Customize your Students' Learning Experience Using Actions, Tokens and Environment Variables

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Conventions Used in This Manual

Typographic Convention	
Type Style	**Represents**
Example Text	Words or characters that appear on the screen. These include field names, screen titles, and pushbuttons.

Abbreviation Convention	
Abbreviation	**Represents**
N	Normal view of the content item editor
A	Advanced view of the content item editor

Document Icons	
Icon	**Icon Meaning**
	Tip – a tip is a type of note that helps the users apply the techniques and procedures described in the test to their specific needs. A tip suggests an alternative method that may not be obvious and helps users understand the benefits and capabilities of the item.
	Note – Notes call the user's attention to information of special importance.
	Reference – Refers the user to another source of information.
	Caution – Caution advises users of actions that could potentially cause problems.

Agents, Tokens, and Environment Variables

The ANGEL Action Editor is an advanced tool that allows you to define actions to be taken when certain events and conditions occur. For example, an action could be defined to allow a student to gain access to previously locked material (action) after the submission of a assessment (event), only if their assessment grade is above 80% (condition).

The Action Editor can be accessed by clicking the Lessons tab, clicking the Edit hyperlink underneath a particular assessment, selecting the Advanced checkbox (located on the toolbar), and clicking the Action Editor hyperlink (located below the Actions field).

Actions

A brief description of each action type follows:

Alert

The Alert action presents a popup message to the user when triggered by a specified event.

- In the **Alert Message** field type the text you wish to be displayed in the popup message.

Announcement

The Announcement action posts a personal announcement to a user's course announcements page.

- In the **Announcement** field, type the text you wish to be displayed as the personal announcement.

- You may optionally type a numeric value in the **Duration** field to specify the number of days the personal announcement should remain posted.

- You may optionally type a numeric value in the **Days Offset** field to specify the number of days to offset (wait before displaying) the personal announcement.

- You optionally type a time value (e.g. 10:30 PM or 22:30) in the Start Time field to specify the time of day to display the personal announcement

Calendar

The Calendar action posts a personal calendar event to a user's course calendar page.

- In the **Title** field, type the text you wish to be displayed as the title of the personal calendar event.

- In the **Category** field, type the category for the personal calendar event.

- In the **Notes** field, type any additional viewable notes that you wish to be associated with the personal calendar event.

- You may optionally type a numeric value in the **Days Offset** field to specify the number of days to offset (wait before displaying) the personal calendar event.

- You may optionally type a numeric value in the **Duration** field to specify the number of minutes the personal calendar event should remain posted.

- You may optionally type true or false in the **Editable by User** field to allow or disallow the student to edit the personal calendar event.

Email (External)

The Email action sends an Internet email message when triggered by a specified event. This item would be useful if you need to send an email message to someone outside of the ANGEL environment.

- Type a valid Internet email address in the **From** field to specify who will appear as the sender of the message.

- Type a valid Internet email address(es) in the **To** field to specify who should receive the Internet email message.

> More than one email address can be added to the To, Cc, or Bcc fields, however they must be separated with \; (not simply a semi-colon). This escapes out the semi-colon character that has additional programmatic uses in the Action editor.

- You may optionally type a valid email address(es) in the **Cc** or **Bcc** fieldss to specify who should also receive the Internet email message.

- Type a subject for the email message in the **Subject** field.

- Type your message text in the **Message Text** field.

- You may optionally type true or false in the **HTML Format** field to determine whether the message is formatted using HTML markup.

Goto

The Goto action redirects the user to another content item (in the same course) when triggered by a specified event.

- In the **Match Text** field, type the Entry ID, password, title, or subtitle of the item you wish to redirect the student to.

  Note: If more than one item exists with the title or password provided in the Match Text field, then the user will be redirected to a list of the matching items.

- You can combine partial titles with an asterisk (*) as a wildcard to locate multiple items with similar titles. For example, to search for all items with the words "Lesson 1" as part of the title, type **lesson 1 *** in the **Match Text** field. In this example, when triggered, the user might be redirected to a list of items with the following titles:

  Lesson 1 Homework
  Lesson 1 Lecture Notes
  Lesson 1 Assessment

- You may optionally type a value (in seconds) in the **Delay** field to specify a period of time to display the confirmation/results page before redirecting to the specified URL.

> Leave the Delay field blank or type 0 if you wish the redirect to take place immediately. Type a very high number, such as 10 minutes (600 seconds) to allow the user to view the confirmation/results page for as long as they wish.

- You may optionally provide an item type in the **Item Type** field to restrict the Goto action to a particular type of item. For instance, to redirect the user to a list of all assessment items, type a * (wildcard) in the **Match Text** field and type **ASSESSMENT** in the **Item Type** field. When the action is triggered, the user will be redirected to a listing of all assessment items. Other item types include: Page, File, Link, Board, Message, Forum, Survey and Dropbox.

- You may optionally configure an additional action to be performed on the resulting page. For example, if you are redirecting to a assessment or form, typing **TAKE** in the **Action** field will direct the user into the assessment or form, bypassing the intermediate "Take the Assessment" page.

- Additional advanced functions or sub-events can be triggered using the Action and Sub-event options. For more information, see your ANGEL Administrator.

Lock

The Lock action locks existing content from the user when triggered by a specified event. The Lock action can only lock content that had previously been locked and is still associated with a particular password.

- Type the password(s) of the item(s) you wish to lock in the **Password(s)** field(s).

Mail (Internal)

The Mail action sends a course mail message when triggered by a specified event.

- Type a valid ANGEL username in the **From** field to specify who will appear as the sender of the message.

- Type a valid ANGEL username(s) in the **To** field to specify who should receive the course mail message.

> More than one valid ANGEL username can be added to the To field, however they must be separated with a comma.

- Type a subject for the course mail message in the **Subject** field.

- Type your message text in the **Message Text** field.

Message

The Message action presents an inline message to the user when triggered by a specified event.

- In the **HTML Message Text** field, type the text (in plain text or HTML format) you wish to be displayed in the inline message.

Redirect

The Redirect action redirects the user to a webpage when triggered by a specified event.

- In the **URL** field, type the fully qualified URL of the webpage you wish to redirect the student to.

- You may optionally type a value (in seconds), in the **Delay** field, to specify a period of time to display the confirmation/results page before redirecting to the specified URL.

> Leave the Delay field blank or type 0 if you wish the redirect to take place immediately. Type a very high number, such as 600 (equivalent to 10 minutes) if you wish to allow the user to view the confirmation/results page for as long as they wish.

Team Enroll

The Team Enroll action enrolls the user into one or more preexisting teams.

- Type the name of the preexisting team in the **Team(s)** field for which you want the user to be enrolled.

Team Unenroll

The Team Enroll action unenrolls the user into one or more preexisting teams.

- Type the name of the preexisting team in the **Team(s)** field for which you want the user to be unenrolled.

Unlock

The Unlock action releases password-protected content to the user when triggered by a specified event. The Unlock action can only unlock content that had previously been locked and is still associated with a particular password. For detailed steps regarding the Unlock action, see the section of this document titled, "Using the Action Editor to Unlock Material Based on a Student's Assessment Score."

- In the **Password(s)** fields, type the password or passwords for those items you would like to be unlocked when the specified event occurs. Using an exclamation point (!) in front of the password will hide the folder, assessment or item you wish to unlock from the user without having to set the Hidden field to Yes. Use the same format and password on the folder, assessment or item you wish to unlock including the exclamation point (!). Example: !password.

Add Variable, Replace Variable Text, and Set Variable

The Add Variable, Replace Variable Text, and Set Variable actions allow the course editor to create and manage environment variables that are associated with the user submitting the Assessment item. These advanced actions could be used to track course progress, competency, etc. Examples of use of the Add Variable, Replace Variable Text, and Set Variable actions include:

- The Add Variable action numerically adds a value to an existing variable value. For example, the Add Variable action could be used to create and increment a

variable called Assessment_Competency that would increment by 1 for every assessment a student received 70% of higher and decrement for every assessment a student received 69% or lower. A unique Assessment_Competency value would be stored for each student in the course – the results of which could be printed to a page for instructor review.

- The Replace Variable Text action replaces a string within a variable value with another string. For example, the Replace Variable action could be used to update a list of 'items to be completed.' As the student completes the items, an image of a checkbox (next to the list item) could be replaced with the image of a selected checkbox.

- The Set Variable action sets or updates the value of the specified variable. For example, the Set Variable action could be used to change the starting point (welcome page) for each student based on the last assessment they had received a passing score for.

  The variable $VARVAL$ can be used in value parameter to insert any existing variable value for append operations. If Variable Name is specified without quotes it will be treated as a token variable and dollar signs will be added.

An additional user_ID parameter can be manually added to the Add Variable, Replace Variable, or Set Variable actions (surrounded by square brackets [user_ID] at the end of the action syntax) to set the user ID for which this variable should be set. The default is the submitter's ID. The value '_global' can be used to set the value for a global course variable.

For additional information on the use of the Action Editor, please refer to the Knowledge Base at http://support.angellearning.com using the keywords Action Editor.

Other Actions

ENROLL
'Enroll a user in a course/group

Param 1: Section ID of Course/Group

Param 2: PIN for Course/Group

Param 3: User Team (optional)

Param 4: User Role (optional)

UNENROLL
'Unenroll a user from a course/group

Param 1: Section ID of Course/Group

Param 2: PIN for Course/Group

SQL
'Run a query against specified database.

Param 1: Database Connection String

Param 2: SQL Query String

EXECUTE

'Run a script via Server.Execute

Param 1: Script to execute

Param 2: Location (optional)

Unlocking Items based on Student Score

The following section outlines the steps required to unlock previously locked material based on a student assessment score.

The steps below assume that your course already contains password-protected content. If your course does not contain password-protected information, then you are recommended to create a sample password protected file to allow you to test your new agent once it has been created.

To unlock material based on a student's assessment score, perform the following steps:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Content Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Release Lesson 2).

4. Select **Grade** from the **Event** drop-down menu and type minimum and maximum grade percentages (required to trigger the agent) in the **Minimum** and **Maximum** fields (i.e. Minimum = 70, Maximum = 100).

5. Click the **Add** button located under **Content Items**.

6. Select **Assessment** from the **Content Type** drop-down menu, select the **Specific Assessment** option and select the assessment that should be used to trigger the agent (i.e. Lesson 1 Assessment).

7. Click the **Save Filter** button.

8. Click the **Add** button located under **User Filter**.

9. You may optionally use the User Filter options to restrict the agent to only run for specific users or teams; otherwise simply click the **Save Filter** button.

10. Click the **Add** button located under **Actions**.

11. Click the **Unlock** hyperlink.

12. Select **Event Originator** from the "**Unlock content for**" select box and click the **Add** button.

13. In the **Password(s)** fields, type the password or passwords for those items you would like to be unlocked when the specified event occurs (i.e. !lesson2_pwd).

    Using an exclamation mark as the first character in a password (in the Password field of the content item and on the Unlock action page) will hide the

content item from the user until the password has been programmatically released via the Unlock agent.

14. Click the **Save Action** button.

A dialog box will appear with the message, "The Actions setting in the main editor window has been updated. For your changes to take effect, you'll still need to save changes in the main editor window."

15. Click the **Save** button.

16. Complete your assessment to ensure the new action is triggered when the specified minimum score (or higher) is received.

17. Access your previously locked content to ensure the content was properly unlocked. You should be able to access the content without providing a password.

Redirect student based on assessment score

The following section provides steps to redirect a student to course content based on the student score on an assessment. This can be used to assist students who have not grasped the concepts provided in the lesson material, or if a student has a high score direct the student to advanced topics.

This exercise requires that you have Teams in your course. Teams (without users) can be added under the Manage tab > Teams. In our example Team A is used.

In preparation for this agent, create a folder with the Team Access set to Team A and cascade this selection to all new sub-items. Add a page item and a assessment item.

To redirect a student to course content based on score:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Content Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Team A Redirect).

4. Select **Grade** from the **Event** drop-down menu and leave the default values (Minimum = 0, Maximum = 70) as displayed in the **Minimum** and **Maximum** fields.

5. Click the **Add** button located under **Content Items**.

6. Select **Assessment** from the **Content Type** drop-down menu and click the **Save Filter** button.

7. Click the **Add** button located under **User Filter**.

8. You may optionally use the User Filter options to restrict the agent to only run for specific users or teams; otherwise simply click the **Save Filter** button.

9. Click the **Add** button located under **Actions**.

10. Select the **Team Enroll** action.

11. Select the **Event Originator** from the "*Users to enroll"* selection box and click the **Add** button.

12. In the **Teams** field type the team name (Team A).

13. Click the **Save Action** button.

14. Click the **Add** button located under **Actions**.

15. Select the **GoTo** action.

16. In the **Match Text** field paste the Entry ID (this is obtained by right-clicking on the hyperlink name of the content item to which you are redirecting the user upon grading).

17. Add a **Delay** of 5 (seconds) so all users can read the results from their assessment.

> This delay can be increased based on the number of items that need to be reviewed.

18. Add **View** to the **Action** field.

19. Click the **Save Action** button.

20. Click the **Save** button.

Notify an instructor of student assessment submissions

To notify an instructor of student assessment submissions, perform the following steps:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Content Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Notify Instructor of Assessment Submissions).

4. Select **Grade** from the **Event** drop-down menu and leave the default values (Minimum = 0, Maximum = 100) as displayed in the **Minimum** and **Maximum** fields.

5. Click the **Add** button located under **Content Items**.

6. Select **Assessment** from the **Content Type** drop-down menu and click the **Save Filter** button.

7. Click the **Add** button located under **User Filter**.

8. You may optionally use the User Filter options to restrict the agent to only run for specific users or teams; otherwise simply click the **Save Filter** button.

9. Click the **Add** button located under **Actions**.

10. Click the **Mail (internal)** hyperlink.

11. Select the instructor from the "**Recipient**" select box and click the **Add** button.

12. Type a message title in the **Subject** field (i.e. Student Assessment Submission) and type message text and event tokens in **Message** field (i.e. $EVENT_USER_FIRST_NAME$ $EVENT_USER_LAST_NAME$ scored $EVENT_GRADE$).

> See the section of this document titled Event Tokens for a full list of supported event tokens.

13. Click the **Save Action** button.

Error! Reference source not found.

14. Click the **Save** button.

15. Submit and grade a assessment to ensure the new action is triggered when the assessment is graded

Provide notification to student who has not logged into the course the past 5 days

The following section provides information on how to send a mail notification to students who have not logged into the course over the past 5 days. This provides students encouragement to stay on track in their course work.

To notify students:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Scheduled Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Students who have not logged in the past 5 days).

4. Select the **Schedule** for running this agent (Daily or Weekly). Select the days on which to run this agent by selecting the checkbox next to the day of the week. Select the time of day when this agent will be run by using the time drop-down list.

5. Click the **Add** button underneath the **User Filter**. You can select *Any User* with the Rights filter of *Specific Rights > Students* with *any team.*

6. The **Condition Filter** selection is **Last Logon** from the drop-down menu with the *List users that **have not** logged on since **5 days ago***.

7. Click the **Save Filter** button.

8. Click the **Add** button under **Actions**. Select the **Mail (Internal)** action. Select **All Faculty** or an individual instructor for the **To->** field and select **All Filtered Users** for the **Bcc->** field. Type your subject in the **Subject** field and message in the **Message** field. Select the checkbox *Send a copy to each recipient's Internet e-mail* so that the message will forward outside the course (if they have not logged into the course in 5 days, they will not know they have a course mail message).

9. Click the **Save Action** button.

10. Click the **Save** button.

> If you want to run this agent as you save it, you can click the **Save & Run** button.

Change a lesson folder icon when a student successfully completes a lesson assessment

This can be done by using a custom token in the Icon URL field of the folder in combination with a Set Variable agent on the assessment item (e.g., changing a folder image icon to the image of a folder with a checkmark).

To change the folder icon based on student score, perform the following steps:

1. Copy web address for the standard ANGEL folder icon.

   (Right-click Lesson 1 folder icon > Select Properties > Select & copy the entire fully qualified web address for the folder icon.)

2. Add a custom token called $lesson1_icon$ in the Icon URL field of the Lesson 1 folder.

   (Edit Lesson 1 folder > Type $lesson1_icon$ in the Icon URL field > Save)

   The Lesson 1 icon should now appear as a broken image.

3. Add an environment variable to specify a default value for the $lesson1_icon$ token.

   (Manage > Environment Variables > Add a Variable > Type $lesson1_icon$ in the Variable Name field > Paste the web address copied from step 1 above in the Variable Value field > Save)

   The Lesson 1 icon should now appear as the default ANGEL icon.

4. Upload an image to be used as the "completed" icon for the Lesson 1 folder.

   (Go to Home > Files > Add Content > Upload a File > Browse/locate, select, and upload "completed" icon image > Copy web address for "completed" icon image)

5. Add a Set Var action to the Lesson 1 assessment that will change the value of $lesson1_icon$ based on a student's score.

   (Edit Assessment > Action editor > New Action > Set Variable > Type lesson1_icon in the Variable Name field > Paste web address copied from step 4 above in the Variable Value field > Specify Event and Criteria settings in the Event Settings section > Save)

   Notice you must specify the token name without the dollar signs in the Action Editor Variable Name field.

6. Test the action by taking the Lesson 1 assessment.

Change the start tab based on a student's progress

(From the ANGEL Knowledge Base – http://support.angellearning.com)

To change the start tab from Syllabus to Lessons based on a user assessment submission:

1. Go to Manage > Tab Settings and select Syllabus from the Start Tab drop-down menu.

   Make note of the Tab IDs for each of the tabs. Most Tab IDs are obvious (Syllabus, Calendar, and Tools), but a few are not as easy to remember (Content, People, and InTouch). Notice the tab ID for In Touch does not have a space separating the two words.

2. Click Save.

3. Go to Manage > Environment Variables and click Edit next to the START_TAB environment variable. This variable was automatically created - to specify the start tab preference - when you saved in the above step.

   Notice the value of the environment variable is Syllabus. Our goal is to add an action that will change this value based on a student submission.

4. Go to the assessment that you wish to use to trigger the start tab action and click Edit > Advanced > Action Editor.

5. Click the New button in the Action editor and click the Set Variable action.

6. Type "START_TAB" in the Variable Name field.

   You must include the quotes around the variable name for this action to work.

7. Type content in the Variable Value field. Content is the Tab ID for the Lessons tab.

8. Select Submit from the Event drop-down menu and click Save.

9. Click Save to close the Action editor and click Save to save the assessment settings.

10. Test the action by re-entering the course (My Page) and taking the assessment.

    Notice the Syllabus tab is now the start tab upon entry to the course. After submitting the assessment, upon re-entry to the course, the Lessons tab (content) will be used as the start tab.

    The Welcome page will actually display first upon entry to the course unless you chose to deselect the 'show welcome page' option on the Manage > Tab Settings page.

Advanced Approach

To take this concept a bit further, you can use the same process as above but change the START_URL environment variable (instead of START_TAB) to change the start point each time the student successfully passes a lesson assessment.

To implement this solution, you will need to add multiple actions - one for each potential starting point. Specifically, you would add a Set Variable action to each assessment (e.g. assessment located in lesson 1-12 folders) to set the START_URL variable value to a URL for the next lesson folder. As the student progresses through the content, their individual START_URL will change to be the root of the lesson folder they should be concentrating on.

> The recommended method to grab the URL value for each folder is to use the HTML Editor. The advantage to using the HTML Editor instead of directly copying the URL is that the HTML Editor builds the link based on the ANGEL GOTO function which does not use the content item's Entry ID, and thus will continue to work if the content is exported to another (Entry ID will change).

To create multiple links for several folders, you may choose to create a temporary page item, click the HTML Editor option, create a link to each folder using the Link to Content Insert Link option. Once these links have been created, you can copy the URL value of each from the HTML view of the page for use in creating each action.

Create a shared course/instructor evaluation for multiple courses/instructors

(From the ANGEL Knowledge Base – http://support.angellearning.com)

This can be accomplished by creating a survey in a resource library and linking to the survey from each course. All responses to the linked survey will be stored in the resource library accessible only to the department, school, or institution - so the instructor cannot see the responses until they have been distributed.

Consider the following frequently answered questions for help in successfully implementing a shared course/instructor evaluation:

Q: How can I capture the course title, course ID, instructor ID, and/or instructor name with the student responses?

A: To automatically capture and pass the course ID in a survey response, add a Textbox with the text COURSE: $COURSE_ID$ in the Question text field and the text TYPE="HIDDEN" VALUE="$COURSE_ID$" in the Attributes text field.

This approach will display the value for the user (non-editable) and pass the value as a question response in the survey results. The same approach will work to capture and pass the following additional tokens:

$SECTION:INSTRUCTORID$ - username of instructor of record for the course
$SECTION:INSTRUCTOR$ - name of the instructor of record for the course
$COURSE_TITLE$ - title of the content area being accessed
$USER_ID$ - username for the student
$USER_NAME$ - full name for the student

> See the appendix of the Instructor reference Manual for a full list of available course, user, and event tokens. $SECTION:INSTRUCTORID$ and $SECTION:INSTRUCTOR$ tokens may not work in earlier versions of ANGEL.

Q: Can I hide the captured course title, course ID, instructor ID, etc. (see above) so the student does not see it on the evaluation?

A: Yes. Try the following steps:

1. Move the question you want to hide to the bottom of your survey. Make note of what question number the question will be assigned (last question on the survey).

2. Add a Section Heading to the survey with the following CSS code pasted in the Text field (of the Section Heading). Update the #question_1 portion of CSS code to use the question number of the question you want to hide (last question on the survey)

   ```
   <style type="text/css">
   <!--
   #question_1 { display:none; }
   -->
   </style>
   ```

3. Try it.

Q: Can I restrict instructors from accidentally copying the survey instead of linking to it?

A: Yes, to restrict instructors from copying the survey instead of linking to it, change the survey's Access Settings > Editable By setting to Author Only. Attempts to copy the item will result in an error.

Q: I am exporting the survey results using the export options under the survey's Utilities menu. Can I change the value stored in the FIELD_ID column to be something more identifiable than the current random alpha-numeric code (e.g. FIELD_F70BC62CE9EB452A801F1682B0441185)?

A: Yes, you can specify a brief unique identifier to be used (in leau of the alpha-numeric field_ID) for each question by specifying the unique identifier in the Field ID field for each survey question (Edit Question > Advanced > Field ID).

Q: I need to allow students to submit the survey once per course. A Max Attempts setting of 1 only allows them to take it for one course. A Max Attempts setting of anything higher allows them to potentially take it multiple times for a single course. To avoid confusion and ensure data integrity, how can I limit users to one attempt per course?

A: The following work-around should work for you:

1. Create a custom confirmation page (e.g. confirm.html) within the associated file manager for the survey.

Steps: Navigate to Survey > Utilities > Associated File Manager > click Add Content > Add a Page > Type confirm.html in the Title field > click the HTML Editor hyperlink to create/format the confirmation page > Save.

Right-click on the hyperlinked title of the resulting page and select Copy Shortcut to copy the fully qualified web address/URL for the confirmation page.

2. Add a SET VARIABLE action (triggered by the SUBMIT event) to the survey to create an environment variable called $COURSE_EVAL$ with a value of 1 (in the course from which the user has accessed the survey) - tagging the student as having already completed the survey in the course.

   Steps: Type COURSE_EVAL in the Variable Name field, type 1 in the Variable Value field, select Submit from the Event drop-down menu.

   You must type the custom token name (COURSE_EVAL) without dollar signs in the Variable Name field for the action to work properly.

3. Add a REDIRECT action (triggered by the VIEW event) to redirect the user to the confirm.html page only if the user has previously submitted the survey from the same course - disabling the user's access to the Begin Survey link.

   Steps: Copy/paste the fully qualified URL for the confirmation page in the URL field, select View from the Event drop-down menu, type $COURSE_EVAL$=1 to the Criteria field.

4. Add a REDIRECT action (triggered by the SUBMIT event) to redirect the user to the confirm.html page when the survey is submitted - bypassing the standard ANGEL confirmation page.

   Steps: Copy/paste the fully qualified URL for the confirmation page in the URL field, select View from the Event drop-down menu, type $COURSE_EVAL$=1 to the Criteria field.

   Keep in mind that the redirect web address (in the two redirect actions) must specify the fully qualified URL to the confirmation page.

5. You may also consider disabling the User Review option (survey settings) to remove reference to previous submissions (from other courses).

Send an email message when a student has completed all lesson assessments with a passing grade.

(From the ANGEL Knowledge Base – http://support.angellearning.com)

1. Create a course environment variable (Manage > Environment Variables > Add Variable) named $COMPLETED$ with an initial value of NOTSET

2. Add a SET VARIABLE, REPLACE VARIABLE, and EMAIL action to each of your assessments.

   The SET VARIABLE action will use a Variable Name of COMPLETED - a Variable Value of {ASSESSMENT1}{ASSESSMENT2}{ASSESSMENT3} - and Criteria of $COMPLETED$ = NOTSET

   The REPLACE VARIABLE action will use a Variable Name of COMPLETED and a Find Text value of {ASSESSMENT1} or {ASSESSMENT2} or {ASSESSMENT3} depending on which assessment you are currently adding the action to. Add a value of 0 in the Replace With field and a required passing grade value in the Criteria field.

   The EMAIL action will use a value of $COMPLETED$ = 000 in the Criteria field (where the number of zeros matches the number of assessments being tracked - three in our example).

   > You may find that you can easily copy/paste the resulting Action script into the remaining assessments (and update only the REPLACE VARIABLE Find Text value) to save time.

3. Try it!

Restrict assessment access until the user has viewed several lesson pages.

(From the ANGEL Knowledge Base – http://support.angellearning.com)

1. Create a course environment variable (Manage > Environment Variables > Add Variable) named $RELEASE$ with an initial value of NOTSET
2. Add a Set Variable action to the parent folder with a Variable Name of RELEASE and a Variable Value of {1}{2}{3} and Criteria of $RELEASE$ = NOTSET
3. Add a REPLACE VARIABLE and UNLOCK action to each of your pages.

   The REPLACE VARIABLE action will use a Variable Name of RELEASE (not $RELEASE$) and a Find Text value of {PG1} or {PG2} or {PG3} depending on which page you are currently adding the action to. Add a value of 0 in the Replace With field. Leave the Event drop-down menu set to View.

   The UNLOCK action will use a Password value that matches the password of your locked assessment. Note: You can optionally use a password that begins with an exclamation point to hide the password

protected item until it is programmatically released. Leave the Event drop-down menu set to View and type/paste the value of $RELEASE$ = 000 in the Criteria field (where the number of zeros matches the number of pages being tracked - three in our example).

4. Try it!

Display a personalized completion certificate when a student has completed the course

(From the ANGEL Knowledge Base – http://support.angellearning.com)

This can be done using the MESSAGE action and one or more of the event tokens described in the Instructor Reference Manual. For example:

1. Download the certificate.zip file to your desktop.
2. Navigate to the final assessment/test in your course and click the Utilities hyperlink located below the assessment.
3. Click the Associated File Manager hyperlink.
4. Click Add Content > Upload Files and browse to the certificate.zip file located on your desktop.
5. Select and upload the file. Select the extract option when prompted.
6. Locate and click the Edit hyperlink located below the certificate.html page.
7. Select and copy all of the HTML code displayed in the File Contents field.
8. Exit the Edit File page and the Associated File Manager to return to the assessment.
9. Click the Edit hyperlink located below the assessment.
10. Scroll down and click the Action Editor hyperlink.
11. Click New and then click the Message hyperlink to add a MESSAGE action.
12. Paste the copied certificate code into HTML Message Text field.
13. Select Grade from the Event drop-down menu, type a numeric value (required percentage) in the Criteria field, and click Save 3 times.
14. Try it!

Send a preformatted message to the entire class

(From the ANGEL Knowledge Base – http://support.angellearning.com)

Preformatted or "canned" messages can be created and stored in ANGEL using custom forms which ANGEL supports through the use of the $POST_URL$ token. Form submissions are stored in the ANGEL database and can be accessed using the $POST:fieldname$ token (replacing fieldname with appropriate field name from the form as shown in the example below).

To use a custom form to send a preformatted message to the entire class:

1. Navigate to the Lessons tab and create a hidden Page titled 'Wrapping up Week 1'

2. Copy/Paste the following sample form (HTML) in the Page Text field.

```
<HTML>
<HEAD>
</HEAD>
<BODY>
<p>Click the Send Message button to send the message to the entire class.</p>
<FORM name=frmMsg action=$POST_URL$ method=post>
<P>Subject<BR><INPUT size=40 value="Wrapping up Week 1" name=SUBJECT></P>
<P>Message<BR><TEXTAREA name=MESSAGE rows=8 cols=60>We're nearing the end of the first week of the course. I hope you are finding value in the concepts and activities covered so far. For more information on content development tools and techniques (discussed in Lessons 3 & 4), such as principles of nesting content, see the Instructor Reference Manual (located under the Help link in the left navigation bar).
```

Don't miss new unread discussion forum postings! The easiest way to locate and view unread discussion forum postings is to navigate to Manage > What's New Agent. You can additionally add and configure the What's New Agent to appear on your personal page (My Page > Preferences > My Page Content) This feature is very useful, for instructors and students, to allow you to see What's New across all of your courses, at a single glance.

```
$USER_NAME$
</TEXTAREA></P>
<P><INPUT type=submit value="Send Message"></P></FORM>
</BODY>
</HTML>
```

3. Click the Action Editor link (Advanced Setting).

4. Click the New button to add a new action.

5. Select the MAIL action.

6. Type $USER_ID$ in the From field.

7. Type CLASS in the To field.

8. Type $POST:SUBJECT$ in the Subject field.

9. Type $POST:MESSAGE$ in the Message Text field.

10. Change the Event drop-down menu to Submit.

11. Click Save to save the MAIL action.

12. Click Save to close the Action Editor.

13. Click Save to save the custom form.

14. Navigate to the custom form and click the Submit button. Your "canned" message will be sent to all members of the course.

💡You can also create a custom results page by adding an HTML page titled post.htm in the Associated File Manager for the custom form. You may use the $POST:fieldname$ token (replacing fieldname with appropriate field name from the form) within the post.htm page to include user responses in the layout of the custom results page.

Can members be automatically notified when content is added to a course?

(From the ANGEL Knowledge Base – http://support.angellearning.com)

ANGEL supports subscription to one or more folders or to the root of a Lessons/Content tab to receive notification (and a preview) when new content is added. Any Course/Group Editor can enroll one or more members using the Environment Variables tool.

To subscribe one or more users to a folder:

Go to Manage > Environment Variables > Add a Variable.

1. Type **SUBSCRIBERS_**_entryID_ in the Variable Name field (where _entryID_ is the entryID of the folder).

📝 To determine an entryID for a folder, right-click on the folder title/link and select Copy Shortcut. Paste to a text document and grab the last alpha-numeric portion of the URL (everything after the ENTRY_ID= portion).

---

2. Type a comma separated list (without leading or trailing spaces) in the Variable Value field of ANGEL usernames of the roster members you wish to subscribe and save.

   The subscribed members receive email notification each time new content is added to the folder.

📝 To receive notification, subscribed members must have a valid email address specified in the email forwarding settings located at My Page > Preferences >System Settings.

To subscribe one or more users to the root level of the Lessons/Content tab, use environment variable name **SUBSCRIBERS_ROOT** without specifying an entryID and add the subscribers using the same method described above. Subscribers will receive notification when content is added anywhere on the lessons tab (up to 10 sub-folder levels deep).

Remind Students of Due/Overdue Assignment Milestones

The following section outlines the steps required to send notification to students for due/overdue assignment milestones.

The steps below assume that your course already contains at least one assignment milestone with a due date specified.

To send notification to students for due/overdue assignment milestones, perform the following steps:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Scheduled Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Student Reminder: Project 1 Due).

4. Select **On this date…** from the **Schedule** section and select the date/time you want the reminder to be sent (i.e. the day before the due date, the due date, or the day after the due date.).

5. Click the **Add** button located under **User Filter**.

6. Select **Milestones** from the **Condition Filter** drop-down menu and select the appropriate milestone (i.e. Project 1) to complete the '*List users that have not completed*' condition.

7. Click the **Save Filter** button.

8. Click the **Add** button located under **Actions**.

9. Click the **Mail (Internal)** hyperlink.

10. Select **All Filtered Users** from the **Recipients** select box and click the **Bcc** button (so students will not know who else received the reminder message).

11. Select your name from the **Recipients** select box and click the **To** button (to receive a copy of the reminder message since To is a required field).

12. Type an appropriate message in the **Subject** and **Message** fields and optionally select the '*Send a copy to each recipient's Internet e-mail*' option.

13. Click the **Save Action** button.

14. Click the **Save** button.

The agent will automatically run on the specified date and send notification to only those students who have not yet completed the due milestone.

Mark a Milestone as Complete Based on Student Score

The following section outlines the steps required to mark a milestone as complete based on student score.

The steps below assume that your course already contains at least one gradable content item (assessment, drop box, etc.) set as an assignment milestone with a *Task Type* value of *Manually marked*.

To mark a milestone as complete based on a student's assessment score, perform the following steps:

1. Click the **Automate** tab and click the **Add** button.

2. Click the **Content Agent** hyperlink

3. Provide a title for the agent in the **Title** field (i.e. Mark Lesson 1 Assessment milestone as complete).

4. Select **Grade** from the **Event** drop-down menu and type minimum and maximum grade percentages (required to trigger the agent) in the **Minimum** and **Maximum** fields (i.e. Minimum = 70, Maximum = 100).

5. Click the **Add** button located under **Content Items**.

6. Select **Assessment** from the **Content Type** drop-down menu, select the **Specific Assessment** option and select the assessment that should be used to trigger the agent (i.e. Lesson 1 Assessment).

7. Click the **Save Filter** button.

8. Click the **Add** button located under **User Filter**.

9. You may optionally use the User Filter options to restrict the agent to only run for specific users or teams; otherwise simply click the **Save Filter** button.

10. Click the **Add** button located under **Actions**.

11. Click the **Milestone Completion** hyperlink.

12. Select the appropriate milestone from the **Milestone** drop-down menu.

13. Select **Event Originator** from the "**Complete for**" select box and click the **Save Action** button.

14. Click the **Save** button.

15. Complete your assessment to ensure the new action is triggered when the specified minimum score (or higher) is received.

The agent will run each time a submission is graded for the selected assessment. The associated milestone will be automatically marked as complete for those who score high enough on the gradable content item.

Using Advanced Boolean Expressions and Tokens in Actions

The following conditional operators can be used in a conditional expression from within an Action. An exclamation mark may be added in front of any of these operators to reverse the Boolean result of the operation.

Expression/Operator	Meaning and Result
term1= term2	True if term1 equals term2
term1 <> term2	True if term1 is not equal to term2
term1 [in] term2	True if the term2 contains term1 (not case

Expression/Operator	Meaning and Result
	sensitive)
term1 [and] term2	True if neither term evaluates to 0, false, or an empty string
term1 [or] term2	True if either term evaluates to anything other than 0, false, or an empty string
term1 > term2	True if term1 is alphabetically or numerically greater than term2
term1 >= term2	True if term1 is alphabetically or numerically greater than or equivalent to term2
term1 < term2	True if term1 is alphabetically or numerically less than term2
term1 <= term2	True if term1 is alphabetically or numerically less than or equivalent to term2

Custom Event Tokens

The following tokens may be used as either a term in a conditional expression or within a parameter. The pound signs (#) should be replaced with the 1-based ordinal position of the question. The alternateID must match the alternate id specified for the survey question.

Events and Object Tokens

$EVENT_GRADE$

>The grade associated with the event.

$EVENT_DATE$

>The date associated with the event.

$DATE_SUBMITTED$

>The date and time the ANGEL survey/assessment/form was submitted.

$EVENT_TIME$

>The time associated with the event.

$EVENT_ENTRY$

>The entryID associated with the event.

$EVENT_USER$

>The user ID of the user associated with the event.

$EVENT_USER_ACCOUNT$

>The account ID of the user associated with the event.

$EVENT_USER_ID$

>The user ID of the user associated with the event.

$EVENT_USER_FIRST_NAME$

The first name of the user associated with the event.

$EVENT_USER_LAST_NAME$

The last name of the user associated with the event.

$EVENT_USER_EMAIL$

The email address of the user associated with the event.

$GRADER_ACCOUNT$

The account ID of the grader associated with the event.

$GRADER_ID$

The user ID of the grader associated with the event.

$GRADER_FIRST_NAME$

The first name of the grader associated with the event.

$GRADER_LAST_NAME$

The last name of the grader associated with the event.

$GRADER_EMAIL$

The email address of the grader associated with the event.

$EVENT_SECTION$

The Section ID of the course or group associated with the event.

$EVENT_MIN$

The minimum grade triggers the action.

$EVENT_MAX$

The maximum grade triggers the action.

$VARVAL$ (SETVAR, REPLACEVAR)

Current value of variable

Assessment GRADE/SUBMIT Events

$Q#:RESPONSE$

The user's response to the specified question

$Q#:ANSWER$

The answer key for the specified question

$Q#:SCORE$

The user's score for the specified question

$Q#:POSSIBLE$

The maximum points possible for the specified question

$POINTS:POSSIBLE$

The total points possible for the assessment

$POINTS:MISSED$

The total points the user missed for the assessment

$POINTS:AWARDED$

The total points the user earned for the assessment

$POINTS:UNGRADED$

The total points as yet unscored for the assessment

Survey SUBMIT Events

$Q# :RESPONSE$

$Q# :OPTIONS$

$FIELD[*alternateID*]:RESPONSE$

$FIELD[*alternateID*]:OPTIONS$

Custom Form

$POST_URL$

Post URL for ANGEL Page item - for use in submitting custom form data to ANGEL

$POST:fieldName$

Submitted value of the specified custom form field – for use in building custom (post.htm) results page

Upload or create a file titled post.htm to the associated file manager for the custom form to customize the default confirmation page that ANGEL displays. Use the $POST:fieldName$ token (where fieldName is replaced by the name of the HTML form field) and any other user, course, or custom tokens to include user responses within the custom formatted confirmation page.

Content Manager Tokens

A number of tokens are defined for the content manager. These tokens may be used in page text or other context. When used, the content manager will automatically replace each token with the appropriate value.

Drive Tokens

FD

> The user's floppy drive setting or "A:" if not set

HD

> The user's hard drive setting or "C:" if not set

CD

> The user's CD drive setting or "D:" if not set

DVD

> The user's DVD drive setting or "D:" if not set

User Tokens

$FIRST_NAME$

> The first name of the user accessing the system

$LAST_NAME$

> The last name of the user accessing the system

$USER_ID$

> The user id of the user accessing the system

ESC_USER_ID

> The URL encoded user id of the user accessing the system

$USER_NAME$

> The full name of the user accessing the system

ESC_USER_NAME

> The URL encoded full name of the user accessing the system

Course Tokens

$COURSE_ID$

> The section id of the content area being accessed

ESC_COURSE_ID

> The URL encoded section id of the content area being accessed

$COURSE_TITLE$

> The title of the content area being accessed

ESC_COURSE_TITLE

> The URL encoded title of the content area being accessed

$SECTION:INSTRUCTORID$

> Username of instructor of record for the course

$SECTION:INSTRUCTOR$

Name of the instructor of record for the course

$COURSE_PATH$

The base path for files associated with the content area being accessed

Application Tokens

$ANGEL:NAME$

Application name of the ANGEL environment

$ANGEL:VROOT$

Value of the APP_VRoot application setting

$ANGEL:UPLOAD_PATH$

The base path for ANGEL uploaded files

$IMAGE_PATH$

The base path for image files used by the component for buttons and icons

$FORM:settingName$

Value of the specified form element

Resource Tokens

$ENTRY_TITLE$

Title of the current resource object

Defined Environment Variables

More than 300 environment variables have already been defined as part of the standard environment. The script pages throughout the environment reference these variables. If any of these variables are not set, a default system values will be used. This allows you to override default functionality without requiring you to specify every variable. The variables have been categorized by functional area below.

Course Rights

Refer to the table of course level rights when determining the appropriate numeric value for applicable environment variables.

Rights	Value	Rights	Value
Unauthenticated Users	0	Mentor	8
Authenticated Users	1	Course Assistant	16
Students	2	Course Editor	32
Team Leaders	4		

Access to the Environment Variables Manager may be limited by your institution.

Calendar

Variable Name	Description
COURSE_CALENDAR_VIEW	Options to display Calendar Events – defaults to MONTH. Other options include DAY, WEEK, and YEAR.
$CALENDAR_MAX_DURATION$	Maximum allowed duration for calendar entries specified in hours.
COURSE_CALENDAR_CATEGORIES	Comma separated list of options to display in the categories list on course calendars.
GROUP_CALENDAR_CATEGORIES	Comma separated list of options to display in the categories list on group calendars.
GROUP_CALENDAR_CATEGORIES	Comma separated list of options to display in the categories list on group calendars.

Content Manager

Variable Name	Description
$ICON_BROWSE_URL$	URL for a link to display under the ICON URL setting. Can be used to implement a browse feature for selecting predetermined icons.
$ICON_BROWSE_ATTRIBUTE$	Advanced attributes for the link generated for the $ICON_BROWSE_URL$.
$LABEL$	Toggle between LABEL and SPAN elements on quizzes, surveys and other form pages. LABEL elements are helpful for ADA accessibility, but introduce some interface issues in some browsers for non-visual impaired users.
$SHOWDIR$	Set to 1 force system to always show directory when navigating using Next and Previous. Set to 0 to skip folders listings that contain no folder text.
$SHOWDIR_NEXT$	Set to 1 force system to always show directory when navigating using Next. Set to 0 to skip folders listings that contain no folder text.
$SHOWDIR_PREVIOUS$	Set to 1 force system to always show directory when navigating using Previous. Set to 0 to skip folders listings that contain no folder text.
$CONTENT_MAX_UPLOAD$	Maximum upload size in bytes.
$THREAD_FRAME_STATIC$	Set to 1 to force threaded view to always be used and disable toggling into single window mode.
$THREAD_FRAME_AREA$	Location of thread view pane. May be TOP, LEFT, RIGHT or BOTTOM.
$THREAD_FRAME_SIZE$	Size in pixels of the thread view pane in message boards.

Lessons/Content Only

Variable Name	Description
ATTACH_MAX_MB	The maximum course mail attachment size in MB. Default=2.

Variable Name	Description
CHARSET	Specifies the character set encoding that should be used for course content. This is useful for supporting content developed for foreign language courses.
CONTENT_BANNERHEIGHT	The height in pixels to make the title frame for link and file items.
CONTENT_DISABLE_NOTES	If set to 1, disables the Notes capability.
CONTENT_DISABLEINDEX	If set to 1, disables the "Index" link in the tool bar.
CONTENT_DISABLENAVIGATION	If set to 1, disables the "Next", "Previous", "Up" and "Top" links in the tool bar.
CONTENT_DISABLEROOTUTILITIES	If set to 1, disables the deletion and utility options generally available from the root menu.
CONTENT_DISABLESEARCH	If set to 1, disables the "Search" link in the tool bar.
CONTENT_DISABLESUBSCRIBE	If set to 1, disables the sending of email messages when new content is added to a folder or message board to which a user is subscribed.
CONTENT_DISABLETHREADVIEW	If set to 1, disables the full-thread view of the message board postings and instead displays only links for the top-level responses to each posting when viewing the posting.
CONTENT_EDITDEFAULT	Specifies the default course/group rights to use for the Editable By setting when adding new root-level items.
CONTENT_EDITORMENU	Customizes the interface used for content editing options. This setting can take any of the following numerical values: 0 (default) – Edit and Delete buttons are used to the left of each item's title. 1024 – A context menu of text-based links is provided underneath each item's title. In addition to Edit and Delete, links are provided for the Reports and Utilities menu of each item. 2048 – Text links are used in place of the standard button images.

Variable Name	Description
CONTENT_ICONHEIGHT	Specifies the height in pixels of icons displayed in directory lists. The default is unspecified so the icons height is proportional to its width.
CONTENT_ICONWIDTH	Specifies the width in pixels of icons displayed in directory lists. The default is "24".
CONTENT_MAXITEMS	A number between 5 and 100 that specifies the number of items to list on pages such as search results and quiz question lists. The default is "25".
CONTENT_NAVBARFOOTER	If set to 1, indicates that the "Next", "Previous", "Up" and "Top" navigation links should be made available as a page footer.
CONTENT_NOTES	Minimum course rights needed to access the Notes tool.
CONTENT_PREFERENCES	Minimum course rights needed to access the Preferences tool.
CONTENT_PRINT	Minimum course rights needed to access the Print tool.
CONTENT_SYSTEM	Allows you to change a defined list of default text values in the content manager. For example, using the following value allows you to change the instructions for a student dropbox. "Upload_Multifile_Homework_Instructions"=" your new instructions"
CONTENT_TRACKINGDEFAULT	Specifies the default tracking setting to use when adding new root-level items. (0-Disabled,1-Students Only,2-All Enrolled Users,3-Authenticated Users,4-Everyone)
CONTENT_VIEWDEFAULT	Specifies the default course/group rights to use for the Viewable By setting when adding new root-level items.
DISCUSSION_FORUM	If set to 0, removes the "Add a Discussion Forum" link from the Course Lessons' Add Content list. Default value is set to 1 for active.
DROPBOX_MAX_MB	The maximum drop box attachment size in MB. Default = 2.

Variable Name	Description
FORM_CONTINUE	Set with a value of NEXT. Upon completion of a survey item the user will be taken to the next content item instead of the main Lessons page.
GRADE_FORM_EMAIL_CHECKED	A value of CHECKED will default the "Send as mail message to user" checkbox on the grade forms to be checked.
MAX_VIEWABLE_BY	Specifies the maximum course rights that will be displayed in the Viewable By field on content manager editor pages. The default value is 64 (Course Administrator).
MIN_VIEWABLE_BY	Specifies the minimum course rights that will be displayed in the Viewable By field on content manager editor pages. The default value is 0 (Everyone).
QUIZ_CONTINUE	Set with a value of NEXT. Upon completion of a quiz item the user will be taken to the next content item instead of the main Lessons page.
SCORM_HITS	If set to 1, SCORM item logging is enabled for ANGEL lesson items (Default = 0). When enabled, SCORM item logging data is viewable on all ANGEL lesson items under Reports > Activity Summary.
SCORM_SESSION	If set to 1, SCORM session logging is enabled (Default = 1). SCORM session data is viewable at the root level of the Lessons tab under Reports > Activity Summary.
SUBMISSION_DELETE_RIGHTS	Maximum course rights required to delete quiz, survey, or drop box submissions. The default is 32 (Course Editor). A value of 16 will allow Course Assistants to delete submissions. A value of 64 will restrict delete access to course/system administrators.
TEAMACCESS_DISPLAY	Default value = 0 Value of 1 enables team settings for **selected** teams. Value of 2 enables team settings for **all** teams.

Other Content Manager Instances

Variable Name	Description
FastPageToolbar	Set to SIMPLE, ALL (default), or custom toolbar, This variable adds the ability to configure what toolbars are available on the HTML Editor. A custom toolbar can be defined by using any of the tokens defined in the ALL toolbar in a comma-separated list. Also, a "toolbar" query parameter can be passed to the HTML Editor to force a specific toolbar.
FastPageToolbar_Simple	Overrides the default SIMPLE toolbar, The default for SIMPLE is Block, FontFace, FontSize, FontStyle, Link, Image, Color, SupSub, Math, ListFormat, Symbol, Help.
FastPageToolbar_All	Overrides the default ALL toolbar. The default for ALL is Style, Block, FontFace, FontSize, SpellCheck, CleanWord, Undo, Clipboard, Macro, FontStyle, HR, Table, Link, Image, Color, SupSub, Math, Symbol, Greek, Latin, Align, ListFormat, Indent, Toggle, Visible, Help, WYSIWYG.(View Source).

Communicate Settings

Variable Name	Description
INTOUCH_PAGE_courseRights	Specifies an alternate setting for the nugget list for the Communicate page for users with the specified course/group rights.
MAIL_INDIVIDUALS	The minimum course/group rights needed to enable the user to select individuals as mail recipients.
MAIL_INTERNET	The minimum course/group rights needed to enable the user to send mail to other users' Internet email accounts even if the recipient users have not enabled mail forwarding.
MAIL_LEADERS	The minimum course/group rights needed to enable the user to send mail to all course faculty or group leaders.
MAIL_MAX_MB	The maximum electronic mail attachment size in MB. Default = 2.
MAIL_MEMBERS	The minimum course/group rights needed to enable the user to send mail to all course or group members.

Variable Name	Description
MAIL_TEAMS	The minimum course/group rights needed to enable the non-editors to send mail to the teams of which they are a member and for editors to send mail to any team.
MAIL_BCC_DEFAULT	If set to 1, changes the default value for the course mail option 'Do not disclose recipients' to be selected. This option can be set using the Course Mail settings page located on the Communicate page of a section.
MAIL_INTERNET_DEFAULT	If set to 1, changes the default value for the course mail option 'Send a copy to each recipient's Internet e-mail' to be selected. This option can be set using the Course Mail settings page located on the Communicate page of a section.
MAIL_MENTOR_DEFAULT	If set to 1, changes the default value for the course mail option 'Send a copy to each recipient's mentor if known' to be selected. This option can be set using the Course Mail settings page located on the Communicate page of a section.
MAIL_REPLY_ALL	Minimum course rights required to Reply to All in Course Mail.
NOANNOUNCE	If set to 1, disables the Announcements feature in a course or group.
NOCHAT	If set to 1, disables the Chat feature in a course or group.
NOFORUMS	If set to 1, disables the In Touch nugget that lists all message boards in the course or group.
NOINTOUCHLINKS	If set to 1, disables the interface for adding custom links to the Communicate page of the course or group.
NOMAIL	If set to 1, disables the Course/Group mail feature in a course or group.
NONEWS	If set to 1, disables the News feature in a course or group.
NOPOLLS	If set to 1, disables the Polls feature in a course or group.
NOTEAMFILES	If set to 1, disables the Team Files nugget in a course or group. This setting is being deprecated in favor of the new team-level setting for toggling file sharing.

Variable Name	Description
NOTOOLLINKS	If set to 1, disables the interface for adding custom links to the Manage page of the course or group.
TEAMFILES_QUOTA	Specifies the disk quota in megabytes for each team defined in the course or group. This setting is being deprecated in favor of the new team-level setting.

Course/Group Tool Settings

Variable Name	Description
ATTENDANCE_CODES	Overrides the default attendance codes by providing a comma-separated list of codes and their respective labels in the form: code1=label1,code2=label2,...
EDITOR_REPORTS_ACCESS	Specifies the minimum course/group rights needed to access course or group reports intended for course instructors and group administrators. The default setting is 16 (Course/Group Assistant).
EDITOR_TOOLS_ACCESS	Specifies the minimum course/group rights needed to access course or group tools intended for course instructors and group administrators. The default setting is 16 (Course/Group Assistant).
SECTION_ACTIVITY_ACCESS	The minimum course/group rights needed to access the course/group activity report. Additionally, the user must have sufficient rights for the EDITOR_REPORTS_ACCESS in order to have access to the link for this feature.
SECTION_ATTENDANCE_ACCESS	The minimum course/group rights needed to access the Attendance Manager. Additionally, the user must have sufficient rights for the EDITOR_TOOLS_ACCESS in order to have access to the link for this feature.
SECTION_GRADES_ACCESS	The minimum course/group rights needed to access the Grade Book. Additionally, the user must have sufficient rights for the EDITOR_TOOLS_ACCESS in order to have access to the link for this feature.

Variable Name	Description
SECTION_LEARNERPROFILE_ACCESS	The minimum course/group rights needed to access the Learner Profile information for all course/group members.
SECTION_MILESTONES_ACCESS	The minimum course/group rights needed to access the Milestones tool for all course/group members.
SECTION_NOTES_ACCESS	The minimum course/group rights needed to access the User Notes feature from the Manage page.
TOOLS_PAGE_courseRights	Specifies an alternate setting for the nugget list for the Manage page for users with the specified course/group rights.

Course/Group Tabs

For the following items, any reference to "tabid" can be replaced with any of the following to affect the respective standard tab: COURSE, CALENDAR, CONTENT, INTOUCH, PEOPLE, SYLLABUS and MANAGE. Likewise, if custom tabs are added, the appropriate tabid for a custom tab can be specified to affect its properties.

Variable Name	Description
NOTAB_tabid	Disables the display of the specified tab. For example, NOTAB_TOOLS would prevent the display of the Manage tab. This setting is being deprecated and replaced by the TAB_ACCESS_id setting that offers finer control.
START_TAB	The id of the tab to be selected upon entering the course or group (after the Welcome Page).
START_URL	The URL of the page to be displayed upon entering the course or group (after the Welcome Page). If START_URL is not specified, the URL associated with the specified Start Tab is used.
TAB_ACCESS_tabid	Defines minimum course/group rights to access the specified tab.
TAB_TEXT_tabid	Defines the label text to use for the specified tab.

Variable Name	Description
TAB_URL_tabid	Defines the URL of the page to display when the specified tab is selected. If this settings id not defined for a tab, the URL will point to the default document of the subdirectory of the section folder with the same name as the tab ID ("/ApplicationPath/section/tabid/"). For example, for the tab with an id of "TOOLS" the default tab URL would point to the relative path "section/tools/".
TABS	A comma separated list of tabids indicating the tabs to display for the course or group.
TABS_courseType	A comma separated list of id=label pairs indicating the tabs to display for the group type as defined to the groups COURSE_TYPE field.

Themes (Style Sheets)

Variable Name	Description
OVERRIDE_SECTION_STYLESHEET	Setting this variable to 1 or any positive number will cause the default stylesheet, or the value of the STYLESHEET variable if specified, to be used in favor of a custom style sheet that is specified for a course or group. This is useful if a user wants or needs to use a consistent style sheet. For example, a visually impaired user may always want to use a high contrast style sheet with large fonts.
STYLESHEET	The URL of the CSS style sheet to use in place of the default style sheet. This will not affect courses or groups that have specified a custom style sheet, unless the OVERRIDE_SECTION_STYLESHEET variable is also set.

System Settings

Variable Name	Description
BREADCRUMBS	This variable controls the viewing of breadcrumbs. Set to 0 disables, 1 enables. This can be set as Course Override to allow for instructors to change at the course level, or set to System Override sets the value for the entire system.
CONFIRM_ABANDON	Set to 0 to disable confirmation messages when leaving a form page.
CONTEXT_HELP	Set to 1 to activate context sensitive help mode for course and group content. When activated, users are taken to a search page based on the active tab. Appropriate content items must be created in Help for results to be found.
DF_MODERATOR_RIGHTS	Defines the course rights level for moderators of Discussion Forums (default is 16 - Manager)
NOTABS	Set to 1 to disable the tabs in a course or group.
SECTION_TIMEOUT	This variable is checked only upon entry into a course or group and supercedes the SESSION_TIMEOUT variable (if any).
SESSION_TIMEOUT	This variable is checked on log in and on entry into any course or group (value in minutes). It will only increase the session timeout period – for example, if the timeout is already greater than the timeout specified in this variable then no change is made.
SIDEBAR	This variable controls the side bar display in a course or group. Set to 'NONE' to disable, 'INDEX' to display map view, or 'NEW' to display the What's New view.
SIDEBAR_ICONS	Set to '1' to use item icons instead of bullets in the map view.
ENFORCE_START_DATE	If a course/group start date option is selected, adding the course/group rights enforces the start date for the specified users and below.

Variable Name	Description
ENFORCE_END_DATE	If a course/group end date option is selected, adding the course/group rights enforces the end date for the specified users and below.
WHATS_NEW_HIDDEN_PARENT	Inhibits display of items in what's new if parent item is not visible.
$NOSAVE$	Set to 1 to globally disable the "Save Answers" feature on quizzes and surveys unless explicitly overridden for a quiz or survey
$EXACTMATCH$	Set to 1 to globally require an exact match for fill-in-the-blank questions unless explicitly overridden at the quiz or question level.
$NOROUNDING$	Set to 1 to globally disable significant digit rounding comparisons for fill-in-the-blank questions unless explicitly overridden at the quiz or question level.
$NOSOUNDSLIKE$	Set to 1 to globally disable sounds-like comparisons for fill-in-the-blank questions unless explicitly overridden at the quiz or question level.
$ONCLICK$	Specify an alternate device-independent JavaScript event to use in place of ONCLICK events throughout the environment. Generally, this would be set to the ONSELECT event on a browser that supports such device-independent events.
LISTICON_CLOSED	The URL of the icon to display for closed nodes.
LISTICON_OPENED	The URL of the icon to display for open nodes.
LISTICON_LEAF	The URL of the icon to display for a bullet on each list item.
NUGICON_nuggetID	The URL of the icon to display in the title bar of the nugget specified by "nuggetID".
NUGBULLET_nuggetID	The URL of the icon to display next to each list item in the nugget specified by "nuggetID". Applies to the MYBOOKMARKS, MYCOURSES and MYGROUPS nuggets.

Variable Name	Description
PLACEHOLDER	Placeholder text to use as a default value for form fields that are initially blank. This setting is only used in some areas of the environment. If set, it can help make the site more accessible to users of older accessibility software that has problems identifying empty form fields.