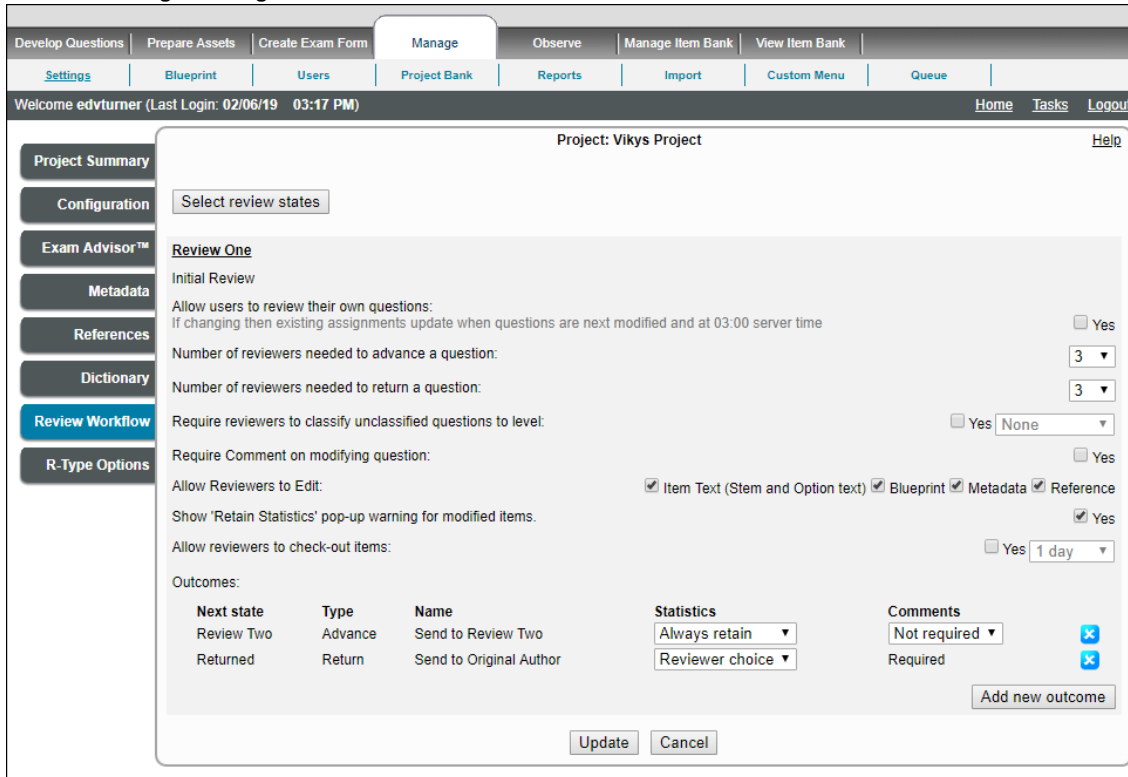


# 5.1.3 Review Workflow

## Access the Review Workflow page


1. Select the **Manage Setting Review Workflow** menu.

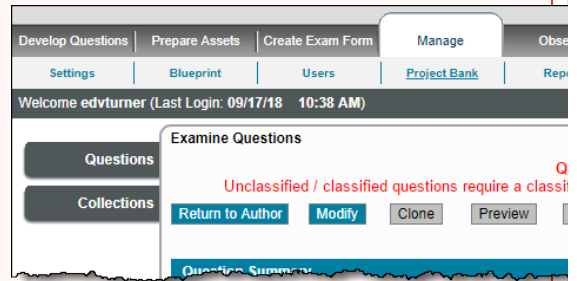


Option	Description
<b>Allow users to review their own Questions</b>	Select <b>Yes</b> to allow authors to review items they have written.
<b>Number of reviewers needed to advance a Question</b>	The number of Reviewers who must advance an item in its current form before it is approved. Allowed values range from 0 to 15; the default is 3.  Setting this to 0 causes the review process to be entirely skipped.
<b>Number of reviewers needed to return a Question</b>	The number of Reviewers who must return an item in its current form before it is returned to the author. Allowed values range from 1 to 15; the default is 3.

**Require reviewers to classify unclassified Questions to level**

Choose **Yes** if Reviewers should ensure the item is correctly classified, and then select the level to which the item should be classified from the drop-down list.  
**Lowest Level** in the drop-down list indicates that in a blueprint of varying depth, the lowest level must be selected irrespective of the depth.

 When **Yes** is selected for **Require reviewers to classify unclassified Questions to level** setting on the **Review Workflow** page and an item with one of the Review States having Unclassified Blueprint or Blueprint level lower than the one specified in the drop-down setting on that page is opened on the **Examine Questions** page, then the following error message is displayed in **red text**. The State of such items cannot be changed to anything other than one of the available Review States or to the Obsolete state.




**Require Comment on modifying Question**

Select **Yes** if the Reviewer should record/explain changes made on the **Create/Edit Question** page.

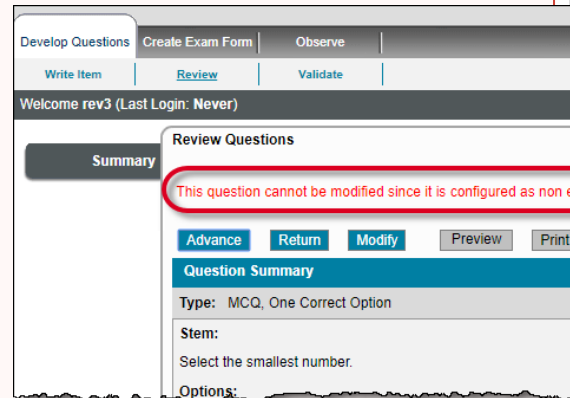
**Allow Reviewers to Edit**

Allow or disallow users with Reviewer permission to edit the following areas: Item Text (Stem and Option text), Blueprint, Metadata, and Reference.


Each of these areas has check boxes next to them, which grant edit permissions to Reviewers if selected and deny them if not selected. All the check boxes are enabled by default, thus allowing Reviewers to edit all these areas unless manually deselected by the Project Manager.

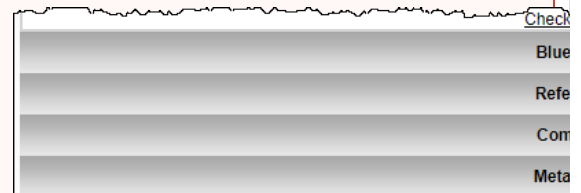
 A Project Manager is also bound by the permissions of a Reviewer on the pages affected by the above settings.

! An item cannot be modified by a Reviewer if all the check boxes are not selected and an error message is displayed in red text.



! A Reviewer is able to partially modify an item if check boxes against some of the above items are not selected, thus allowing modifications to only certain areas of the item. A message in red text informs the Reviewer about areas that cannot be edited.

If metadata and blueprint are set to not editable, then a disallowed icon  (red circle icon with a diagonal slash across it) is displayed just after the configuration name. Moving the mouse cursor over these icons shows the message **Manager has disabled editing this content within the current review state.**





An error message in red is displayed if you try to disallow Reviewers to edit **Metadata** in **Review Workflow** when it is set to **Mandatory** under **Manage Settings Metadata**. If there are multiple review states, then at least one review state must allow the Reviewers to edit metadata.

Develop Questions | Prepare Assels | Create Exam Form | Manage | Obse

Settings | Blueprint | Users | Project Bank | Rep

Welcome edvturner (Last Login: 11/21/18 01:36 PM)

Project Summary

Configuration

Exam Advisor™

Metadata

References

Dictionary

Review Workflow

R-Type Options

Review One must contain at least one advance out

Select review states

**Review One**

First content review

Allow users to review their own questions:  
If changing then existing assignments update when questions

Number of reviewers needed to advance a question:

Number of reviewers needed to return a question:

Require reviewers to classify unclassified questions to level:

Require Comment on modifying question:

Allow Reviewers to Edit:

Show 'Retain Statistics' pop-up warning for modified items.

Allow reviewers to check-out items:

Outcomes:

Next state	Type	Name
------------	------	------

⚠ When the check box next to **Blueprint** is removed in **Review Workflow**, meaning it cannot be edited by *Reviewers*, and you try to enforce a blueprint level against **Require Reviewers to classify unclassified Questions to level**, then you get an error message in red.

The screenshot shows a web application interface with a top navigation bar containing 'Develop Questions', 'Prepare Assets', 'Create Exam Form', 'Manage', and 'Obse'. Below this is a secondary navigation bar with 'Settings', 'Blueprint', 'Users', 'Project Bank', and 'Rep'. A user greeting reads 'Welcome edvturmer (Last Login: 11/21/18 01:36 PM)'. A left sidebar lists menu items: 'Project Summary', 'Configuration', 'Exam Advisor™', 'Metadata', 'References', 'Dictionary', 'Review Workflow' (highlighted in blue), and 'R-Type Options'. The main content area displays the 'Review Workflow' configuration page. At the top, a red error message states: 'Please set the BluePrint editable since the area is'. Below this is a 'Select review states' button. The 'Review One' section includes several configuration options: 'First content review', 'Allow users to review their own questions: If changing then existing assignments update when questions', 'Number of reviewers needed to advance a question:', 'Number of reviewers needed to return a question:', 'Require reviewers to classify unclassified questions to level.', 'Require Comment on modifying question:', 'Allow Reviewers to Edit:', 'Show 'Retain Statistics' pop-up warning for modified items.', and 'Allow reviewers to check-out items:'. At the bottom, an 'Outcomes:' section contains a table:

Next state	Type	Name
Validate	Advance	Send to Validate
Returned	Return	Send to Original Author

⚠ When you clear the check box for Reference in **Review Workflow** so that Reviewers should not be able to edit references in items, you will get an error in red if it has been set as mandatory (check box next to **Questions must have references** is enabled) in the **Questions** tab of **Manage Settings Configuration**.

Develop Questions | Prepare Assets | Create Exam Form | **Manage** | Observe

Settings | Blueprint | Users | Project Bank | Reports

Welcome edvturmer (Last Login: 11/21/18 01:36 PM)

Project Summary

Configuration Please set the Reference editable in any of the review states

Exam Advisor™

Metadata

References

Dictionary

**Review Workflow**

R-Type Options

Select review states

**Review One**

First content review

Allow users to review their own questions:  
If changing then existing assignments update when questions are reviewed

Number of reviewers needed to advance a question:

Number of reviewers needed to return a question:

Require reviewers to classify unclassified questions to level:

Require Comment on modifying question:

Allow Reviewers to Edit:

Show 'Retain Statistics' pop-up warning for modified items.

Allow reviewers to check-out items:

Outcomes:

Next state	Type	Name
Validate	Advance	Send to Validate
Returned	Return	Send to Original Author

**Show 'Retain Statistics' pop-up warning for modified items**

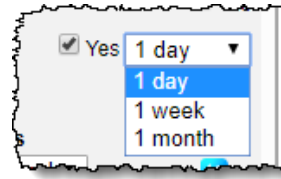
The pop-up to confirm retaining statistics while trying to save an item with statistics after modifying for a review state is not shown, if this check box is not selected, and the statistics are retained.

This check box is selected by default, meaning the pop-up to confirm retaining statistics appears while modifying items with statistics.

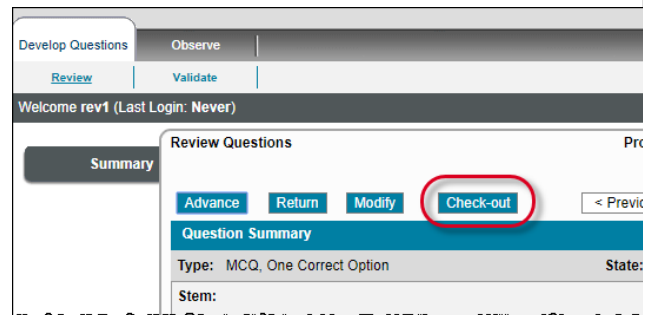
This check box is grayed out and the statistics are retained while saving an item with statistics after modifying for a review state, if the **Show 'Retain Statistics' pop-up warning for modified items** check box at the **Project level** is not selected.

### Allow reviewers to check-out items

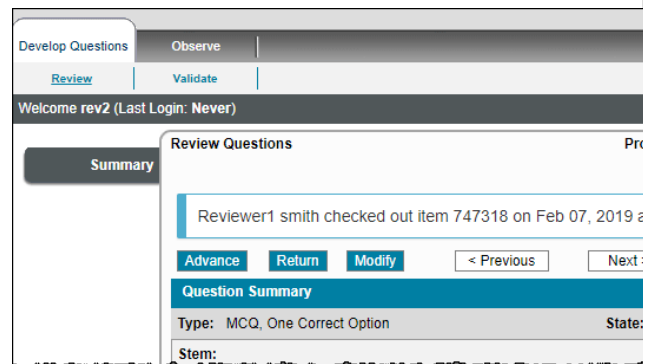
Allow or disallow users with Reviewer permission to manually check out an item for 1 day, 1 week, or 1 month.



This setting enables a **Check-out** button on the **Review Question** page. When the reviewer clicks the Check-out button, the item remains checked out for the number of days specified in the drop-down list, unless the user checks in the item. ExamDeveloper sends out an email reminder one day prior to automatically checking in the item. If the user does not check in the item before the expiration date, ExamDeveloper checks in the item at **3 am** server time on the expiration date.



This manual check-out prevents other users from editing the item as long as it is checked out. When they get to the Review Questions page for an item that is checked out, a message notifies the reviewer which user has the item checked out.



### Outcomes

The Outcomes list what happens when you **advance** or **return** an item. There can be multiple advance and return states.



Only Project Managers can access this page to modify these settings.

2. After selecting all information, click **Update** to save changes or **Cancel** to discard changes.

## Add Review States to a project

Once Review States have been added to the Item Bank, you can add them to a project. See [Review State](#) for details on adding a review state to an Item Bank.

1. Click the **Select review states** button. The page with a list of **Available Review states** in the current Item Bank and the **Current Order** of the review states is displayed.

### Select Review States

	Available Review states	Current Order
↓	<input checked="" type="checkbox"/> Review: Default	1
↓ ↑	<input checked="" type="checkbox"/> Review: State One	2
↓ ↑	<input checked="" type="checkbox"/> Review: State Two	3
↓ ↑	<input checked="" type="checkbox"/> Review: State Three	4
↓ ↑	<input checked="" type="checkbox"/> Review: State Four	5
↓ ↑	<input checked="" type="checkbox"/> Review: State Five	6
↑	<input checked="" type="checkbox"/> Review: State Six	7

2. Select the check boxes for the review states you wish to include in your project workflow.
3. To save changes click **Save**, or to discard the changes click **Cancel**.
4. When you add or move review states, a message notifies you how the review states have changed as a result of saving the changes. In this example, previously Review One had two possible outcomes: **Return**, which sent the item back to the Original Author, and **Advance**, which sent the item to the Validate state. After adding Review Two and Review Three there are still two possible outcomes: Return, which sends the item back to the Original Author, and Advance, which now sends the item on to Review Two. See [Add Review Outcomes](#) below for details on how to add more review outcomes.

Develop Questions | Prepare Assets | Create Exam Form | Manage | Observe | Manage Item Bank | View Item Bank

Settings | Blueprint | Users | Project Bank | Reports | Import | Custom Menu | Queue

Welcome edvturner (Last Login: 11/21/18 01:36 PM) [Home](#) [Tasks](#) [Logout](#)

Project: Vikys Project [Help](#)

- Project Summary
- Configuration
- Exam Advisor™
- Metadata
- References
- Dictionary
- Review Workflow
- R-Type Options

Changes processed.

As a result of changes to the review workflow, outcomes have changed for the following states: Review One.

**Review One**

First content review

Allow users to review their own questions:  Yes

If changing then existing assignments update when questions are next modified and at 03:00 server time

Number of reviewers needed to advance a question:

Number of reviewers needed to return a question:

Require reviewers to classify unclassified questions to level:  Yes

Require Comment on modifying question:  Yes

Allow Reviewers to Edit:  Item Text (Stem and Option text)  Blueprint  Metadata  Reference

Show 'Retain Statistics' pop-up warning for modified items:  Yes

Allow reviewers to check-out items:  Yes

Outcomes:

Next state	Type	Name	Statistics	Comments
Review Two	Advance	Send to Review Two	<input type="text" value="Always retain"/>	<input type="text" value="Not required"/> <input type="button" value="x"/>
Returned	Return	Send to Original Author	<input type="text" value="Reviewer choice"/>	<input type="text" value="Required"/> <input type="button" value="x"/>

**Review Two**

Subject Matter Expert review

**i** If only **one** review state is configured, by default the *Advance* outcome moves the item to the *Validate* state, and the *Return* outcome moves the item back to the *original author*. If three review states are configured, by default each of the review states are configured as follows:

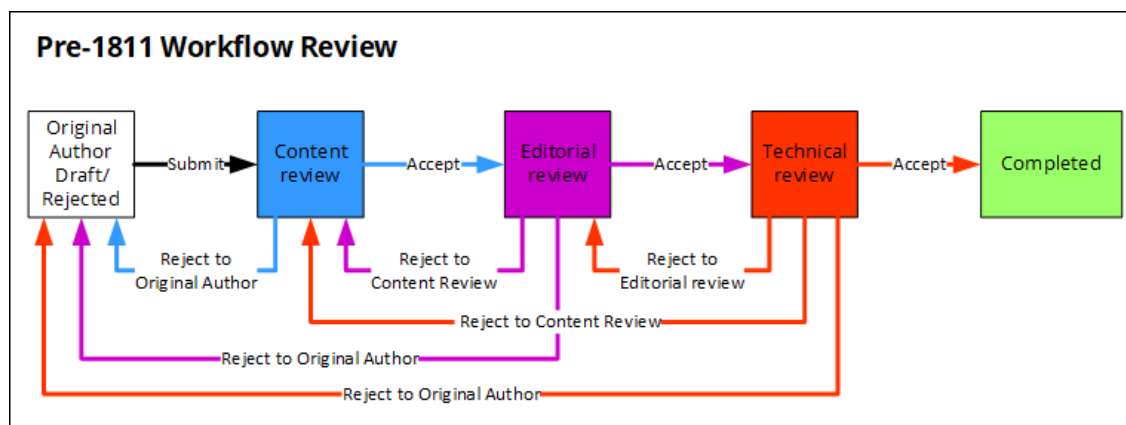
- Review One: *Advance* moves the item to Review Two, and *Return* moves the item to the Original Author
- Review Two: *Advance* moves the item to Review Three, and there are two possible *Return* outcomes - the item can be returned to Review One, or to the Original Author
- Review Three: *Advance* moves the item to the Validate state, and there are three possible *Return* outcomes - the item



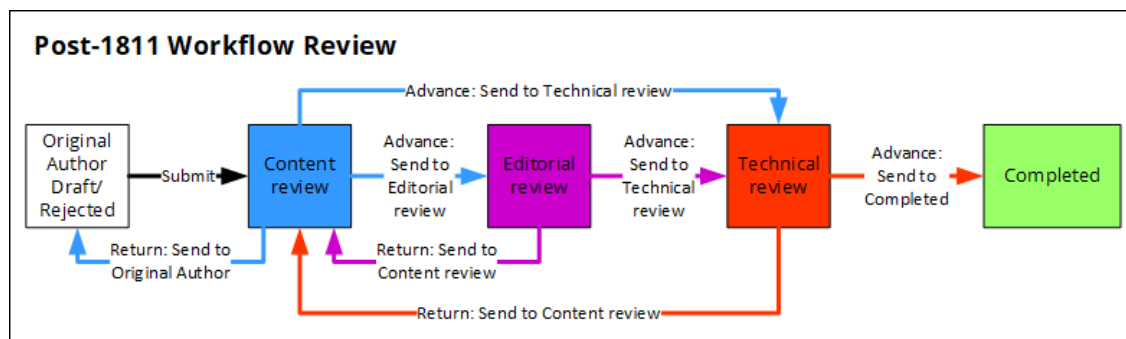
can be returned to Review Two, Review One, or to the Original Author  
Outcomes can be added or deleted from each review state.

## Add Review Outcomes

Prior to 1811, there was only a single linear path to forward an item. When reviewers Accepted or Advanced an item, it went to the next review state. The final reviewer could determine who to reject or return the item to.



As of 1811 Project Managers can add multiple outcomes for users to forward or return items. Only the final reviewer is given the option to forward or return the item and select the next review state or select who to return the item to. Each review state may have multiple Advance outcomes and multiple Return outcomes.



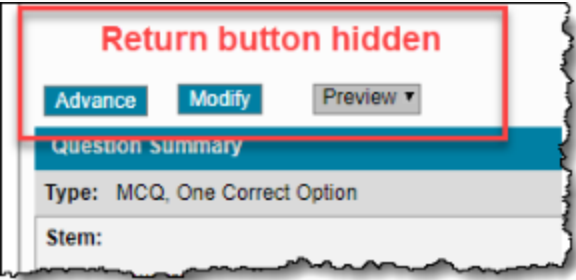
**i** If there is only one Advance outcome for the final reviewer, the item automatically advances to the next review state when they click **Advance**.

If there are multiple Advance outcomes for the final reviewer, they must select who to advance the item to from the **Outcome** drop-down list on the Review or Modify Question page.

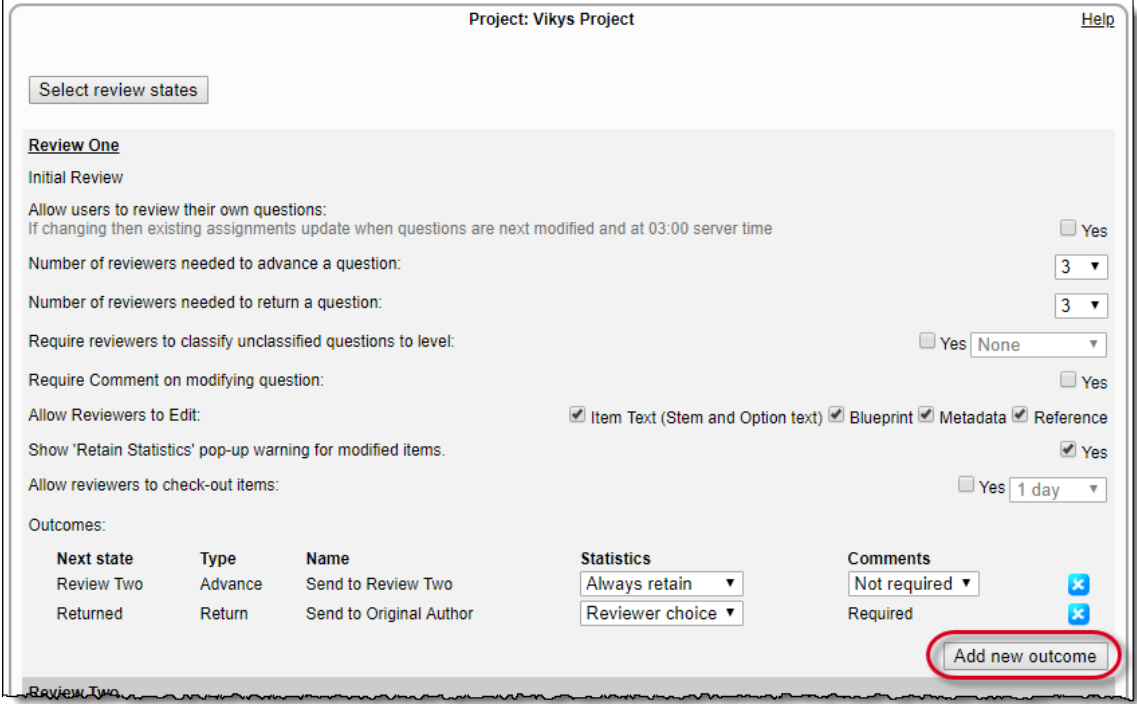
**Advance Question**

Outcome:

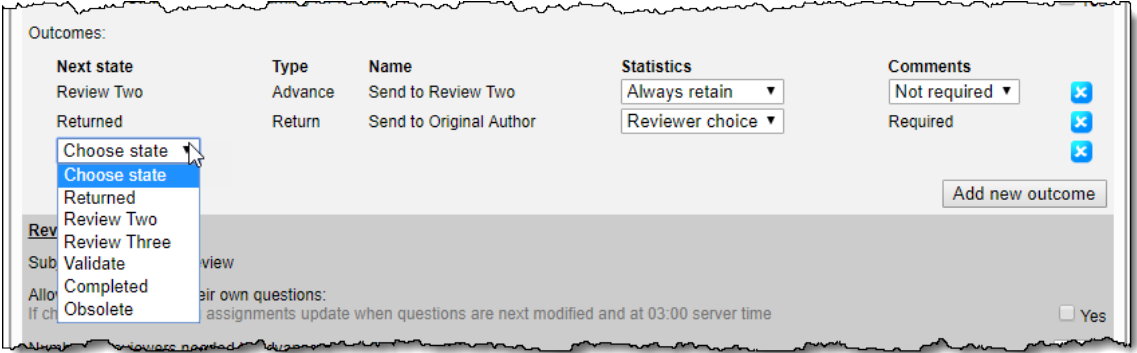
If there are no outcomes where the next state is a Return state, the **Return** button is hidden on the Review or Modify Question page.



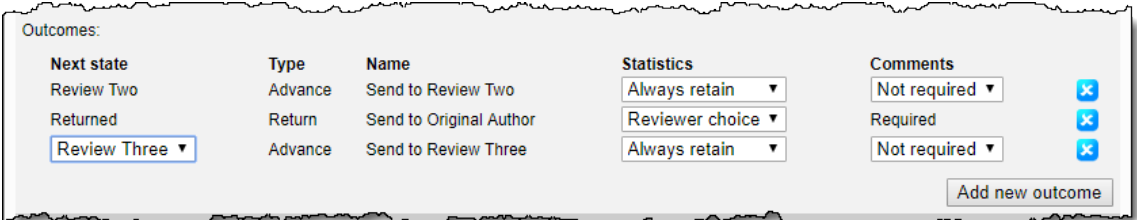
1. Click the **Add new outcome** button for the desired review state.



2. Click the **Choose state** drop-down list and select the desired **outcome** from the list.



The new Outcome is added to the list.



- All Return Outcomes require reviewers to add a comment explaining why they are returning the item. You can specify if Comments are required for any of the other Outcome options. Click the **Comments** drop-down list for the newly added Outcome and select **Required**.

Outcomes:

Next state	Type	Name	Statistics	Comments
Review Two	Advance	Send to Review Two	Always retain	Not required
Returned	Return	Send to Original Author	Reviewer choice	Required
Review Three	Advance	Send to Review Three	Always retain	Not required

Not required  
Required

Add new outcome

- For each of the Outcome states, you can specify whether to **Always retain** statistics or let the reviewer decide by selecting **Always retain**.

Outcomes:

Next state	Type	Name	Statistics	Comments
Review Two	Advance	Send to Review Two	Always retain	Not required
Returned	Return	Send to Original Author	Reviewer choice	Required
Review Three	Advance	Send to Review Three	Always retain	Required

Always retain  
Reviewer choice  
Always retain

Add new outcome

- Click **Update**. The Outcomes are updated for the review state.

Project: Vikys Project Help

Changes processed.

Select review states

**Review One**

Initial Review

Allow users to review their own questions:  
If changing then existing assignments update when questions are next modified and at 03:00 server time  Yes

Number of reviewers needed to advance a question: 3

Number of reviewers needed to return a question: 3

Require reviewers to classify unclassified questions to level:  Yes: None

Require Comment on modifying question:  Yes

Allow Reviewers to Edit:  Item Text (Stem and Option text)  Blueprint  Metadata  Reference

Show 'Retain Statistics' pop-up warning for modified items.  Yes

Allow reviewers to check-out items:  Yes 1 day

Outcomes:

Next state	Type	Name	Statistics	Comments
Review Two	Advance	Send to Review Two	Always retain	Not required
Review Three	Advance	Send to Review Three	Always retain	Required
Validate	Advance	Send to Validate	Always retain	Not required
Returned	Return	Send to Original Author	Reviewer choice	Required

Add new outcome

**Review Two**

## Delete Review Outcomes

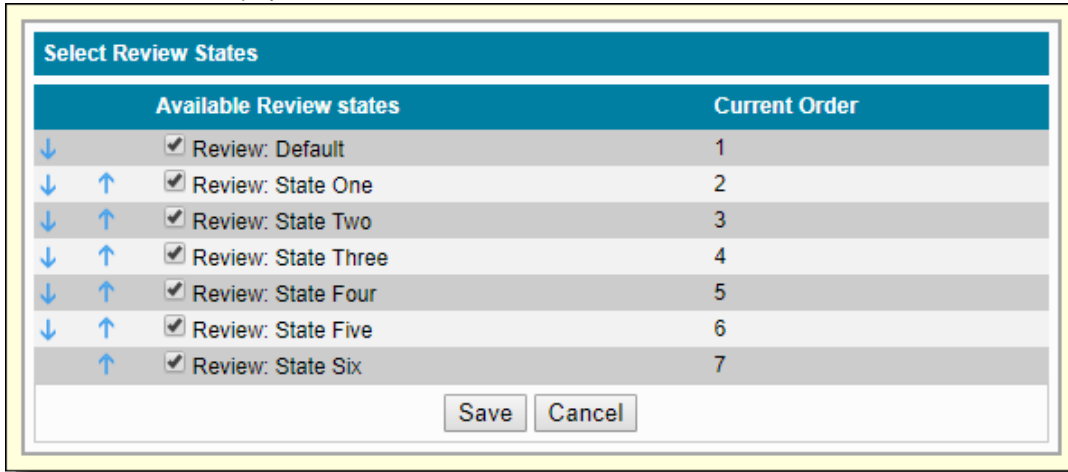


- Click the **Delete** icon for the outcome you wish to remove from the review state. The outcome is removed from the review state.
- Click **Update** to save the changes.

## Re-sequence Review States

You may have a need to rearrange the order of the review states. If items have already gone through review states, the historical information on the item is retained.

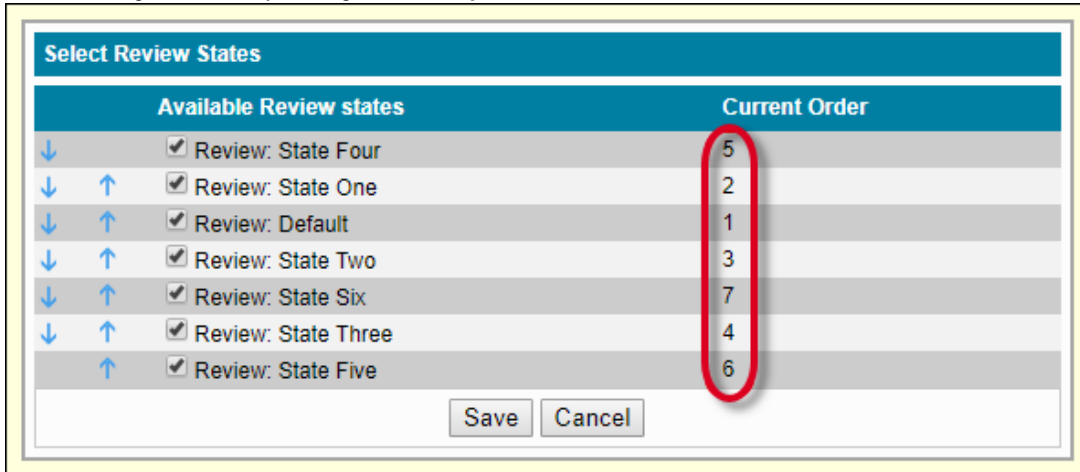
1. Click the **Select review states** button. The page with a list of **Available Review states** in the current Item Bank and the **Current Order** of the Review States is displayed.



Select Review States		
	Available Review states	Current Order
↓	<input checked="" type="checkbox"/> Review: Default	1
↓ ↑	<input checked="" type="checkbox"/> Review: State One	2
↓ ↑	<input checked="" type="checkbox"/> Review: State Two	3
↓ ↑	<input checked="" type="checkbox"/> Review: State Three	4
↓ ↑	<input checked="" type="checkbox"/> Review: State Four	5
↓ ↑	<input checked="" type="checkbox"/> Review: State Five	6
↑	<input checked="" type="checkbox"/> Review: State Six	7

Save Cancel

2. You can change the order by clicking the **Move Up** and **Move Down** arrows.



Select Review States		
	Available Review states	Current Order
↓	<input checked="" type="checkbox"/> Review: State Four	5
↓ ↑	<input checked="" type="checkbox"/> Review: State One	2
↓ ↑	<input checked="" type="checkbox"/> Review: Default	1
↓ ↑	<input checked="" type="checkbox"/> Review: State Two	3
↓ ↑	<input checked="" type="checkbox"/> Review: State Six	7
↓ ↑	<input checked="" type="checkbox"/> Review: State Three	4
↑	<input checked="" type="checkbox"/> Review: State Five	6


Save Cancel

3. To save changes click **Save**, or to discard the changes click **Cancel**.



If you add, remove, or re-sequence review states, all outcomes for a review state are recalculated and any manual outcomes added to the review state are lost and must be recreated.

## Disable Review States

1. Select **Select review states**. The page with the list of **Available Review states** and the **Current Order** for that Review State is displayed.
2. Deselect the  check box beside the Review State you would like to disable for the current project and click **Save**. The Review State is disabled for the current project and is no longer visible on the **Review Workflow** page.

Select Review States		
	Available Review states	Current Order
↓	<input checked="" type="checkbox"/> Review: Default	1
↓ ↑	<input checked="" type="checkbox"/> Review: State One	2
↓ ↑	<input checked="" type="checkbox"/> Review: State Two	3
↓ ↑	<input type="checkbox"/> Review: State Three	4
↓ ↑	<input checked="" type="checkbox"/> Review: State Four	5
↓ ↑	<input type="checkbox"/> Review: State Five	6
↑	<input type="checkbox"/> Review: State Six	7

3. Then click **Update** to configure the changes.

If the Review State you want to delete has any assignments, it shows an error message: **Please delete the assignments for the states to delete.**

The screenshot shows a web application interface. At the top, there is a navigation bar with tabs: 'Develop Questions', 'Prepare Assets', 'Create Exam Form', 'Manage' (selected), 'Observe', 'Manage Item Bank', and 'View Item Bank'. Below this is a secondary navigation bar with links: 'Settings', 'Blueprint', 'Users', 'Project Bank', 'Reports', 'Import', 'Custom Menu', and 'Queue'. A user greeting bar says 'Welcome demouser2f (Last Login: 12/12/17 12:46 AM)' and includes 'Home', 'Tasks', and 'Logout' links. The main content area is titled 'Project: Demo\_Project1' and contains a 'Select review states' button. A red error message is displayed in the center: 'Please delete the assignments for the states to delete.' On the left side, there is a sidebar with buttons for 'Project Summary', 'Configuration', and 'Exam Advisor™'.