D2L Brightspace – Daylight Experience
Intelligent Agents
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Introduction
The Intelligent Agents tool (IA) sends emails to users based on preset conditions. You can run agents automatically or manually. For each agent you will need to determine what criterion the agent is looking for, how often it looks for that criterion, and what the email should say to those who are receiving it when the criterion is met. The intelligent agent will contact your students (InitiatingUser) on your behalf, via email, and make them aware that they have satisfied a criterion of your choosing that merits the contact. Using Intelligent Agents in your course can help make learners more accountable, and engage them when they complete tasks.

The email contains:
- Org unit code and name
- The name of the agent
- Time and date submitted
- Time and date completed
- Actions taken by the agent
- Errors agent encountered, such as a bounced email address

Some Example Uses of the IA tool include:
- Emailing users based on their grades, login history, or activity completion.
- Automating standard communications, such as welcome messages, season greetings, and congratulations.

Important Notes/Best Practices:
- Be conscious about whether you want the agent to send an email to the student, to you, or both.
- Use Intelligent Agents sparingly, as too many repetitive emails can lose their effectiveness.
- Switch between sending emails automatically and manually.
- Be sure to name Agents accordingly, and use descriptions when possible.

Learning Objectives
After completing the instructions in this booklet, you will be able to:
- Access the Intelligent Agents tool
- Create an Intelligent Agent
- Set Custom Values
- Edit an agent
- Run an agent
- Execute a Practice Run
- Delete and Restore an Intelligent Agent
- Replace strings in an Intelligent Agent
Accessing the Intelligent Agents Tool

The following will explain how to access the Intelligent Agents tool:

1. Click the **Course Admin** link.

![Figure 1 - Click Course Admin]

2. From the *Course Administration* page, under the *Communication* section, click **Intelligent Agents**.

![Figure 2 - Click Intelligent Agents]

*Note:* You can create, edit and delete Intelligent Agents from the Agents List page (See Figure 3).

Agent Creation Example Scenario

When creating an Intelligent Agent, it is important to identify:

- The purpose of the agent
- Agent criteria
- The audience of the agent

One example of an Intelligent Agent would be if you wish to identify students who are falling behind in a course. First, you would need to create an agent that will send an email when a student has not logged in for a certain period of time AND achieves a failing grade on a particular grade item. The audience for the agent is the student (InitiatingUser), and the instructor. The student is notified when they are at risk of falling behind. The instructor is receiving the proactive notification of that particular student who is falling behind.
Creating An Intelligent Agent

The following indicates how to create an Intelligent Agent to identify students who are falling behind in a course:

1. Access the Intelligent Agents tool.
2. Click New.

![Figure 3 - Click New](image)

3. Enter the Agent Details:
   a. Enter an Agent Name (See Figure 4).
   b. Enter a Description (See Figure 4).
   c. Assure the checkbox beside Agent is enabled to activate the agent for use after you save (See Figure 4).

![Figure 4 - Enter Agent Details](image)

**Note:** Multiple criteria can be selected for each agent.
4. Enter Criteria includes selecting activities for the agent to monitor. For this example, we will be selecting to apply the Intelligent Agent to All users visible in the Classlist, Login Activity, and Creating and Attaching a Release Condition. These criteria MUST be met to qualify the agent:

   a. Role in the Classlist: Select the radial button next to All users visible in the Classlist (See Figure 5).
   
   b. Login Activity: Check the box beside Take action when the following login criteria are satisfied to base agent actions on how regularly users log in to your course. For this example, we selected “User has not logged in for at least 5 days” (See Figure 5).
   
   c. Course Activity (Not Selected): Check the box beside Take action when the following course activity criteria is satisfied to base agent actions on how often users visit the course (See Figure 5).
   
   d. Release Conditions: Choose the Attach Existing, or Create and Attach button to base agent actions on selected or created release conditions. In this example, we created and attached a release condition (See Figure 5).

   Note: With multiple release conditions, you can choose to select “All conditions must be met” or “Any condition must be met”. With one release condition, leave it at “All conditions must be met” (See Figure 5).

   e. Newly Created Release Condition: (As created in the steps above.) “Receives less than or equal to 50% on the quiz: Test 1.” (See Figure 5).
5. *Actions* determines the action the agent takes when its conditions are met:

a. Under *Repetition*, select if the agent will **Take action only the first time the agent’s criteria is satisfied for a user** or **Take action every time the agent is evaluated and the agent’s criteria are satisfied for a user** (See Figure 6).

b. If you wish the agent to execute an *enrollment action* (e.g. unroll user from course) or assign a *new role* to the user (e.g. change role from student to visitor), click the **checkbox** next to *Change user enrollments when the criteria are satisfied* (See Figure 6).

**Note:** If *Role in Classlist* is set to **All users visible in the classlist**, the agent will apply the change in user enrollments to everyone in your classlist who meets the criteria of the agent.
6. Click the **checkbox** next to *Send an email when the criteria are satisfied* to have the agent send an email when criteria is met (See Figure 7).

7. Enter the recipients in the *To, Cc, and Bcc field* (See Figure 7).  
**Note:** To use special replace strings, view Using Replace Strings in an Intelligent Agent. This example uses {InitiatingUserFirstName}, which will send an email to the user who satisfies the agent’s criteria.

8. Enter a **subject** in the *Email Subject field*. Be sure to use a descriptive subject line (See Figure 7).  
**Note:** You can also use replace strings in both the subject and message fields, as shown here using the {OrgUnitName} and a subject line (See Figure 7).

9. Compose your **email** in the *Message field* (See Figure 7).  
**Note:** Emails sent by the agent come from a DoNotReply account. If you expect students to reply, include your email address as a CC, and tell students to “Reply All”. If they just reply to the agent, you will not receive it. Refer to the section Setting Custom Values for instructions on setting up automatic forwarding.

10. Click the **HTML** (for additional formatting options) or **Plain text** radio buttons to choose the email format (See Figure 7).

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**Figure 7 - Customize Email**
11. To run the agent on a schedule, click the **Use Schedule** checkbox (See Figure 8).

12. Click the **Update Schedule** button to set the schedule. This determines how frequently the learning environment evaluates the agents’ criteria, and how often the agent takes action for users who satisfy its criteria (See Figure 8).

**Note:** If no action schedule is defined for the agent, you must manually run the agent to evaluate its criteria and initiate the associated action.

![Figure 8 - Scheduling the Agent](image)

13. Update the schedule information in the **Update Agent Schedule** pop-up (See Figure 9).

14. Click the **Update** button in the **Update Agent Schedule** pop-up to save the schedule and close the pop-up (See Figure 9).

![Figure 9 - Update Agent Schedule](image)

**Note:** The agent will only run while the course is active. Once the course is changed to inactive, the agent will not run regardless of the schedule settings.
15. When finished, click **Save and Close**.

![Save and Close](image)

**Figure 10 - Save and Close**

### Setting Custom Values

Instructors can receive replies to Intelligent Agent emails directly. Students can reply directly to the agent emails, and replies are sent to the instructor. The steps below show how to change these settings.

1. From the Agent List, click **Settings**.

![Agent List](image)

**Figure 11 - Agent Settings**

2. Click the radio button to **Set custom values for this course** (See Figure 12).
3. Enter the email addresses in the following fields: **Name that emails come from** and **Reply-To address for responses** (See Figure 12).
4. Click **Save** (See Figure 12).

![Intelligent Agent Settings](image)

**Figure 12 - Intelligent Agent Settings**

**Note:** The values entered for **Name that emails come from** and **Reply-To address for responses** are not copied during copy course components, and instructors need to update these fields post-copy.
Editing An Agent

1. Click the name of the agent you want to edit on the Agent List page (i.e. Falling Behind).

![Agent List Page](image)

**Figure 13 - Agent List Page**

2. Make your changes. Changes to a section will be marked blue.

![Change Description](image)

**Figure 14 - Change Description**

3. Click Save and Close.

![Click Save and Close](image)

**Figure 15 - Click Save and Close**
4. A confirmation page will appear. Click OK.

![Figure 16 - Click OK](image)

**Running An Agent Manually**

If you did not create your Intelligent Agent to run on a schedule, you can run it manually.

1. Click the **drop-down** to the right of the agent’s name on the Agent List page (See Figure 17).
2. Click **Run Now** (See Figure 17).

![Figure 17 - Agent List: Run Now](image)
Executing A Practice Run

A Practice Run is another mode for running an Intelligent Agent. It runs the agent, and reports back a list of users who met the specified criteria. Users identified in a practice run are not notified or emailed, and does not count as an action when using the “Take action only the first time the agent’s criteria are satisfied for a user” type of agent. The following instructions will show how to perform a practice run.

1. From the Agent List page, click the drop-down icon next to the agent’s name (See Figure 18).
2. Select Practice Run (See Figure 18).

![Figure 18 - Practice Run](image)

3. A Confirmation window will appear. Click the Run button.

![Figure 19 - Run button](image)
4. The *Practice Run Agent Confirmation* page will appear. Click **Done**.

![Practice Run Agent Confirmation](image)

**Figure 20 - Practice Run Agent Confirmation**

**Viewing Agent History**

The history page allows users creating Intelligent Agents to see each time the agent runs, which users it identifies, what emails have been sent, and details on any errors that occurred during the agent run. The following shows you how to view agent history:

1. From the Agent List, click the **drop-down icon** next to the Agent’s name (See Figure 21).
2. Click **View History** (See Figure 21).

![View History](image)

**Figure 21 - View History**
3. The Agent’s history will appear.

Exporting Agent History

Agent run history can also be exported to a CSV file. The export can include all agents, or a specific agent. You can also specify a date range for the history which you want to export. The following will show you how to export agent run history:

1. From the Agent List, click the drop-down icon next to the Agent’s name (See Figure 23).
2. Click Export History (See Figure 23).
3. The Export Agent History options page will appear. Click in the From This Date box to choose the start date (See Figure 24).

4. Click in the To This Date box to choose the end date (See Figure 24).
   **Note:** Select this checkbox if you wish to include Practice Runs in your Export Agent History (See Figure 24).

5. Click Export (See Figure 24).

![Figure 24 - Export Agent History Options](image)

6. The Export Success page appears with a link to the Export Agent History as a CSV. Click the link to download your history.

![Figure 25 - Export Success](image)
Deleting and Restoring An Intelligent Agent

Deleting An Agent

1. Select the **drop-down icon** next to the agent from the *Agent List* page (See Figure 26).
2. Click **Delete** (See Figure 26).

   ![Figure 26 - Agent List: Delete](image)

3. A confirmation page will open. Click **Delete**.

   ![Figure 27 - Confirmation Page](image)
Deleting Multiple Agents
1. Click the checkboxes next to the agents’ names (See Figure 28).
2. Click Delete (See Figure 28).

![Figure 28 - Delete Multiple Agents](image)

Restoring Agents
1. From the Agent List, click More Actions (See Figure 29).
2. Select Restore (See Figure 29).

![Figure 29 - More Actions](image)

3. A list of agents that are available to restore will appear. Click the Restore button for the agent you would like to restore.

![Figure 30 - Restore Buttons](image)
Using Replace Strings In An Intelligent Agent

Before using replacement strings, consider the following:

- Assure that you properly format and spell your string.
- Use “name” strings sparingly.

Below is a list of replacement strings. These lines of text will assist instructors with personalizing messages and making sure that the correct students are receiving emails. As a best practice, we recommend that you insert the org unit name into the subject line enabling quick identification of the course the message is related to.

Note: If you decide to export your course, Intelligent Agents can be copied course to course via Copy Components.

Replace Strings

{OrgName} The name of the organization.

{OrgUnitCode} The code for the Org Unit.

{OrgUnitName} The name of the Org Unit.

{OrgUnitStartDate} The start date specified for the Org Unit.

{OrgUnitEndDate} The end date specified for the Org Unit.

{OrgUnitId} The Id for the Org Unit.

{InitiatingUserFirstName} The first name of the initiating user.

{InitiatingUserLastName} The last name of the initiating user.

{InitiatingUserUserName} The username of the initiating user.

{InitiatingUserOrgDefinedId} The Org Defined ID of the initiating user.

{LoginPath} The address of the login path for the site.

{InitiatingUser} The user who performed the action that met the agent’s criteria.

{InitiatingUserAuditors} The auditors for the user who performed the action that met the agent’s criteria.

{LastLoginDate} The date the initiating user last logged in.

{LastCourseAccessDate} The date the initiating user last accessed the course.
Additional Help
For additional support, please contact the KSU Service Desk:

KSU Service Desk for Faculty & Staff
- Phone: 470-578-6999
- Email: service@kennesaw.edu
- Website: http://uits.kennesaw.edu