

Educational Development Unit Aonad Leasachadh Foghlaim

# **Brightspace Intelligent Agents**



Brightspace Intelligent Agents automatically scan your Brightspace module/unit/course space for criteria that you define. When a criterion is fulfilled, the Intelligent Agent will send a pre-configured email to pre-defined email addresses.

Follow the steps below to learn how to set up Intelligent Agents. At the end of this document, you will also find some templates that can help you configure your own Intelligent Agents.

To start using Intelligent Agents, navigate to the Course Tools drop-down menu in your Brightspace

module/unit/course. From the drop-down menu, select Intelligent Agents. (Figure 1)



#### Figure 1

You are now inside the Intelligent Agents tool. Click on the blue New button to create a new Intelligent

Agent. (Figure 2)

Agent List	🔅 Settings
New More Actions View: All agents V	Apply
No intelligent agents found.	

Figure 2

When you create a new Intelligent Agent, you will first have to give it a new name (1), and will be able to decide if you would like to leave the agent enabled (default) or if you would like to switch it off for the moment (2). You can also add a description to your agent (click on Edit Description). (Figure 3)



#### 1. Criteria

○ •••	
<ul> <li>All users visible in the C</li> <li>Users with specific roles</li> </ul>	lasslist s:
Lecturer	
Leader	
Teaching Assistant	
Marker	
External	
Student	
Student U18	
Instructor Read Onl	У

Next, you will need to determine the criteria for your agent. The first thing you need to determine is who should be evaluated by the Intelligent Agent. The default is 'All users visible in Classlist' which means that anyone in the classlist could potentially be evaluated when an Intelligent Agent is triggered. You can, however, also choose a specific role to be evaluated when an agent is triggered. (Figure 4)

Figure 4

Next, you will be able to determine further criteria. You could for instance set up an agent based on Login

Activity, so either you or inactive students get a notification when a login into Brightspace hasn't occurred for a certain amount of days. You could also set up an agent based on course activity, so either you or inactive students get a notification when the module/unit/course hasn't been accessed for a certain amount of days. (Figure 5)

Login Activity	
Take action when the following login criteria are	satisfied:
User has not logged in for at least	day(s)
User has logged in during the past	day(s)
Course Activity	
Take action when the following course activity course	riteria are satisfied:
User has not accessed course for at least	day(s)
User has accessed course during the past	day(s)

#### Figure 5

Create and Attach	Remove All Conditions
	Create and Attach

Figure 6

This will open a pop-up window, where you can choose and configure a release condition. (Figure 7)

For a list of possible release conditions and what they mean, see

### Appendix 1.

# 2. 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 Which Action Repetition setting should I use?

#### Figure 8

action only the first time that the agent is triggered, or you can choose to take action every time the agent is triggered. (Figure 8) The frequency will then be based on your settings further down when you determine how often you would like the Intelligent agent to be run.

Next, you will be able to put together an email template which will be send out to the pre-determined users when the criteria for the agent are triggered. (Figure 9)

For use cases and email templates, go to

## Appendix 2.

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0.	JC	neu	u	1118

Use Schedule No schedule defined Next Run Date: No schedule defined Update Schedule What does an agent's Schedule determine?

Web: Educational Development Unit website

### Figure 10

If you would like to monitor more specific actions, create and attach a release condition to your Intelligent Agent. To do so, click on the grey Create and Attach button. (Figure 6)

Oreate a New Release Condition - Mozilla Firefox		(==)		×
🕐 🗎 https://brightspace.uhlac.uk/d2l/common/dialogs/ne	onModal/blank.d	21?d2 •••	☑ ☆	=
Release this item when the following cor	ndition is m	et:		
Condition Type				
Select Condition Type	<b>•</b>			
Condition Details				
Select Condition Type				

#### Figure 7

Next, you will configure when and how action is taken. You will first need to determine how often action should be taken. You can either choose to take

Send an Fmail

er	nd an Email
	Send an email when the criteria are satisfied
	Name that the emails come from: Brightspace Auto Messages - No Reply
	Reply-To address for responses: d2lsupport@universityofhi.brightspace.com
	How can I change the default From and Reply settings?
	To: *
	Cc:

#### Figure 9

Lastly, you will have to schedule your Intelligent Agent. Check the box next to Use Schedule, and then click on the grey Update Schedule button. (Figure 10)

A pop-up window will open for you. Determine how frequently you would like the Intelligent Agent to be run (1), determine when it should be repeated (2) and enter a start and /or end date if necessary (3). When you are done, click the blue Update button at the bottom of the pop-up window. (Figure 11) You will now see that your schedule has

been added to the agent. (Figure 12)

Image: Second Schedule - Mozilla Firefox       Image: Second Schedule - Moz	
Repeats Every:* day(s) Schedule Dates: Has Start Date	3. Scheduling ✓ Use Schedule Schedule: Evaluated every 1 day(s) Next Run Date: Friday, 13 September 2019
13/09/2019 Now	Update Schedule
Has End Date	What does an agent's Schedule determine?
20/09/2019 Now	Figure 12

When you are done setting up your Intelligent Agent, click the blue Save and Close button on the bottom of the page. (Figure 13)

You will now see the Intelligent Agent in your list of agents. You will see the Agent name (1), any results of the last run of the agent (2), the date of the last run (3), and the next run date (4). On the top of the list, you will also see buttons to enable, disable or delete agents (5). (Figure 14)

		View: All agents	Apply
Z∎ Enable     B Disable     Delete			4
Agent ▲	Results of Last Run	Last Run Date	Next Run Date
Sample Intelligent Agent v 1	2	- 3	Friday, 13 September 2019

Figure 14

When you select the drop-down menu next to your agent, you will be able to run the agent. (Figure 15)

	Content Communication and	d C se -
ou	Agent List	Сору
		View History
	New More Actions V	Export History
		Practice Run
	🖬 Enable 🛛 🖬 Disable 🧋	C Run Now
	Agent 🔺	Delete
	Sample Intelligent Agen	nt 💌
Figure 15		

# Appendix 1 – Release condition types (Brightspace)

### Awards

Condition Type	Description
Awards	The user must have earned a specific award in order to fulfil the release condition

### Checklist

Condition Type	Description
Completed checklist	The user must complete all items on the selected checklist in order to fulfil the release condition
Incomplete checklist	The user must not complete one or more items on the selected checklist in order to fulfil the release condition
Completed checklist item	The user must complete a specific item on the selected checklist in order to fulfil the release condition
Incomplete checklist item	The user must not complete the specific item on the selected checklist to fulfil the release condition

## Classlist

Condition Type	Description
Group enrolment	The user must be enrolled in a specific group in order to fulfil the release condition
Org unit enrolment	The user must be enrolled in a specific org unit in order to fulfil the release condition
Section enrolment	The user must be enrolled in a specific section in order to fulfil the release condition
Role in current org unit	The user must either: <ul> <li>be enrolled as a specific role</li> <li>not be enrolled as a specific role</li> </ul> <li>in order to fulfil the release condition</li>
Date of enrolment in current org unit	The user must be enrolled in the current org unit for a specified number of days in order to fulfil the release condition

## Competencies

Condition Type	Description
Competency achieved	The user must complete a specific competency in order to fulfil the release condition
Competency not yet achieved	The user must not complete a specific competency in order to fulfil the release condition
Learning objective achieved	The user must complete a specific learning objective in order to fulfil the release condition
Learning objective not yet achieved	The user must not complete a specific learning objective in order to fulfil the release conditions
Score on associated rubric	The user must achieve a specified Score and Threshold level on a learning objective, based on an associated rubric, in order to fulfil the release condition

Web:
 Educational Development Unit website
 Email:
 Educational Development Unit Email Address

### Content

Condition Type	Description
Visited content topic	The user must visit a specific content topic in order to fulfil the release condition
Not visited content topic	The user must not visit the specified content topic in order to fulfil the release condition.
Visited all content topics	The user must visit all content topics in the course offering in order to fulfil the release condition
Completed content topic	The user completes a content topic. The method of completing the topic depends on the type, such as viewing a file or submitting an assignment.
	This release condition ignores exemptions, meaning that if the learner completes the activity, the release condition can be met, regardless of the activity being required, optional, or exempt.

## Discussions

Condition Type	Description
Posts authored in topic	The user must author a specified number and type of posts in a designated module or topic in order to fulfil the release condition
No posts authored in topic	The user must not author any number or type of post in a designated module or topic in order to fulfil the release condition
Score on associated rubric	The user must achieve a specified Score and Threshold level on a discussion module or topic, based on an associated rubric, in order to fulfil the release condition

## Assignments

Condition Type	Description
Submission to Assignment	The user must make a submission to a specified assignment in order to fulfil the release condition
No submission to Assignment	The user must not make a submission to a specified assignment in order to fulfil the release condition
Receive feedback on Assignment submission	The user must receive feedback on a submission to a specified assignment in order to fulfil the release condition
Score on associated rubric	The user must achieve a specified Score and Threshold level on an assignment submission, based on an associated rubric, in order to fulfil the release condition

### Grades

Condition Type	Description
Grade value on a grade item	The user must achieve a specified grade value on a grade item in order to fulfil the release condition
No grade received	The user must not receive a specified grade value on a grade item in order to fulfil the release condition
Released final grade score	The user must have their final grade score set to released or set to released plus the final grade meeting a defined threshold, in order to fulfil the release condition.
	<b>Note</b> : This release condition is evaluated beginning from the first time the grade is released and cannot be revoked once it is fulfilled. Therefore, if your grade book is set up to release final grades throughout a course, and/or drop ungraded items, the release condition may be fulfilled sooner than expected (i.e. before the end of the course). D2L recommends using this release condition in combination with other release conditions or intelligent agents to ensure that the event or content triggered by the released final grade score occurs at the anticipated time.

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Score on	The user must achieve a specified Score and Threshold level on a grade item, based on an associated
associated rubric	rubric, in order to fulfil the release condition

# Quizzes

Condition Type	Description
Score on a quiz	The user must achieve a specified score on a quiz in order to fulfil the release condition
Completed quiz attempt	The user must achieve a specified number of attempts of a quiz in order to fulfil the release condition
Score on selected questions	When a quiz has a learning objective with associated questions and an assessment method attached to it, the user must achieve a specified grade value on the learning objective in order to fulfil the release condition
Score on associated rubric	The user must achieve a specified Score and Threshold level on a quiz, based on an associated rubric, in order to fulfil the release condition
No completed quiz attempt	The user must not complete any attempt on a quiz in order to fulfil the release condition

# Surveys

Condition Type	Description
Completed survey attempt	The user must achieve a specified number of attempts of a survey in order to fulfil the release condition
No completed survey attempt	The user must not complete any attempt on a survey in order to fulfil the release condition

## Appendix 2 – Use cases and Email templates



The templates below outline the recommended settings for different Intelligent Agent use cases and include a sample message. In all cases, the templates and sample messages can be modified as needed. Some of the templates are based on Brightspace templates, which you can download as a MS Word document <u>here</u>.

The following Intelligent Agent scenarios are included in this guide:

Intelligent Agents that will send a notification email to a student once the student triggered it

- Agent 1 A student hasn't accessed the course in two weeks
- Agent 2 Failed a quiz
- Agent 3 Late assignment
- Agent 4 No posts authored in discussion topic

Agent 5 – A student has reached a topic page in a long course to indicate halfway or almost finished

Intelligent Agents that will send a notification email to you as the lecturer/leader once a student triggered it

- Agent 6 Students have accessed a certain content topic
- Agent 7 Students have completed an assignment
- Agent 8 Students have completed a quiz
- Agent 9 Students have contributed to a discussion

### Intelligent Agents that will send a notification email to a student once the student triggered it

#### Agent 1 – A student hasn't accessed the course in two weeks

- ✓ Agent Name: Hasn't accessed course in two weeks
- ✓ Agent Criteria:
  - Role in Classlist All users visible in the classlist
  - Login Activity None
  - Course Activity Take action when... User has not accessed the course during the past \_\_\_\_ days
  - Release Conditions –
     None
- ✓ Agent Action:
  - Action Repetition Take action every time the agent is evaluated, and the agent's criteria are satisfied for a user
  - Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: {InitiatingUser}
- Subject: We've missed you you haven't logged in for a while
- Content:

Hello {InitiatingUserFirstName},

It seems you haven't logged into your course on Brightspace since {LastCourseAccessDate}.

It is important to check in to the course frequently, so you don't fall behind or miss important information. With one quick click, you can access your course right from here: {LoginPath}. Why not go take a look now and see what's new?

### ✓ Scheduling:

• Do not use schedule

### Agent 2 – Failed a quiz

- ✓ Agent Name: Failed a Quiz
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Student
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions Quizzes → Score on a Quiz → Select Quiz → < \_\_\_\_<sup>\*</sup>% All conditions must be met.

### ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: {InitiatingUser}
- Subject: Unsuccessful Quiz Attempt
- Content:

Hello {InitiatingUserFirstName},

You gave that quiz your best effort, but unfortunately you did not meet the passing grade. The upside is you can attempt the quiz again, but we recommend reviewing the course content first to help you be more successful when you try again.

If you have questions about the material, reach out to your instructor/manager/training coordinator<sup>†</sup>.

### ✓ Scheduling:

• Do not use schedule

<sup>\*</sup> Enter the predetermined failing mark/percentage here.

<sup>&</sup>lt;sup>+</sup> You could opt to enter the lecturers or leaders name here.

### Agent 3 – Late assignment

- ✓ Agent Name: Late Assignment
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Student
  - Login Activity None
  - Course Activity None
  - Release Conditions –
     Assignments → No submission to dropbox → Select assignment folder All conditions must be met.

# ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

# ✓ Sample Email:

- To: {InitiatingUser}
- Subject: Oops, you missed a deadline
- Content:

Hello {InitiatingUserFirstName},

It seems you've missed the deadline on an assignment. It is recommended that you finish and submit that assignment as soon as possible to avoid falling further behind in your course work.

If you have questions about the assignment, reach out to your instructor/manager/training coordinator <sup>‡</sup>.

# ✓ Scheduling:

 Repeats daily, every 1 day Run schedule with start date – align date to day after assignment due date<sup>§</sup>

<sup>&</sup>lt;sup>‡</sup> You could opt to enter the lecturers or leaders name here.

<sup>&</sup>lt;sup>§</sup> This sequence is set so it only notifies learners once, the day after assignment deadline.

### Agent 4 – No posts authored in discussion topic

- ✓ Agent Name: No posts authored in discussion topic
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Student
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions –

Discussions  $\rightarrow$  No posts authored in topic  $\rightarrow$  select discussion  $\rightarrow$  No threads All conditions must be met.

### ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: {InitiatingUser}
- Subject: It's time to share your insights.
- Content:

Hello {InitiatingUserFirstName},

As part of your course, there is a discussion currently underway that you have not yet posted in. Your fellow learners/classmates/co-workers<sup>\*\*</sup> want to know what you have to say on the topic, so be sure to take some time to pop into the course {LoginPath}, see what's already been said, and contribute to the discussion.

### ✓ Scheduling:

 Repeats weekly, every 1 week → pick day of week for reoccurrence; Run schedule with start date – align date to 2 days after discussion becomes available to learner.<sup>++</sup>

Web: Educational Development Unit website Email: Educational Development Unit Email Address

<sup>\*\*</sup> Amend this to something that makes sense in your context.

<sup>&</sup>lt;sup>++</sup> You can modify this schedule and the action repetition above to customize but this sequence is set so it only notifies learners once, two days after discussion should be available.

### Agent 5 – A student has reached a topic page in a long course to indicate halfway or almost finished

- ✓ Agent Name: Once a learner has reached a topic page in a long course to indicate halfway or almost finished
- ✓ Agent Criteria:
  - Role in Classlist Users with specific roles → Student
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions –
     Content → Visited content topic → select topic
     All conditions must be met

### ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: {InitiatingUser}
- Subject: You're almost to the finish line!
- Content:

Hello {InitiatingUserFirstName},

Well done, you're 75% <sup>‡‡</sup> of the way through your course. Keep working hard through this final stretch. The satisfaction of completion is within your reach!

### ✓ Scheduling:

Repeat daily, every 1 day

<sup>&</sup>lt;sup>##</sup> Amend to fit how much of the module/unit/course the student has completed as of that day.

Intelligent Agents that will send a notification email to you as the lecturer/leader once a student triggered it

### Agent 6 – Students have accessed a certain content topic

- ✓ Agent Name: Students have accessed content topic \_\_\_\_§§
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Lecturer; Leader
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions –

Content  $\rightarrow$  Visited content topic  $\rightarrow$  select topic All conditions must be met

✓ Agent Action:

- Action Repetition –
   Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: Enter your own UHI email address here
- Subject: Update on students who have visited content topic \_\_\_\_\*\*\*
- Content:

Hello,

{InitiatingUserFirstName} {InitiatingUserLastName} has completed content topic \_\_\_\_\_<sup>+++</sup>.

### ✓ Scheduling:

• Set up scheduling that suits your needs.

 Web: Educational Development Unit website
 Email: Educational Development Unit Email Address

<sup>&</sup>lt;sup>§§</sup> Insert name of particular content topic here.

<sup>\*\*\*</sup> Insert name of particular content topic here.

<sup>&</sup>lt;sup>+++</sup> Insert name of particular content topic here.

### Agent 7 – Students have completed an assignment

- ✓ Agent Name: Student have completed assignment \_\_\_\_<sup>###</sup>
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Lecturer; Leader
  - Login Activity None
  - Course Activity None
  - Release Conditions
    - Assignments  $\rightarrow$  Submission to folder  $\rightarrow$  select assignment folder All conditions must be met

### ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied

### ✓ Sample Email:

- To: Enter your own UHI email address here
- Subject: Update on students who have completed assignment \_\_\_\_§§§
- Content:

Hello,

{InitiatingUserFirstName} {InitiatingUserLastName} has completed assignment \_\_\_\_\_\*\*\*\*\*.

- ✓ Scheduling:
  - Set up scheduling that suits your needs.

 Web: Educational Development Unit website
 Email: Educational Development Unit Email Address

<sup>&</sup>lt;sup>‡‡‡</sup> Insert name of particular assignment here.

<sup>&</sup>lt;sup>§§§</sup> Insert name of particular assignment here.

<sup>\*\*\*\*</sup> Insert name of particular content topic here.

### Agent 8 – Students have completed a quiz

- ✓ Agent Name: Students have completed quiz \_\_\_\_\_\*\*\*\*\*
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Lecturer; Leader
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions –
     Quizzes → Completed quiz attempt → select quiz
     All conditions must be met
- ✓ Agent Action:
  - Action Repetition Take action only the first time the agent's criteria are satisfied for a user
  - Send an Email Send an email when criteria are satisfied
- ✓ Sample Email:
  - To: Enter your own UHI email address here
  - Subject: Update on students who have completed quiz \_\_\_\_\_\*\*\*\*
  - Content:

Hello,

{InitiatingUserFirstName} {InitiatingUserLastName} has completed quiz \_\_\_\_\_§§§§.

- ✓ Scheduling:
  - Set up scheduling that suits your needs.

<sup>++++</sup> Insert name of particular quiz here.
 <sup>++++</sup> Insert name of particular quiz here.
 <sup>5555</sup> Insert name of particular content topic here.

Web: Educational Development Unit website Email: Educational Development Unit Email Address

### Agent 9 – Students have contributed to a discussion

- ✓ Agent Name: Students have contributed to discussion \_\_\_\_\_\*\*\*\*\*
- ✓ Agent Criteria:
  - Role in Classlist –
     Users with specific roles → Lecturer; Leader
  - Login Activity None
  - Course Activity –
     None
  - Release Conditions –

Discussion  $\rightarrow$  Posts authored in topic  $\rightarrow$  select discussion (+ customise additional options) All conditions must be met

### ✓ Agent Action:

- Action Repetition Take action only the first time the agent's criteria are satisfied for a user
- Send an Email Send an email when criteria are satisfied
- ✓ Sample Email:
  - To: Enter your own UHI email address here
  - Subject: Update on students who have completed quiz \_\_\_\_\_<sup>+++++</sup>
  - Content:

Hello,

{InitiatingUserFirstName} {InitiatingUserLastName} has completed discussion \_\_\_\_\_\*\*\*\*\*.

- ✓ Scheduling:
  - Set up scheduling that suits your needs.

 Web:
 Educational Development Unit website
 Email:
 Educational Development Unit Email Address

<sup>\*\*\*\*\*</sup> Insert name of particular discussion topic here.

<sup>&</sup>lt;sup>+++++</sup> Insert name of particular quiz here.

<sup>\*\*\*\*\*</sup> Insert name of particular discussion topic here.