D2L Brightspace
Intelligent Agents
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, 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
- Setting 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](image)

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

![Figure 2 - Click Intelligent Agents](image)

**Note:** You can create, edit and delete Intelligent Agents from the Agents List page.
Agent Creation Example Scenario

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

- The purpose of the agent,
- agent criteria, and
- 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 pro-active notification of that particular student who is falling behind.

Creating an Intelligent Agent

The following indicates how to create an Intelligent Agent from the Agent List 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. Check the box beside Agent is enabled to activate it 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 Agent Criteria which includes selecting the activities to monitor. For this example, we will be selecting Login Activity, and Creating and Attaching a Release Condition and both of those criteria MUST be met to qualify the agent:

a. **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).

b. (Not Selected) **Course Activity**: Check the box beside *Take action when the following course activity criteria is satisfied* to base agent actions on how regularly users visit your course (See Figure 5).

c. **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**: When using multiple Release Conditions, you have two options: you can choose to select “All of the following conditions” must be met or “Any of the following conditions” must be met. If you only have one release condition, leave it set to, “All of the following conditions” (See Figure 5).

d. **Newly Created Release Condition**: “Receives less than or equal to a 50% on the quiz: Test 1.”

![Figure 5 - Enter Agent Criteria](image-url)
5. Enter *Agent Action* which will determine the action the agent takes when its conditions are met:

   a. Make a selection in the *Action Repetition* menu. The agent takes action only once or every time the criteria is satisfied (See Figure 6).

   b. To run the agent on a schedule, choose the *Use Schedule* checkbox. Then click the *Update Schedule* button (See Figure 6). This determines how frequently the learning environment evaluates the agents’ criteria, and how often the agent takes action for users who satisfy its criteria.

   **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.

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**Figure 6 - Agent Action**
c. Update the schedule information in the *Update Agent Schedule* pop-up (See Figure 7).

d. Click the **Update** button in the *Update Agent Schedule* pop-up to save the schedule and close the pop-up (See Figure 7).

![Update Agent Schedule](image)

**Figure 7 - Update Agent Schedule**

**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.
6. Click the **HTML** or **Plain text** radio buttons to choose the email format (See Figure 8).
   **Note:** If you use HTML, you can add formatting and visual interest to your message; however, you may choose plain text as some recipients may have their email configured to reject messages containing HTML.

7. Enter the recipients in the **To**, **Cc**, and **Bcc** field (See Figure 8).
   **Note:** To use special replace strings, view [Using Replace Strings in an Intelligent Agent](#). This example uses `{InitiatingUserFirstName}`. This will send an email to the user who performs the actions necessary to satisfy the agent’s criteria.

8. Enter a **subject** in the **Email Subject** field. Be sure to use a descriptive subject line.
   **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 8).

9. Compose your **email** in the **Message** field (See Figure 8).
10. Click **Save** (See Figure 8).

   **Note:** The emails generated from the Intelligent Agents tool come from a DoNotReply account. If you expect students to reply, be sure to include your email address as a **CC**, and to tell students to select “Reply All”. If the student just replies to the agent, you will not receive it.

   **Note:** If you do not wish to be contacted by the student based on the receipt of the agent, make sure that your message indicates to **NOT Reply to this message**.
Email Format:

- HTML
- Plain text

To:

{InitiatingUserFirstName}

Cc:

Bcc:

"Kathryn Morgan" <kmorga62@kennesaw.view.usg.edu>

What special email addresses can I use?

Email Subject:

{OrgUnitName} - You are falling behind in the course

What replace strings can I use in the subject and message?

Message:

Hello {InitiatingUserFirstName}.

My records indicate that you are not logging in regularly to this course, and you did not achieve a passing grade on the Test 1 quiz. Please contact me so that we can discuss a strategy for success in this course.

Sincerely,

Professor Morgan

Save and Close  Save  Cancel

Figure 8 - Email Format and Body
Setting Custom Values

Instructors can now 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 (see Figure 9).

![Figure 9 - Agent Settings](image)

2. Click the radio button to Set custom values for this course (see Figure 10).

![Figure 10 - Set custom values for this course](image)

3. Enter the email addresses in the fields, Name that emails come from and Reply-To address for responses (see Figure 11). **Note:** You can enter your D2L email address (netid@kennesaw.view.usg.edu) if you wish to keep all emails within D2L.

4. Click Save (see Figure 11).

![Figure 11 - Enter Email Addresses](image)
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. Late Wk1 Milestone Reminder)

![Figure 12 - Agent List Page](image)

2. Make your changes.

![Figure 13 - Change Description](image)

Note: Changes to section are indicated by the color blue.
3. Click **Save**.

Running an Agent Manually

If you did not create your Intelligent Agent to run on a schedule, you can run it manually. The following shows you how to do that:

1. Click the **drop-down icon** to the right of the agents name on the **Agent List** page (See Figure 12).
2. Click **Run Now** (See Figure 12).

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 do a practice run.

1. Navigate to the Agent List page, and click the drop-down icon to the right of the agent’s name (see Figure 13).
2. Select Practice Run (see Figure 13)

3. A Confirmation window will appear. Click the Run button (see Figure 14).

4. The Practice Run Agent Confirmation page will appear. Click Done (see Figure 15).
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.

1. From the Agent List, click the **drop-down icon** next to the Agent’s name (see Figure 16).
2. Click **View History** (see Figure 16).

3. The Agent’s history will appear (see Figure 17).

![Agent List](image)

**Figure 19 - View History**

![Agent History](image)

**Figure 20 – Agent History**
Deleting and Restoring an Intelligent Agent

To Delete an Agent:

1. Select the drop-down icon next to the agent from the Agent List page (See Figure 13).
2. Click Delete (See Figure 13).

3. A confirmation page will open. Click Delete (see Figure 19).

To Delete Multiple Agents:

1. Click the checkboxes next to the agents names (see Figure 20).
2. Click Delete (see Figure 20).
To Restore Agents:

1. From the Agent List, click **More Actions**, and then select **Restore** (see Figure 21).

![Agent List]

**Figure 24 - More Actions**

2. A list of agents that are available to restore will appear. Click the **Restore** button for the agent you would like to restore (see Figure 22).

![Restore Agents]

**Figure 25 - Restore buttons**
Using Replace Strings in an Intelligent Agent

There are a few things that you should keep in mind before using replace strings:

- Make sure that you properly format and spell your string.
- Secondly, use “name” strings sparingly.

Below is a list of replace strings. These lines of text will assist instructors with personalizing messages and making sure that the correct students are receiving the emails.

Note: As a best practice, we recommend that you insert the course name, or 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

**KSU Student Helpdesk**
- Phone: 470-578-3555
- Email: studenthelpdesk@kennesaw.edu
- Website: http://uits.kennesaw.edu