transition restriction: change

Approved (not editable)

It means that the changes have been approved.

Possible Transitions:

- To Committed

Under review (not editable)

Possible Transitions:

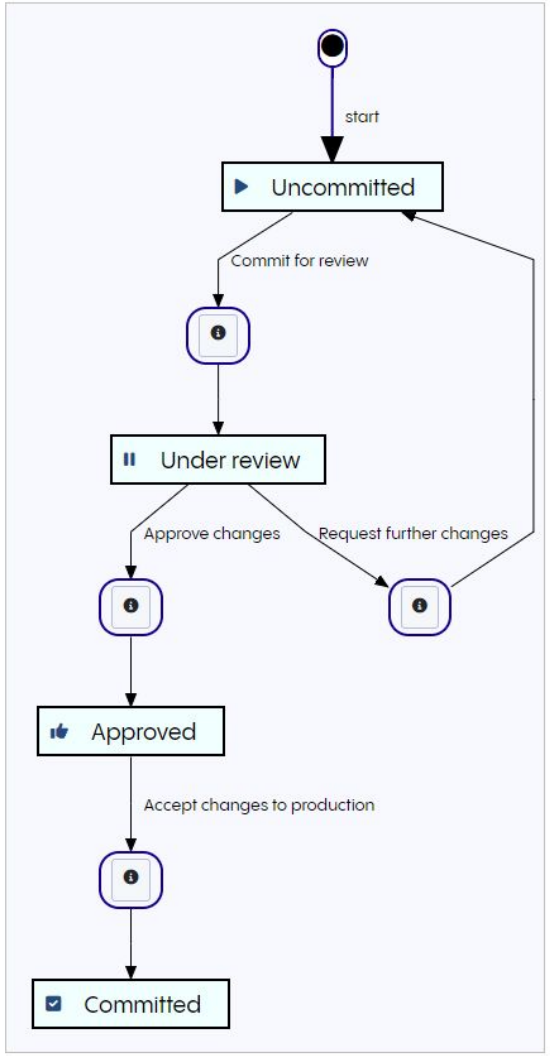
- To Approved if the following conditions are satisfied:
  - Required governance role: data governor
- To Uncommitted

Transition restriction: governance role

Committed (not editable)

This is a terminal status with no possible transitions into other statuses.

It means that the changes have been written to the production copy and no further edits are possible.



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Status Change Events

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Event-Condition-Action

What is an Event?

- Event is any change in data.
  - data edits (additions and deletions), workflow status change, etc.
- EDG will watch for changes, and executes rules.
- It's up to the rule to determine if the change is significant by checking that it meets certain conditions, if so, the rule executes an action.

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Event-Condition-Action

What is an Action?

- Anything you program, requires writing ADS (or SWP) scripts.
- EDG will execute an action specified for an event when it detects that the event happened.

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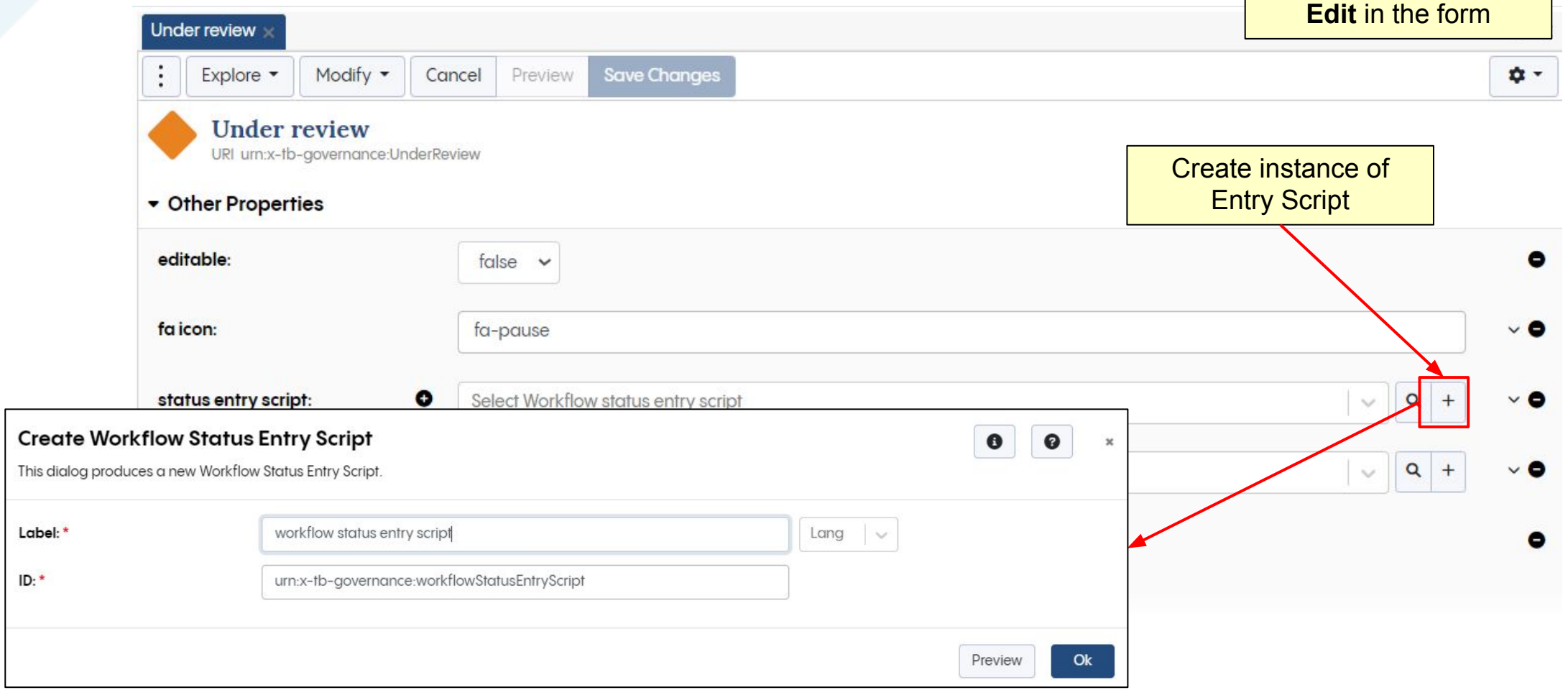
Event-Condition-Action: Add a status script

Workflow Status Entry Script

Return to the "Under review" tag and click **Edit** in the form

Create instance of Entry Script



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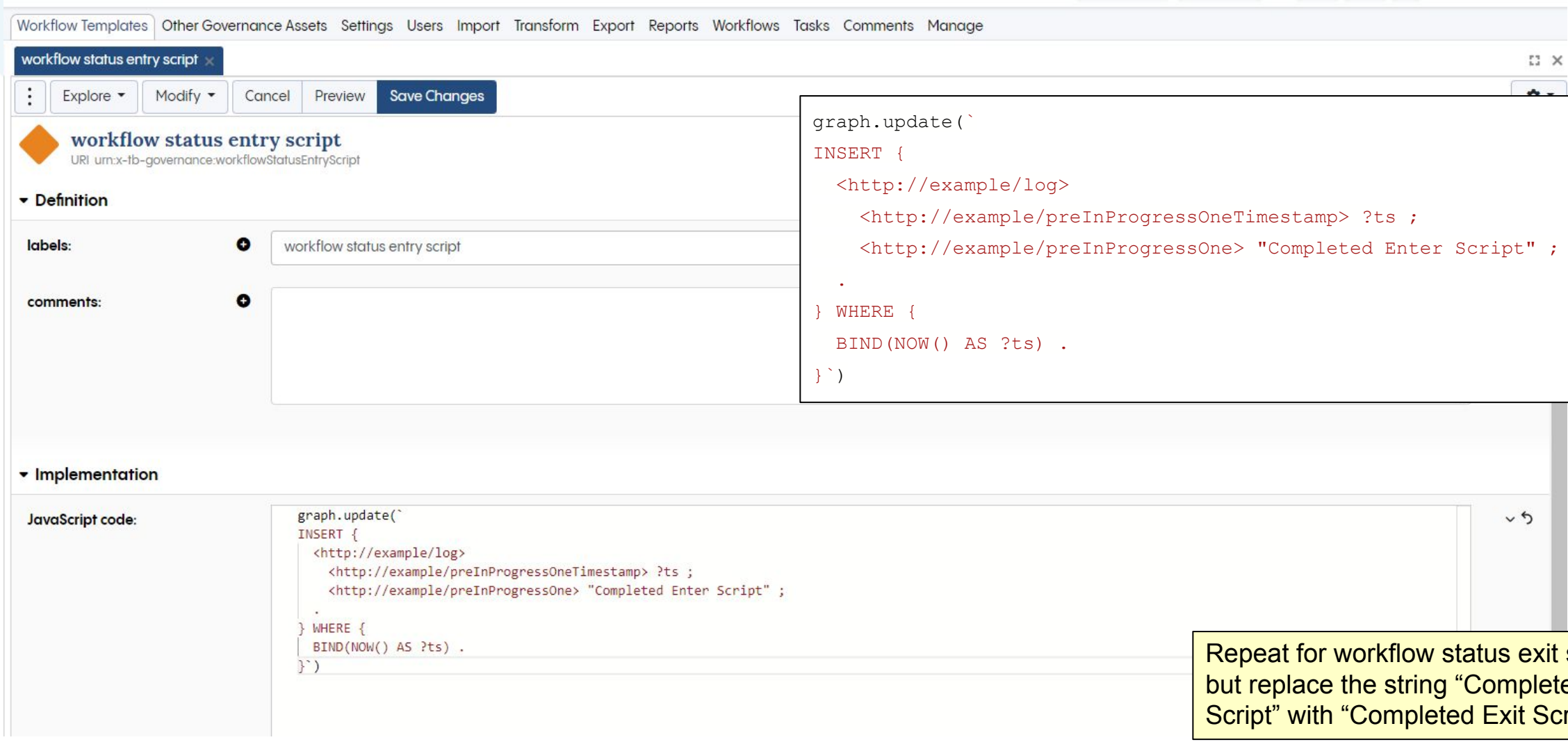
Event-Condition-Action: Add a status script change




```
graph.update(`
INSERT {
  <http://example/log>
    <http://example/preInProgressOneTimestamp> ?ts ;
    <http://example/preInProgressOne> "Completed Enter Script" ;
  .
} WHERE {
  BIND(NOW() AS ?ts) .
}`)
```

Repeat for workflow status exit script, but replace the string “Complete Enter Script” with “Completed Exit Script”

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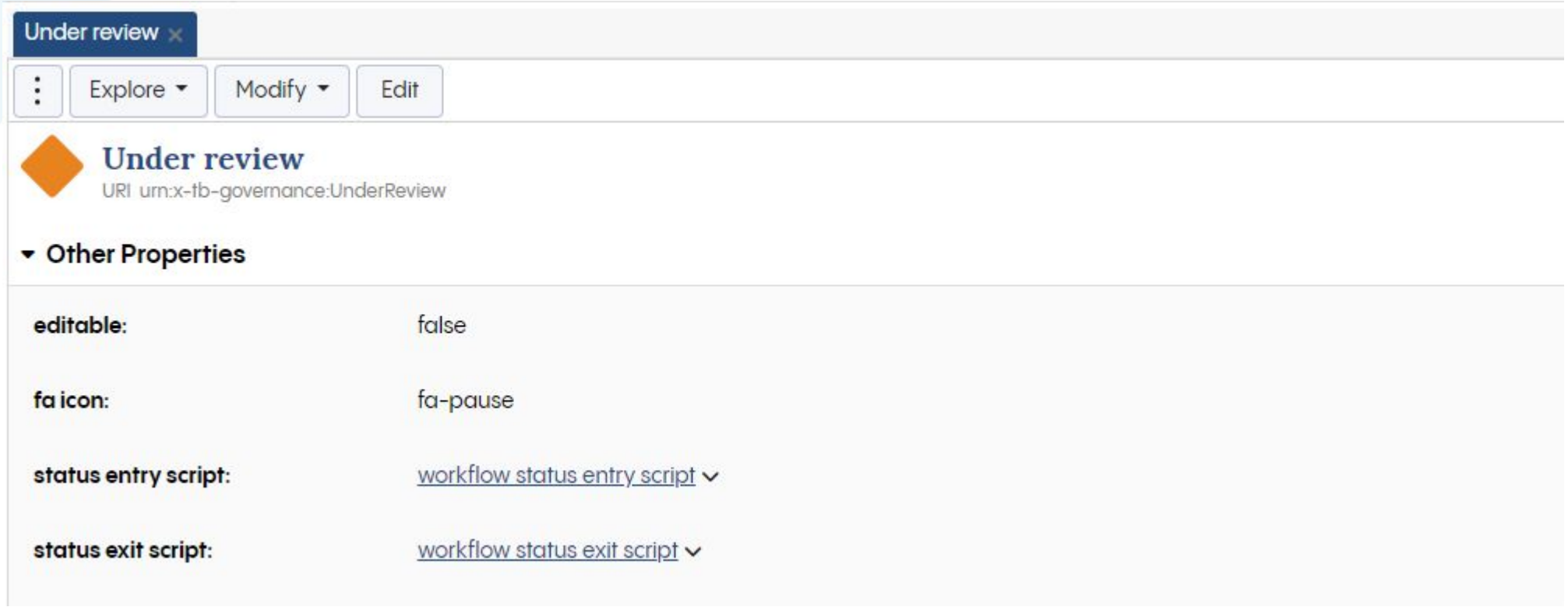
Event-Condition-Action: Add a status script change



How it should look

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Viewing Template

Workflow Template **Workflow Template**

Diagram View

This workflow template consists of the following states:

Uncommitted (editable)

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It means that changes are being made or are expected to be made. Any change created so far is "work in progress" and has not been written to the production copy.

Possible Transitions:

- To Under review if the following conditions are satisfied:
  - Working copy requires changes: true

Approved (not editable)

It means that the changes have been approved.

Possible Transitions:

- To Committed

Under review (not editable)

Entry Scripts

- workflow status entry script

Exit Scripts

- workflow status exit script

Possible Transitions:

- To Approved if the following conditions are satisfied:
  - Required governance role: data governor
- To Uncommitted

Committed (not editable)

This is a terminal status with no possible transitions into other statuses.

It means that the changes have been written to the production copy and no further edits are possible.

Status scripts: entry and exit

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What we covered

- What is a Workflow?
- Overview of existing workflows
- Creating a Workflow Template
- Status Change Events