UNIVERSITY of GUELPH

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Using CourseLink Intelligent Agents

What are Intelligent Agents

Intelligent Agents are a tool in CourseLink that can be very powerful for communication in a remote delivery setting.

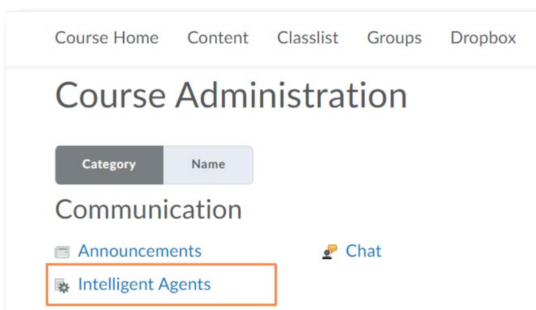
Intelligent Agents (IAs) will automatically scan CourseLink for user-defined criteria. When or if the criteria is met, the Intelligent Agent will send a customized email to pre-defined addresses to notify them that the criteria has been met. This can be accomplished by using static email address or personalizing the recipients by utilizing Replace Strings. Intelligent Agents work well with Release Conditions, but also have some unique criteria.

Use the Intelligent Agents tool in your course to:

- trigger an email to learners if they have not accessed a course for a prescribed period of time,
- alert learners if they have met the criteria established by a Release Condition,
- alert instructors/TA when students have met the criteria established by a Release Condition,
- email learners if a combination of the criteria above are met.

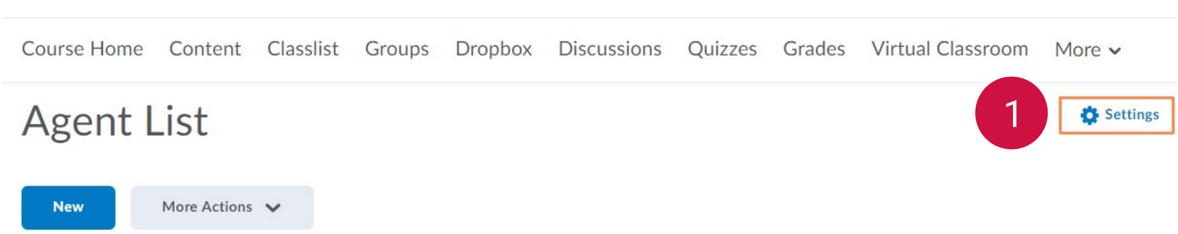
Using Intelligent Agents

Intelligent Agents are accessed through the **Course Administration** screen, under the **Communication** category.

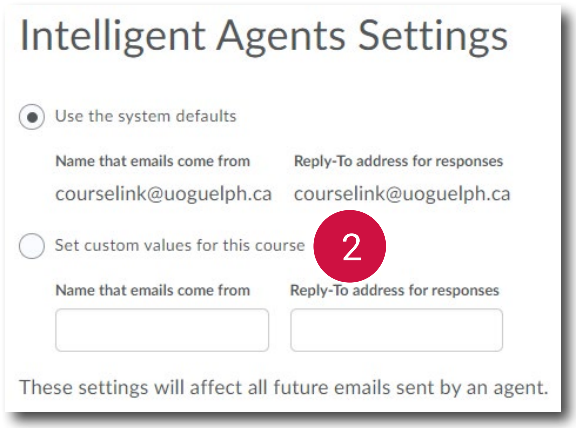


Setting Up your Intelligent Agents

1. Before creating any agents in any courses, instructors need to modify some basic Intelligent Agent course settings.



2. Specifically, the **Name the emails come from** and the **Reply-To address for responses** should be updated to reflect the course from which the agent will be running. The default setting is the support email, courselink@uoguelph.ca, which will not be able to respond to any student replies.



Creating an agent

1. When creating an agent, a Name must be provided for the Agent. This will help identify this specific agent from all the other agents you could potentially create. To provide more detailed information, a description should be provided. Both these values will be visible in the List of Agents as a quick reference.

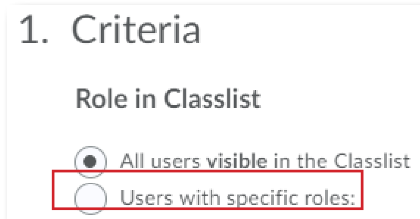
If you plan on automating or scheduling the agent, it should be enabled. If left disabled, the agents can still be triggered manually, which may be preferred in some instances.

Next the instructors will need to consider the following items:

- What criteria the agent will look for
- Should an email be sent if users meet the criteria is met, and if so the content of that email
- How frequently should the agent be run and on what schedule

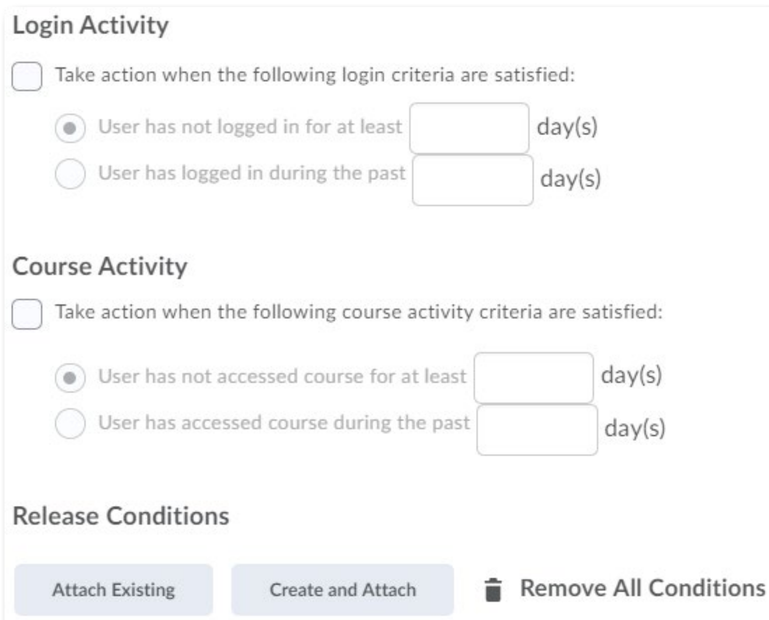
Setting the Criteria

1. The first criteria to select is the users that the agent will be looking at. In most cases, instructors will want the agent to look at just the behaviour of registered students. This can be done by selecting “Users with specific roles” and “Registered-student” from the list of available roles.



2. When setting the criteria for an agent, instructors can incorporate the same Release Conditions criteria found throughout CourseLink, but they also have two unique sets of conditions not found in Release Conditions:

- Login Activity
- Course Activity

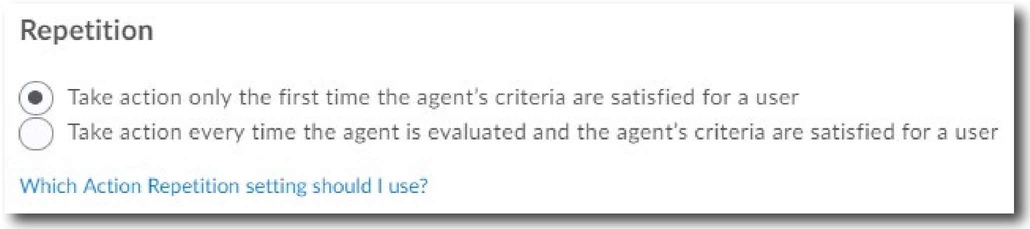


Note: These criteria can be combined with each other and/or with Release Conditions. You can make the agent as general or specific as you like (i.e. agent will activate if user hasn’t accessed the course for five days and/or hasn’t accessed CourseLink for two days and/or scored less than 50% on a quiz and/or hasn’t participated in a discussion).

Agent Actions

Repetition

The Action Repetition setting determines how many emails an agent might send to users who satisfy its criteria. There are two options:

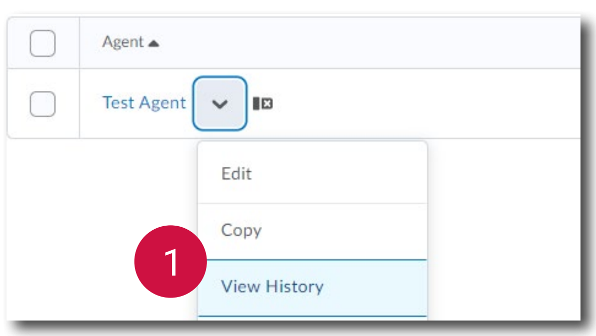


Take action only the first time the agent's criteria are satisfied for a user
When you select this setting, all users that satisfy the agent's criteria will only receive an email the first time no matter how many times the agent is evaluated.

Take action every time the agent is evaluated, and the agent's criteria are satisfied for a user
When you select this setting, the agent sends an email to all users that satisfy its criteria every time the agent is evaluated.

Email

1. If you choose not to send emails, the agent will effectively run as a query/report. From the **Agent List** you can select the **View History** option from the appropriate agent to see each time it has been run. Each row in this history will the display number of users who matched the criteria for that run, and by selecting the **number of users identified** you can see the names of these specific users.

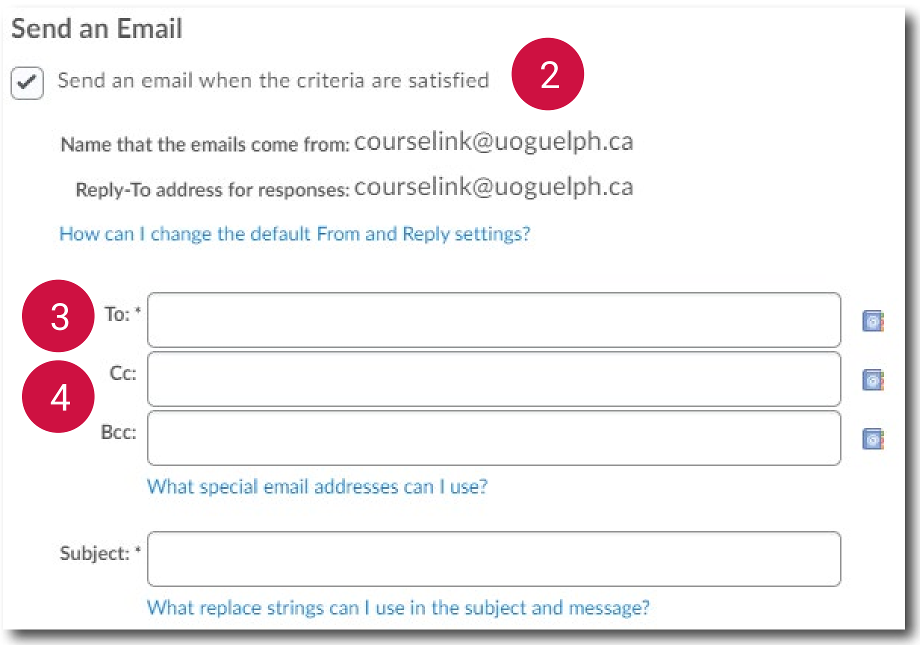


2. If you want, the agent can send an email when the set criteria are satisfied. To do this you can select the **Send an email when the criteria are satisfied** check box and enter your email details. Emails can be sent in HTML or plain format and can even have attachments added.

Note: Any email that is sent via intelligent agents will use the details defined in the course's Intelligent Agent settings. By default, this is the support email courselink@uoguelph.ca. Instructor's must update these settings to an email specific to the course, such as the primary instructor's email, to receive any of the replies sent by students.

3. The To, CC, and BCC fields should be set to the relevant user. These can be set to any valid email including the individual students matching the set criteria, TA, instructor, or even a course co-ordinator. To send an email to the matching user, instructors should use the **{InitiatingUser}** Replace String to automatically place that user's email in the TO or CC field.

4. Instructors can also consider CC/BCCing themselves or co-instructors in the email to gain a better sense of when and which user(s) triggered the agent. If going this route, note that all emails are sent out individually. If 5, or 50, users match the criteria an equal amount of emails will be sent. Students would receive 1 email each, but all CC/BCC'd recipients would receive 1 email for each matching student.



Replace Strings

Replace Strings can be used in agent emails and allows instructors to customize these communications by incorporating user specific information. This can help instructors build better relationships with learners, increase engagement levels, and improve the overall learning experience.

Replace Strings are variable names enclosed in curly braces {} that are automatically replaced by the corresponding values. For example, if you enter the text {InitiatingUserFirstName} into the body, when the email is sent, that value is replaced with the recipient's first name.

The following Replace Strings are useful for communication with Intelligent Agents.

Replace String	Description Example	For Use In: Address	For Use In: Subject	For Use In: Body
{InitiatingUser}	The email of the user who performs the action that meets the agent's criteria Johnathan Doe <jdoe@uoguelph.ca>	✓	○	○
{OrgUnitCode}	Code for the Org Unit MATH_1000_01_W20	○	○	✓
{OrgUnitName}	Name of the Org Unit MATH*1000 (01) W20 - Calculus	○	○	✓
{InitiatingUserFirstName}	First name of the initiating user Johnathan	○	○	✓
{InitiatingUserLastName}	Last name of the initiating user Doe	○	○	✓
{LastCourseAccessDate}	Date the initiating user last accessed the course Wednesday, January 1, 2020 12:00 PM EDT	○	✓	✓
{LastLoginDate}	Date the initiating user last logged in Wednesday, January 1, 2020 12:00 PM EDT	○	✓	✓
{LoginPath}	The address of the login path for the site https://courselink.uoguelph.ca/shared/login/login.html	○	○	✓

Sample Communication

Email Configuration

To: {InitiatingUserFirstName},

Subject: Participation in {OrgUnitName}

Hello {InitiatingUserFirstName},

It appears you haven't been active in {OrgUnitName} for more than 5 days.

If there are reasons that you haven't been able to login, then please let me know. Here is the link to the Courselink course site. Hope to see you soon.

{LoginPath}

--
Professor Rick Mave
maverick@uoguelph.ca
Department of Mathematics

Email Output

To: Johnathan Doe <jdoe@uoguelph.ca>

Subject: Participation in MATH*1000 (01) W20 – Calculus

Hello Johnathan,

It appears you haven't been active in MATH*1000 (01) W20 - Calculus for more than 5 days.

If there are reasons that you haven't been able to login, then please let me know. Here is the link to the Courselink course site. Hope to see you soon.

https://courselink.uoguelph.ca/shared/login/login.html

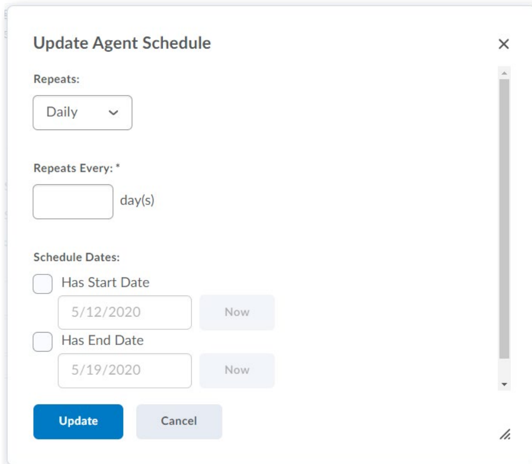
--
Professor Rick Mave
maverick@uoguelph.ca
Department of Mathematics

**replace stings will not be highlighted in either view*

Note: Instructors should make sure to note the tone of their email. Students may not realize that Replace Strings are being used, making it almost too easy to write what seems like a personal outreach email. The resulting communication should be genuine and authentic but have an appropriate level of formality for the course.

Agent Scheduling

Depending on your agent, you may wish to schedule it to run automatically. You can schedule how frequently CourseLink evaluates the agent criteria, under **Scheduling**. To do so, make sure to select the **Use Schedule** check box, then click **Update Schedule** and set your scheduling details.



Scheduled Intelligent Agents stop running and are automatically disabled if the course is inactive, past its end date, or deleted. You can set up a practice run or a manual run of an Intelligent Agent at any time in a course with a passed end date.

All scheduled agents, for all courses, are activated by the server daily and always at the same time. The scheduled time is configured by the CourseLink administrators and cannot be changed for individual courses. It is currently scheduled for approximately 9:00 PM (Canada - Toronto) and instructors can always confirm this time by reviewing Intelligent Agent course settings.

Running an Intelligent Agent

When setting up an Intelligent Agent, you can choose to run it either manually or automatically on a schedule.

To run an agent **manually**, click **Run Now** from the Context menu of the agent you want to run manually. This option works well for agents you want to run once in a course (*i.e.*, to check in after a midterm exam is marked).

To run an agent **automatically**, choose **Use Schedule** when deciding the **Agent Action**. Agents can run daily, weekly, monthly or annually. This option is useful for agents you want to run regularly throughout a course (*i.e.*, checking in on students who have not accessed the course site recently).

Notifications

After an Intelligent Agent has run, the user who created the Intelligent Agent will receive a confirmation email with the following information:

- Org Unit Code and Name
- The agent that ran
- Whether the agent took action
- Any error text

You will not be notified which students triggered the agent. To see a list of all initiating users, you could CC yourself on the email.

Intelligent Agent Actions

As you create more agents, the **Agent List** for your course will grow. Each agent on your list will have several actions that you can use:

Action	Result
Individual Actions – select from the agent's context menu	
Edit	Modify the configuration of an individual agent
Copy	Copy an existing agent, allowing a copy to be modified and retaining the original
View History	View a detailed list of when the agent was run, either manually or as scheduled
Export History	Download the detailed list of when the agent was run as a CSV
Practice Run	Good for when you just want to identify a list of students, but not send an email
Run Now	Run the agent as soon as the server allows without sending any emails. You can see which users meet the agent criteria once it has completed.
Delete	Delete the agent. This option cannot be undone, use with caution.
Batch Actions – select the appropriate agent checkboxes, then the action from the table menu	
Enable	Enables all the selected agents. Agents copied over from a previous course offering as automatically disable and must be enabled to run in the new offering.
Disable	Disables all the selected agents. Disabled agents will not run as scheduled but can still be run manually.
Delete	Deletes all the selected agents. This option cannot be undone, use with caution.

Effective Practices

- Think carefully about who the Intelligent Agent email will be sent to (you, the student or both)
- Don't overdo it. When you use Intelligent Agents too much, they can feel spammy and lose effectiveness.
- Use the name and description of your agents to your advantage so that you can keep your IAs neatly organized and recognizable.
- CC yourself in the Intelligent Agent email in order to better understand which Initiating User(s) triggered the agent.
    - You may want to create Rules in your mailbox to filter and organize these messages as they come in, especially with large class sizes.
- Intelligent Agents work with Release Conditions, which means that they can be connected to any tools that use Release Conditions, including Content, Discussion, Quizzes and Assignments.
- Ensure the tone of the email won't be misunderstood, especially if personalizing your communications with Replace Strings. Students may not recognize that the email is automated and not a direct communication from the instructor.
- If your course is copied from a previous semester, review your agents to update and enable any relevant agents.

Additional Resources:

- Brightspace Community - Create an Agent
- Intelligent Agents Quick Reference Guide
- Intelligent Agents - Create an Intelligent Agent - Instructor

CourseLink Technical Support

If you have any questions or would like more information about remote delivery, please contact CourseLink Support. We are here to help you.

Phone: 519-824-4120 ext. 56939
Toll Free: 1-866-275-1478 (Canada and USA)
Email: courselink@uoguelph.ca

Hours of Operation

Monday - Friday: 8:30 a.m. - 8:30 p.m.
Saturday: 10 a.m. - 4 p.m.
Sunday: noon - 6 p.m.
Holidays: 10 a.m. - 4 p.m.
All times listed above are Eastern Time.