

Intelligent Agents

The **Intelligent Agents** tool monitors a course to find activity that matches criteria that you set. The criteria that the agents search for are log in activity, course activity, and release conditions in Brightspace.

Example uses for agents include:

- Emailing users with grades below a certain level
- Checking for users that have not logged in within a specific number of days
- Checking for users that view a specific content topic

Visual tour of Intelligent Agents

The screenshot shows the 'Agent List' interface. At the top right, there is a 'Settings' gear icon with a red circle containing the number 5. Below the title, there are three buttons: 'New Agent' (blue, with a red circle containing 1), 'Edit Categories', and 'More Actions' (with a dropdown arrow). On the right side, there is a 'View:' dropdown menu set to 'All agents' (with a red circle containing 4) and an 'Apply' button. Below these are four action icons: 'Enable' (checked, with a red circle containing 2), 'Disable', 'Delete', and 'Bulk Edit'. The main area is a table with the following structure:

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Hasn't accessed course ▼ ✕ This IA indicates when a learner hasn't accessed my course in 5 days.		-	-
<input type="checkbox"/>	Hasn't logged in to Brightspace ▼ This IA indicates when a learner hasn't logged in to Brightspace in 5 days.		-	Saturday, August 19, 2023 9:00 AM EDT

Figure: Use **Intelligent Agents** to create new agents, group Agents into categories, export a history of all run Agents, and more.

1. Create a new agent, create and edit categories to group related agents together, and select **More Actions** for more options.
2. **Enable, Disable, Delete** or **Bulk Edit** existing agents.

3. Use the table to select agents, edit agents, and review information about agent run dates.
4. Use the drop down menu to filter agents.
5. Customize email settings related to Intelligent Agents.

Considerations for setting up agents

When you create a new agent, you need to determine:

- The criteria the agent looks for. The agent can check user login activity, course activity, and/or triggered release conditions. Be aware that intelligent agents evaluate the status of release conditions at the time that they run. A user that may have satisfied a release condition on a prior run, may no longer satisfy a release condition on a subsequent run, especially in the case of our 'NOT' conditions.
- How often the agent is scheduled to run and find users that meet its criteria. If you don't set a schedule then the agent must be manually triggered on the **Agent List** page.
- How often the agent takes action when a user satisfies the criteria. I.e. Will the agent send one email the first time the user triggers the agent, or send reminder emails to the user every time the agent runs?
- The action you want the agent to take when it finds a user that fits the criteria it is looking for. An agent could: change enrollment in the current course, or enroll into another course; send an email to the user, their auditor, or other user; or do nothing (choosing no action enables the agent to run and generate reports of who has satisfied the criteria during different runs of the agent).

Notes:

- You must have the appropriate enrollment permissions in the current or destination courses to create intelligent agents that change user enrollments.
- File attachments and inserted images in emails cannot exceed the limit set for your institution for email attachments.

Best practices for creating and using agents

There are many things you should consider when setting up agents for your course in order to get the most benefit from using the tool. Agents are most useful when you have carefully considered how you are organizing and presenting them in a course.

Some best practices include:

- Use a standard naming convention to keep the order and purpose of each agent clear
- Use the agent's Description area to collect reminder notes of what you need to adjust in the agent for each offering
- Determine if your agent would benefit from repetition
- Use replace strings to personalize emails and minimize editing
- Avoid overusing agents, especially if you can get the information to learners another way

Add a link to the Intelligent Agents tool to the navbar

You can add a link to the Intelligent Agents tool to your course's navbar.

To add the link to the navbar

1. From the **Course Admin** menu, select **Navigation and Themes**.
2. Click the link for the navbar, in which you want to add a link to the Intelligent Agents tool.
3. On the **Edit Navbar** page, in the **Links** area, click **Add Links**.
4. In the **Add Links** dialog box, select the **Intelligent Agents** check box.
5. Click **Add**, and then **Save and Close**.

Create an agent

Create an agent that will perform an action such as sending an email based upon the criteria you set.

To create an agent

1. Navigate to **Course Admin > Intelligent Agents**.

2. Click **New Agent**.

Agent List Settings

New Agent Edit Categories More Actions ▾

View: All agents ▾ Apply

Enable Disable Delete Bulk Edit

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ▾ <input checked="" type="checkbox"/> Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support is Available! ▾ <input checked="" type="checkbox"/> This Intelligent Agent is sent to students who might benefit from additional support.		-	-

Figure: Click **New Agent** to start creating an intelligent agent.

3. Do the following:

- a. Enter an **Agent Name**.
- b. (Optional) Add a **Description** of the agent.
- c. (Optional) Select a **Category**. To create a new category, click **Add Category**, add a **Name**, and then click **Save**.

New Agent

Agent Name: *
Great Job on the Quiz!

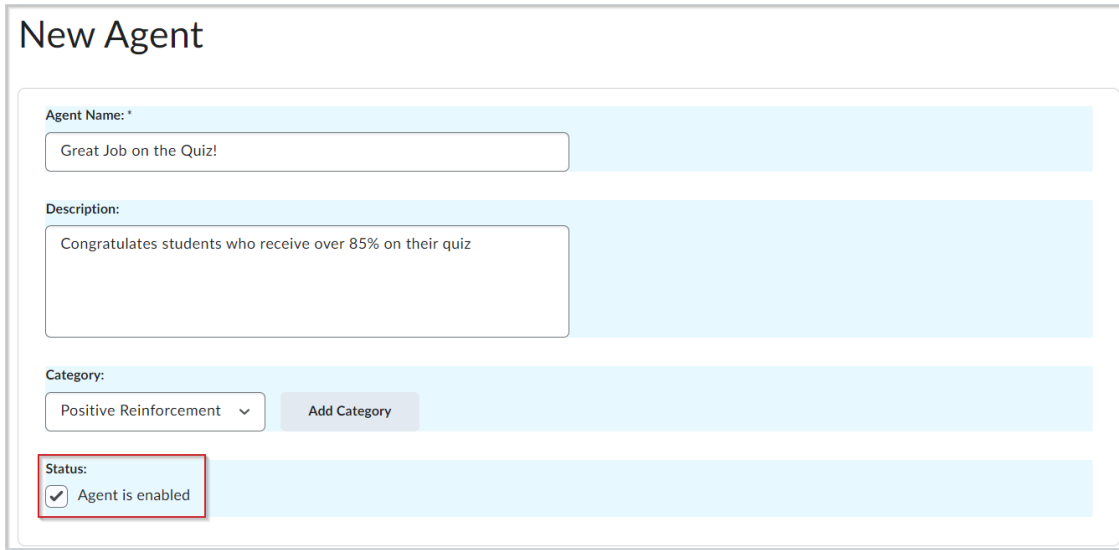
Description:
Congratulates students who receive over 85% on their quiz

Category:
Positive Reinforcement ▾ Add Category

Status:
 Agent is enabled

Figure: Enter the new agent's **Agent Name**, **Description**, and **Category**

4. Navigate to **Status** and select **Agent is enabled** to have the agent enabled upon creation.



The screenshot shows a 'New Agent' form with the following fields:

- Agent Name:** A text input field containing 'Great Job on the Quiz!'.
- Description:** A text area containing 'Congratulates students who receive over 85% on their quiz'.
- Category:** A dropdown menu showing 'Positive Reinforcement' and an 'Add Category' button.
- Status:** A section with a red border containing a checked checkbox and the text 'Agent is enabled'.

Figure: Click **Agent is enabled** to enable the agent upon creation.

5. To schedule how frequently agent criteria is evaluated, do the following:
 - a. Expand **Scheduling** by clicking the arrow icon.
 - b. Select a **Frequency**.
 - c. Enter in the criteria based on that frequency.

Note: Intelligent Agents can be scheduled to run before the course start date. Scheduled intelligent agents stop running and are automatically disabled if the course is inactive, past its end date, or deleted. You can still set up a practice run or a [manual run](#) of an intelligent agent at any time in a course with a passed end date.

Figure: Expand **Scheduling** and select the desired **Frequency**

Expand **Criteria** and under **Role in Classlist** do one of the following:

- To have the agent to be applicable to all roles in the Classlist, select **All users visible in the Classlist**.
- To have the agent be applicable to select roles, select **Users with specific roles** and select the desired roles.

Figure: Select the desired **Role in Classlist** option.

7. To have the agent **Take Action on Activity**, select one or more of the following options:
 - a. **Login Activity** runs the agent if the user either has or has not logged into the platform during the last specified number of days.
 - b. **Course Activity** runs the agent if the user either has or has not accessed the course in the last specified number of days.



Note: Neither option can be selected if the agent's **Frequency** is set to Hourly or **One-Time Run**.

Take Action on Activity

Login Activity

User has not logged in during the last day(s)

User has logged in during the last day(s)

Course Activity

User has not accessed the course in the last day(s)

User has accessed the course during the last day(s)

c.

d. Figure: Select and set the desired **Take Action on Activity** option or options.

8. To set an intelligent agent based on specific release conditions, do one of the following:

- o To have the agent run using an existing condition, navigate to **Criteria > Release Conditions** and click **Attach Existing**. Select the desired condition

and click **Attach**. Multiple conditions can be selected.

Attach an Existing Condition [X]

View Conditions for:
All Tools [v]

- Grades
- Final grade: released and receives less than or equal to 80 %
- Checklist
 - Completes the checklist item: **Final Assignment Choice-Oral Presentation**
 - Completes the checklist item: **Final Assignment Choice-Formal Report**
- Quizzes

Attach Cancel [//]

Figure: Select the desired condition or conditions and then click **Attach**.

- To create a new condition for your agent, navigate to **Criteria > Release Conditions** and click **Create and Attach**. Select a **Condition Type**. Specify any additional **Condition Details** and click **Create**.
For example, you can create an agent that acts against users who have been enrolled in a course for a certain number of days, either based on the first or

last time they were enrolled in the course.

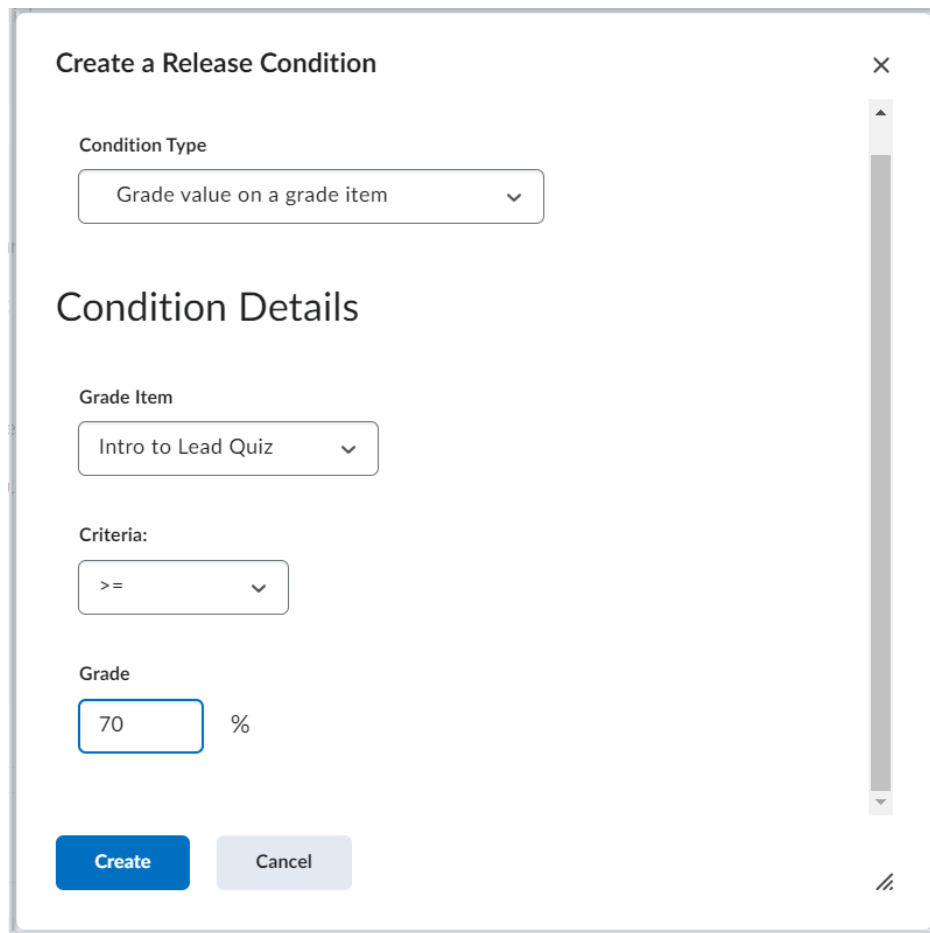


Figure: Select the desired **Condition Type** and enter in the required information. When completed, click **Create**.



Note: All criteria selections under **Take Action on Activity**, which include the criteria **Login Activity**, **Course Activity**, and **Release Conditions**, are optional selections.

9. Expand the **Actions** section by clicking the arrow icon.
10. In **Repetition**, select how often you want the agent to take action.
11. If your role has the **Use Agent Enrollment Actions** and **Perform Unenroll** permissions, you can set your agent to perform an enrollment or unenrollment action:
 - a. Under **Change User Enrollments**, select **Change user enrollments when the criteria are satisfied**.

- b. From **Enrollment Action**, select the action you want your agent to perform and select the course.
- To **Enroll user in a course**, select an available course. Only courses you have permission to enroll in will be shown. Select the **New Role** the user will be enrolled with when the agent criteria are satisfied.

Actions

Repetition

Take action only the first time the agent's criteria are satisfied for a user

Take action every time the agent is evaluated and the agent's criteria are satisfied for a user

[What Action Repetition setting should I use?](#)

Change User Enrollments

Change user enrollments when the criteria are satisfied

Enrollment Action **New Role**

Change current role Instructor

This affects all users visible in the Classlist!
We recommend including a role filter in the Criteria.

Send an Email

Send an email when the criteria are satisfied

Figure: Select the **New Role** desired for your user in **Change User Enrollments**.

12. To have the agent to send an email when the criteria are satisfied, navigate to **Send an Email**, select the **Send an email when the criteria are satisfied** check box and enter your email details and relevant attachments.

13. Click **Save and Close**.

Edit an agent

You can make changes to existing agents.

To edit an agent

1. Navigate to **Course Admin > Intelligent Agents**.
 - Select a filter option from **View**. The options are:
 - **All Agents**

- **By Category** (which sorts the agents by their assigned category)
- **Enabled** (only those agents that have been enabled)
- **Disabled** (only those agents who are not currently enabled).

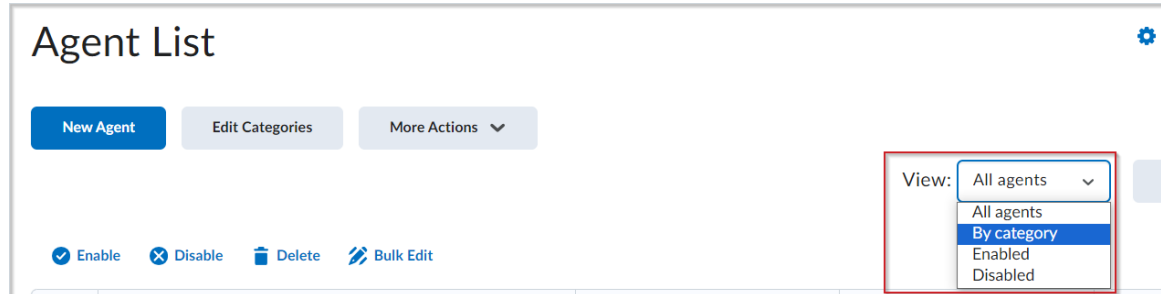


Figure: Select a **View** filter and then click **Apply**.

2. From the context menu of the agent you want to edit, click **Edit Agent**.

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	<p>Academic Risk ▼</p> <p>Sends an email to the student's Advisor to indicate academic risk</p>		-	-
<input type="checkbox"/>	<p>Additional Support</p> <p>This Intelligent Agent might</p>		-	-
<input type="checkbox"/>	<p>Grade Alert - Below 80%</p> <p>Sends an email to the student to receive a grade alert if they fall off to below 80%</p>		-	-
<input type="checkbox"/>	<p>Great Job on the Quiz</p> <p>Congratulates student on their quiz</p>		-	-

Figure: Click **Edit Agent**.

3. To edit multiple agents at once, select two or more agents and click **Bulk Edit**.

Note: You can only change certain attributes (title, category, active or inactive state) using **Bulk Edit**.

<input checked="" type="checkbox"/> Enable <input checked="" type="checkbox"/> Disable <input type="checkbox"/> Delete <input checked="" type="checkbox"/> Bulk Edit				
<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input checked="" type="checkbox"/>	Academic Risk ▼ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input checked="" type="checkbox"/>	Additional Support is Available! ▼ ✕ This Intelligent Agent is sent to students who might benefit from additional support.		-	-
<input type="checkbox"/>	Grade Alert - Below 80% ▼ ✕ Sends an email to students if they've checked off to receive a grade alert and their grade drops below 80%		-	-

4. Figure: Select two or more agents from the table and then click **Bulk Edit**.
4. Make your changes.
5. Click **Save and Close**.

Delete an agent

You can delete an agent individually or in bulk. Deleted agents do not run if they have a recurring schedule.

To delete an individual agent

1. Navigate to **Course Admin > Intelligent Agents**.
2. From the context menu of the agent you want to delete, click **Delete**.

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ▼ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support is Available! ▼ ✕ This Intelligent Agent is sent to students who might benefit from additional support.		-	-
<input type="checkbox"/>	Grade Alert - Below 80% ▼ ✕ Sends an email to students if they've checked off to receive a grade alert and their grade drops below 80%		-	-
<input type="checkbox"/>	Great Job on the Test! ▼ ✕ Congratulates students who score 80% or higher on their test.		-	-

Figure: Click **Delete**.

3. To confirm the deletion, click **Delete**.

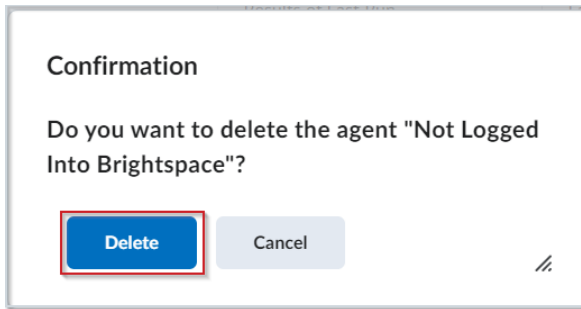


Figure: Click **Delete** to confirm your deletion.

To delete multiple agents

1. Navigate to **Course Admin > Intelligent Agents**.
2. In the **Agent List**, select the agents you want to delete.
3. Click **Delete**.

The screenshot shows the Intelligent Agents interface. At the top, there are buttons for "Enable", "Disable", "Delete" (highlighted with a red box), and "Bulk Edit". Below is a table with columns: "Agent", "Results of Last Run", "Last Run Date", and "Next Run Date".

<input type="checkbox"/>	Agent	Results of Last Run	Last Run Date	Next Run Date
<input checked="" type="checkbox"/>	Academic Risk Sends an email to the student's Advisor to indicate academic risk		-	-
<input checked="" type="checkbox"/>	Additional Support is Available! This Intelligent Agent is sent to students who might benefit from additional support.		-	-
<input type="checkbox"/>	Grade Alert - Below 80% Sends an email to students if they've checked off to receive a grade alert and their grade drops below 80%		-	-

Figure: Click **Delete** to delete the selected agents.

4. To confirm the deletion, click **Delete**.

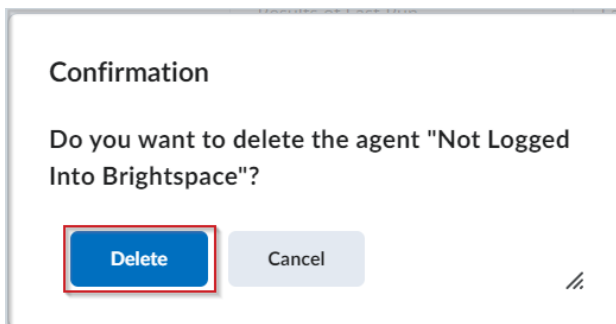


Figure: Click **Delete** to confirm your deletion.

Restore an agent

You can restore deleted agents. All restored agents maintain existing properties and history.

To restore a deleted agent

1. Navigate to **Course Admin > Intelligent Agents**.
2. Click **More Actions** and select **Restore**.
3. Click **Restore** to restore a deleted agent.

Reorder agent categories

You can reorder the list of categories used by Intelligent agents.

To reorder the list of agent categories

1. Navigate to **Course Admin > Intelligent Agents**.
2. Click Edit Categories.

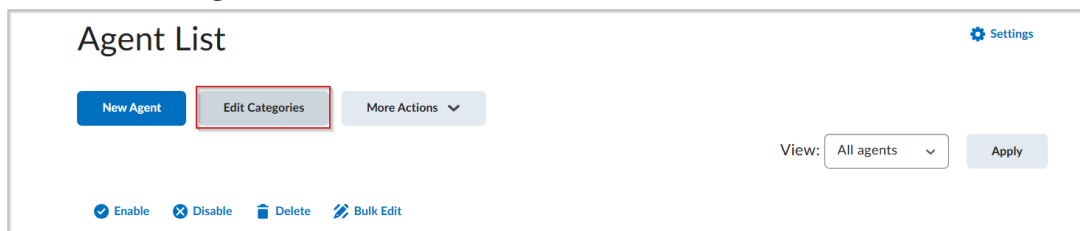


Figure: Click **Edit Categories**.

3. Click the **Sort Order** of the category. Enter the number value, and then press Enter or click away from the field.
4. Click **Close**.

Change the status of an agent

You can enable and disable agents individually or in bulk easily on the **Agent List** page. Disabled agents display an **Agent is not enabled** icon (represented by a red circle with a line through it) beside their name.

To change the status of an agent

1. Navigate to **Course Admin > Intelligent Agents**.
2. Do one of the following:
 - To enable an agent, select the agent you want to enable and click **Enable**.

- To disable an agent, select the agent you want to disable and click **Disable**.



Figure: Click **Enable** or **Disable** to change your agent's status.

Update Intelligent Agents settings

You can adjust the settings in the Intelligent Agent tool to set custom values for the name that emails come from and the reply-to address that responses are delivered to.

To update Intelligent Agent settings

1. Navigate to **Course Admin > Intelligent Agents**.
2. Click **Settings**.
3. Select one of the following:
 - Select **Use the system defaults**.
 - Select **set custom values for this course** and fill in the available fields.
4. Click **Save**.

Replace strings for agents

Replace String	Description	For Use In
{InitiatingUser}	The user who performs the action that meets the agent's criteria	Email address field
{InitiatingUserAuditors}	The auditors for the user who performs the action that meets the agent's criteria	Email address field
{OrgName}	The name of the organization	Email body
{OrgUnitCode}	The code for the Org Unit	Email body
{OrgUnitName}	The name of the Org Unit	Email body

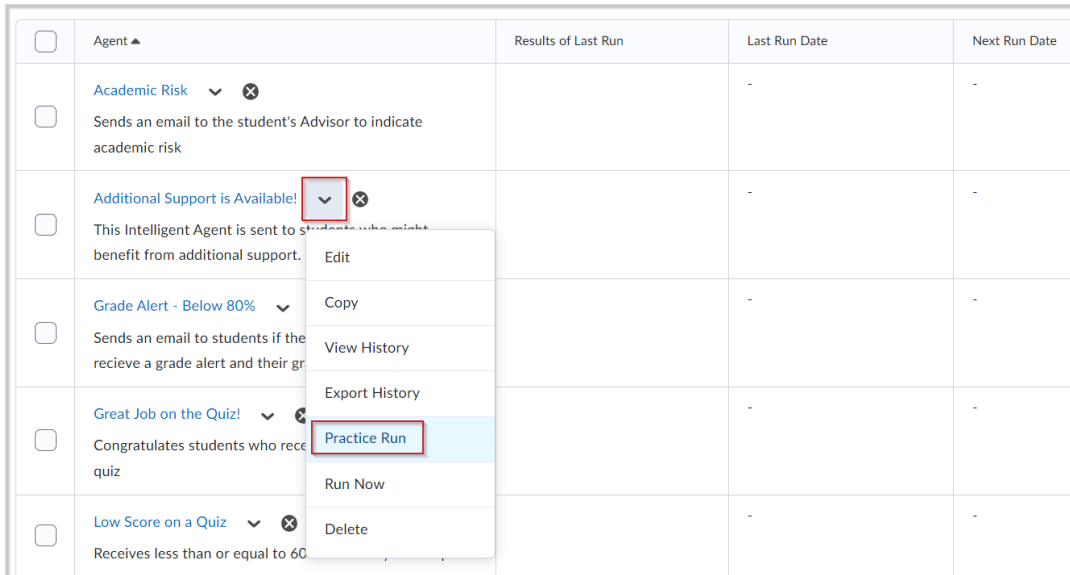
{OrgUnitStartDate}	The start date specified for the Org Unit	Email body
{OrgUnitEndDate}	The end date specified for the Org Unit	Email body
{OrgUnitId}	The org unit ID required to make quicklinks works	Email subject line and email body
{InitiatingUserFirstName}	The first name of the initiating user	Email body
{InitiatingUserLastName}	The last name of the initiating user	Email body
{InitiatingUserUserName}	The username of the initiating user	Email body
{InitiatingUserOrgDefinedId}	The Org Defined ID of the initiating user	Email body
{LastCourseAccessDate}	The date the initiating user last accessed the course	Email subject line and email body
{LastLoginDate}	The date the initiating user last logged in	Email subject line and email body
{LoginPath}	The address of the login path for the site	Email body

Perform a practice run on an agent

You can have an agent perform a practice run to see who will be identified by the agent without sending those users an email. Agents do not need to be enabled to perform a practice run.

To perform a practice run on an agent

1. Navigate to **Course Admin > Intelligent Agents**.
2. From the context menu of the agent you want to perform a practice run for, click **Practice Run**.



<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ▼ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support is Available! ▼ ✕ This Intelligent Agent is sent to students who might benefit from additional support.		-	-
<input type="checkbox"/>	Grade Alert - Below 80% ▼ Sends an email to students if they receive a grade alert and their grade		-	-
<input type="checkbox"/>	Great Job on the Quiz! ▼ ✕ Congratulates students who receive a high score on a quiz		-	-
<input type="checkbox"/>	Low Score on a Quiz ▼ ✕ Receives less than or equal to 60		-	-

Figure: Click **Practice Run** from the agent's context menu.

3. Click **Run** in the **Confirmation** dialog.
4. Click **Done** to return to the **Agent List** page.
5. The results of the practice run appear in the **Results of Last Run** column.

Figure: Click the link in the Results of Last Run column to view more details.

Run an agent manually

Typically, agents are set up to run automatically. If you do not have a regular schedule set up for an agent, you must run it manually.

When you run an agent manually, it sends a confirmation email to the user that requested or set up the agent. This email contains the following information:

- org unit code and name
- which agent ran
- time and date the request was submitted
- time and date the request was finished

- whether the agent took action

You can set up a manual run of an intelligent agent at any time in a course with a passed end date. Agents do not need to be enabled to set up a manual run.

To run an agent manually

1. Navigate to **Course Admin > Intelligent Agents**.
2. From the context menu of the agent you want to run manually, click **Run Now**.

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ⌵ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support This Intelligent Agent might benefit from additional support	0 users identified	1 minute ago	-
<input type="checkbox"/>	Grade Alert - Below 80% Sends an email to the student to receive a grade alert if they fall off to below 80%		-	-
<input type="checkbox"/>	Great Job on the Quiz Congratulates students on their quiz		-	-

Figure: Click **Run Now** from the agent's context menu.

3. Click **Run** in the **Confirmation** dialog.
4. Click **Done** to return to the **Agent List** page.
5. The results of the practice run appear in the **Results of Last Run** column. You can also view the details by clicking **View History** from the agent's context menu.

<input checked="" type="checkbox"/> Enable <input checked="" type="checkbox"/> Disable <input type="checkbox"/> Delete <input type="checkbox"/> Bulk Edit				
<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ▼ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support is Available! ▼ ✕ This Intelligent Agent is sent to students who might benefit from additional support.	10 users identified	1 minute ago	-
<input type="checkbox"/>	Grade Alert - Below 80% ▼ ✕ Sends an email to students if they've checked off to receive a grade alert and their grade drops below 80%		-	-

Figure: Click the link in the **Results of Last Run** column to view more details.

View the history of an agent

You can view the history of an agent to see when the agent was run, who was identified, the type of run (**Manual**, **Scheduled**, or **Practice**), who ran the agent, and if any errors were encountered.

To view the history of an agent

1. Navigate to **Course Admin > Intelligent Agents**.
2. From the context menu of the agent you want to view the history of, click **View History**.

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Academic Risk ▼ ✕ Sends an email to the student's Advisor to indicate academic risk		-	-
<input type="checkbox"/>	Additional Support is Available! ▼ ✕ This Intelligent Agent is sent to students who might benefit from additional support.	0 users identified	2 hours ago	-
<input type="checkbox"/>	Grade Alert - Below 80% ▼ ✕ Sends an email to students if they've checked off to receive a grade alert and their grade drops below 80%		-	-
<input type="checkbox"/>	Great Job on the Quiz! ▼ ✕ Congratulates students who score 80% or higher on their quiz		-	-

Figure: Click **View History** from the agent's context menu.

Export the history of an agent

You can export the history of an agent to a CSV file to see when the agent was run, who was identified, the type of run (Manual, Scheduled, or Practice), who ran the agent, and if any errors were encountered.

1. Navigate to **Course Admin > Intelligent Agents**.
2. Click **More Actions**, and select **Export Agent History**.

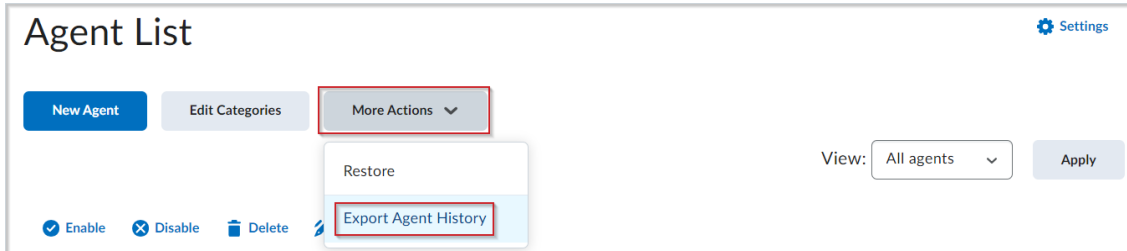


Figure: Click **Export Agent History** from the **More Actions** menu.

3. Use **Select an Agent** to select either **All** agents or a specific agent.
4. Select **Include Practice Runs** to include practice run information.
5. Set the date range to include.
6. Click **Export**.

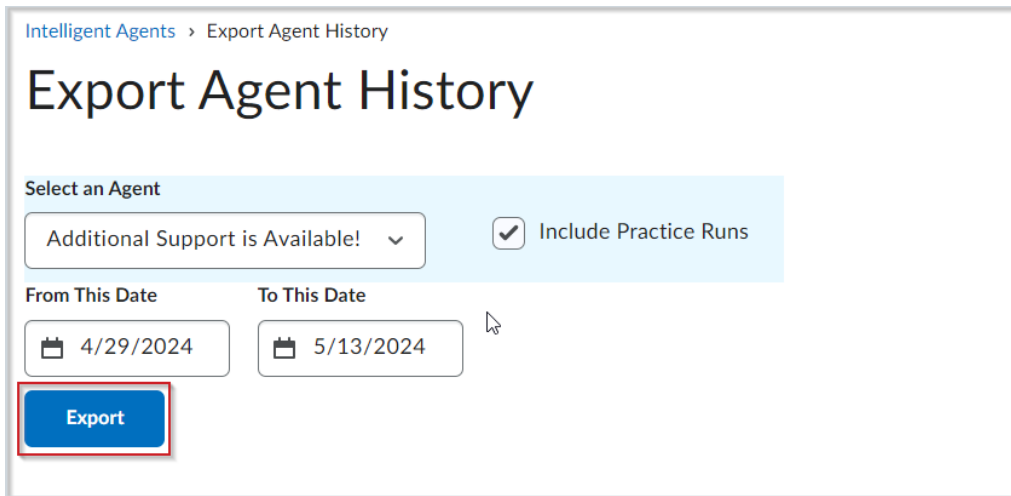


Figure: Once you have selected an agent and set the date range, click **Export**.

7. Click on the CSV file link to download the history.