

Blackboardlearn⁺

Release 9.1

*Understanding the Change from
Blackboard Learn 9.0 to 9.1*



Blackboard



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Introduction

Challenged with meeting the expectations of their 21st-century learners, educators are constantly trying to find ways to make their instruction more engaging.

Faculty spend a lot of time on non-teaching administrative activities, such as grading, data-entry, paperwork, and Course management, that distract from learning activities which help retain and keep students engaged in academics.

Colleges, schools, and departments often spend significant amounts of time and resources on manual processes to align what is happening in the classroom to department, program or overall institutional objectives.

Clients are trying to navigate a time of significant demographic shifts and technology innovation while maintaining the integrity of the academic process, accessibility, service quality and accountability to leadership.

Blackboard Learn™ Release 9.1 will help you to meet these challenges by fostering student engagement, supporting educator efficiency, and delivering open and extensible learning.

Fostering Student Engagement

The exciting new social learning and teaching tools available in Release 9.1 foster more logical, visually impactful, and active learning opportunities for students, helping them stay connected to their educational experience 24 hours a day:

- Learning Modules Table of Contents view
- Wikis for Courses, organizations, and groups
- Mashups
- Integration with Blackboard Connect

Supporting Educator Efficiency

Many of the new features and enhancements in Release 9.1 save educators and organizational leaders time and effort and make it easier to focus on student achievement and retention:

- Learning Modules Table of Contents view
- Improved grading capabilities
- Course Files area for managing content
- Standards Alignment for K-12 Clients
- Customizable Teaching Roles

Delivering Open and Extensible Learning

With free access to partner technologies, expanded content partnerships and hundreds of building block extensions to choose from in Release 9.1, Blackboard Learn's open platform is designed to meet the learning needs of an institution at enterprise scale with an open architecture that supports agility and extensibility.

- Mashups
- Building Blocks and the Blackboard Developers Network
- Web Services

Available Tools and Resources

Transitioning to a platform can often be an expensive proposition. Institutions and organizations face many costs including content conversion, end user training, and project management. Institutional and organizational leaders have to evaluate the financial costs as well as the cost to end users when making the decision to move. For Release 9.1, Blackboard is delivering tools, resources, and services to reduce the change management costs of transitioning to Release 9.1, both in terms of educator or facilitator time and institutional and organizational resources.

Blackboard Upgrade Center

The [Blackboard Upgrade Center](#) was created to help you find all the information you need to make the upgrade process as simple as possible. This site is designed for Blackboard administrators, system administrators or anyone involved in the process of upgrading Blackboard from a technical or procedural standpoint.

Preview Accounts and the Project NG Playground

Reading about a new release and experiencing it are two different things. We know that you probably want to get a feel for Release 9.1 before you go through the work of setting up a pilot or test instance. Sign up for a preview account that will give you instructor level access in a Release 9.1 Course hosted by Blackboard. You can investigate Release 9.1 and invite others at your institution to access the software and contribute to the development of your upgrade plan. This account is available for 30 days and can be renewed at the end of its term.

Blackboard wants to share some of our newest ideas for Blackboard Learn and get your feedback to help shape future releases. The Project NG Playground Program is an exciting way to get a sneak peek at functionality while it's still in the experimental stages. Try the newest features on our hosted playground server and experience them from a student, teacher, and instructional designer perspective.

For more information, go to [Step 1.2 – Preview and Play](#) on the Upgrade Center.

Upgrade Services

Experience tells us that some institutions would like additional support and assistance in upgrading, so we've developed a host of custom services offerings and assistance that work as your virtual upgrade team. Let us help you with the upgrade by taking advantage of the expertise of the Blackboard Consulting Services team.

For more information, go to [Step 2.4 – Preview and Play](#) on the Upgrade Center.

Blackboard Learn Upgrade Kits

To assist in the upgrade process, Blackboard has produced an Upgrade Kit comprised of documentation resources specific to your upgrade path. For a detailed list and explanation of each document, see the `ReadMe.txt` file included in the Blackboard Learn 9 to Blackboard Learn 9.1 Upgrade Kit available on the [Upgrade Center](#) or [Behind the Blackboard](#).

On-Demand Learning Center

The [On-Demand Learning Center](#) provides access to Quick Start Guides and Video Tutorials for many features in Release 9.1. In addition to accessing the site directly, users with the appropriate roles can access the site from the My Institution tab, the Course Panel, and the Administrator Panel.

Blackboard Learn Help

A full suite of reference materials for Blackboard Learn 9.1 is available Blackboard Help is available to everyone through Blackboard Learn and at <http://help.blackboard.com>.

Blackboard Learn Technical Details

The full technical details for Blackboard Learn Release 9.1, including the Release Notes, Supported Technologies and Browsers, the Resolved Issues from previous releases, and Known Issues in the current release, are available on the [Maintenance Center](#) on Behind the Blackboard.

About this Document

Release 9.1 includes exciting new product innovations, and Blackboard is committed to providing the tools and resources necessary to help you plan and prepare for your upgrade.

This document is designed to give the users a comprehensive look at the features and functions of Blackboard Learn, Release 9.1, and how they compare to Release 9.0. This document includes information about the following feature sets:

- [Course Delivery Features](#)
- [Content Management Features](#)
- [Outcomes Assessment Features](#)
- [Blackboard Learn Release 9.1 Service Pack 1 \(SP1\) Features](#)
- [Blackboard Learn Release 9.1 Service Pack 3 \(SP3\) Features](#)
- [Blackboard Learn Release 9.1 Service Pack 4 \(SP4\) Features](#)

Product Naming and Terminology

Blackboard Learn features and functions are grouped into sets of capabilities. The table below identifies the product and names for sets of capabilities that are used to define Blackboard Learn.

Name	Description
Blackboard Learn	Blackboard's flagship product for enabling teaching and learning online.
Course delivery capabilities	Includes features and functions for creating online Courses. Prior to Release 9.0, this was known as the Learning System.
Content management capabilities	Includes tools for storing, managing, and presenting content as well as tools for collaborating on content with other users. Prior to Release 9.0, this was known as the Content System.
Community engagement capabilities	Includes features and functions for building out a vibrant and diverse learning community as well as tools for delegated system administration. Prior to Release 9.0, this was known as the Community System.
Outcomes assessment capabilities	Includes features and functions to measure the success of institution learning initiatives. Prior to Release 9.0, this was known as the Outcomes System.
Building Blocks	Building Blocks is the catch-all name for the program and interfaces used to integrate tools and outside systems with Blackboard Learn.
Basic Edition	An entry-level version of Blackboard Learn that includes a subset of the features available with the Course delivery capabilities.
Enterprise Edition	The standard version of Blackboard Learn. This term is used to differentiate it from the Basic Edition. Other capabilities are licensed separately.

Course Delivery Features

New Features and Feature Enhancements

Blackboard Learn 9.1 includes several innovations that are grouped in the following categories:

- [Blackboard Connect Integration](#)
- [Building Content](#)
- [Course Files](#)
- [Course/Organization Role Customization](#)
- [Grade Center](#)
- [Learning Modules](#)
- [Lesson Plans for HigherEd and ProEd Clients](#)
- [Lesson Plans for K-12 Clients](#)
- [Mashups](#)
- [Standards Alignment for K-12 Clients](#)
- [Tests, Surveys, and Question Pools](#)
- [Textbook](#)
- [Web Services and Building Blocks](#)
- [Wikis](#)

Innovations in each of these areas represent the confluence of best-of-breed features and functions from earlier Blackboard products.

Removed Features

eCommerce

This add-on product line is no longer available with Blackboard Learn.

Offline Content

Offline Content can no longer be added to a Course. The Offline content type will no longer be available when uploading content. For more information about available Content Types, see [Building Content](#).

Blackboard Connect Integration

Clients who have licensed both Blackboard Learn and Blackboard Connect can now integrate the two products. This integration includes the following features:

- The ability to “push” user data from Blackboard Learn into a new Blackboard Connect installation.
- The ability for Blackboard Learn system administrators to send System Announcements by SMS text message or text-to-voice phone calls through Blackboard Connect.
- The ability for Blackboard Learn users to receive Notifications (the same kind of Notifications supported in 9.0 through email or the Learn web interface) by via SMS text message or text-to-voice phone calls through Blackboard Connect. Users still have the ability to select which types of Notifications they will receive and through what media (web, email, SMS, voice call).

For more information about Blackboard Connect, see the Blackboard Connect documentation available on [Behind the Blackboard](#) or contact your Blackboard Client Manager.

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. Clients must license both Blackboard Learn Enterprise Edition and Blackboard Connect.

Where does this feature appear?

If the integration is enabled, the Announcements page accessed through the Administrator Panel is updated to reflect the additional SMS and text-to-voice options. The Notifications Settings page will display two additional columns (SMS and Voice) in addition to the existing columns (Web and Email) for users to select the mode for Notifications.

Did this feature change any existing workflows?

The SMS and text-to-voice options are simply additional options available to System Administrators when creating System Announcements and Notifications.

Is the integration automatic?

No. The integration must be activated for the client by the Blackboard Connect Client Care team in the Blackboard Connect central service. Once enabled, the System Administrator has to enable the Blackboard Connect proxy tool in Blackboard Learn.

At that point, the data between the two systems needs to be synchronized. If it is a new Blackboard Connect implementation, the Blackboard Learn System Administrator can “push” the user data from Blackboard Learn into Blackboard Connect. However, if there is an existing Blackboard Connect installation on campus or if the campus wants to use a system other than Blackboard Learn as the data source for Blackboard Connect, additional services work may be required.

At what phone number will the users receive the SMS messages or voice calls?

How the phone number is configured will vary from institution to institution. The phone number needs to be a part of the Blackboard user record (most likely using the existing fields in Personal Information), but there is no requirement that the phone number fields be managed through Blackboard Learn. As an alternate example, the phone numbers could be populated into Blackboard Learn through an SIS (Student information system).

What if Students do not want to receive SMS messages or voice calls from Blackboard Learn?

Users must explicitly indicate that they want to receive Notifications (and Announcements) in these modes.

Building Content

Multiple content types provide Instructors with extended flexibility when building and structuring content within a Course. Instructors can add different types of content to a Course, including videos and images as well as packaged content, such as IMS and SCORM. Instructors also have numerous options for organizing this content, such as Content Folders, Lesson Plans, and Learning Modules.

Feature Enhancement

+ Upload Content Using New Content Types

Several content types for uploading content to an area within a Course have been changed or added:

- **Audio:** This new content type provides a separate method of adding an audio file. This content type includes fields for accessibility.
- **Image:** This content type was available in Release 9.0, but the user interface for adding this type of file has changed.
- **Video:** This new content type provides a separate method of adding a video file. This content type includes fields for accessibility.
- **URL:** This content type was available in Release 9.0, but the previous name “External Link” has been changed to “URL.”
- **Learning Module:** This content type was available in Release 9.0, but it has changed to include a hierarchical Table of Contents. For more information, see [Learning Modules](#).
- **Lesson Plan:** This new content type provides a new type of content container (similar to a folder) that has a tabbed format to add different content items. This feature is designed to allow Students to view content with a lesson profile and instructional objectives. For more information, see the appropriate section for your license: [Lesson Plans for HigherEd and ProEd Clients](#) or [Lesson Plans for K-12 Clients](#).
- **Blank Page:** This new content type provides a method to add an HTML page to a Content Area or the Course Menu.
- **Mashups:** This new content type enables Enterprise Edition clients to pull data from the following third-party application content into Blackboard Learn: YouTube videos, SlideShare presentations, and Flickr photos. For more information, see [Mashups](#).

Feature Loss

- Offline Content

Offline Content can no longer be added to a Course. The Offline content type will no longer be available when uploading content.

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. Uploading Mashups content requires an Enterprise Edition license. Basic Edition clients cannot upload Mashup content.

Where does this feature appear?

These content types are available in the Build area of the Action Bar when uploading content to an area within a Course.

Course Files

Using Course Files for Basic Content Management

The new Course Files feature provides basic content management features and functions within a Course as a core part of the course delivery capabilities of Blackboard Learn. These features and functions were previously available only to clients who licensed the content management capabilities.

Instructors will have the ability to more effectively use (and reuse) content stored in Course Files (or in the Content Collection if the content management capabilities have been licensed) when building a Course without any significant impact on their customary workflows and practices. New capabilities for uploading, managing, and using content in a Course are available to support Instructors when using the Course Files feature or the Content Collection.

In previous versions of Blackboard Learn, when an Instructor attached a file to a Course content item, that file would be placed in a “hidden” file system on the Blackboard server where it was invisible to the Instructor. Blackboard Learn now provides a Course Files area that allows Instructors or any user with an appropriate Course-authoring role to view and manage all files related to their Course content.

Attaching Files to Course Content and for Re-Using Files

The current process for attaching files to Course content remains basically the same, but with a few important additions that Instructors should note:

- When attaching a file, an Instructor can select a file from the local computer or the Course Files area of their Course. If the content management capabilities have been licensed, an Instructor can select a file from any available Content Collection.
- Instead of attached files being stored in a “hidden” file system, files attached from the local computer are uploaded automatically into the Course Files area. If the content management capabilities have been licensed, attached files can be placed in any available Content Collection. This allows Instructors to see, manage, and re-use the files in other parts of their Course. An Instructor can now upload a file once and use it in multiple areas of the Course.
- When attaching files to content items, Instructors can select multiple files from multiple folders in the Course Files area. If the content management capabilities have been licensed, Instructors also can select multiple files from any available Content Collection.
- Because a file may be re-used in a Course (or across Courses if the content management capabilities have been licensed), the new 360° View lets the Instructor see all of the places that any given file has been used as well as the full path in the Course to that content item.
- The organization of files in Course Files has no impact on how they appear when linked to from a Course.
- A link to a file can be included in one or more areas in a Course.
- When a link to a file in Course Files is deleted from a Course, the file is not deleted.
- When a file in Course Files is renamed or moved, any links to the file will remain intact.
- Files uploaded by Students are not automatically added to Course Files.

Uploading Files

In addition to adding files by attaching them directly to Course content items, Instructors can upload files directly to Course Files or to any available Content Collection if the content management capabilities have been licensed.

Instructors can upload a single file from the local computer using Browse, or they can upload multiple files or entire folders from the local computer using Browse or by dragging the items from the desktop to the interface. Instructors can also upload a package of HTML files to be unpacked automatically into Course Files.

Managing HTML

In Blackboard Learn, an HTML Object (formerly known as a “Snippet” in the Content Collection) is an HTML file created in Blackboard Learn that has some additional, Blackboard-specific properties associated with it.

Instructors can create HTML Objects in two ways:

- The **Create HTML Object** action in Course Files (or the **Build > HTML Object** action if the content management capabilities have been licensed) will bring up a WYSIWYG editor that allows the Instructor to create an HTML file.
- The **Save as HTML Object** option in the WYSIWYG editor of content items or folders will allow the content that is created in the WYSIWYG editor to be saved to Course Files as an HTML file for re-use.

If the content management capabilities have been licensed, the **Save as Reusable Object** option that appears in every WYSIWYG editor allows the same capability, but for many more types of content. The Content Collection also has a **Discover Content** capability that allows for the discovery of HTML Objects and other types of Reusable Objects.

HTML files, whether uploaded or created as HTML Objects, are presented more effectively in Release 9.1. If an HTML file is linked to from within a Course or from the Table of Contents for a Learning Module, when a user clicks on the HTML file it will be displayed inline inside of the Blackboard Learn interface, instead of opened separately.

Viewing Images as Thumbnails

In Course Files (and the Content Collection if the content management capabilities have been licensed), users can switch between **View List**, which lists the files in a directory, and the new **View Thumbnails**, which shows a resizable thumbnail of image files. All non-image files will display the appropriate icon for the file type.

Course Files with the Content Collection

For clients who have licensed the content management capabilities, Course Files fully integrates individual Course content with the Content Collection. Course Files encourages the sharing and reuse of content by allowing users to access and manage all of their files in the Content Collection from within a Course and across Courses. The additional features available include:

- Cross-Course sharing of content
- Institutional content repositories
- Personal content repositories

- Reusable Objects
- Metadata for content
- Version control
- File locking
- Tracking user interaction with an item
- Sharing of comments
- Advanced search function
- Permissions and passes control
- e-reserves
- e-portfolios
- Portfolios
- Integration with the outcomes assessment capabilities

In addition, administrators can change the default directory for an individual Course by clicking **Properties** under **Customization** in the Course Control Panel. Administrators can also change the default directory for an individual Course or multiple Courses using a command line tool.

If a client who licenses only the course delivery capabilities later decides to license the content management capabilities, the Course Files feature will integrate seamlessly with the Content Collection.

For more information, see the Course Files and Content Management topics in [Blackboard Help](#) or contact your Blackboard Client Manager.

Frequently Asked Questions

Are there any exceptions based on licensing?

No.

Where does this feature appear?

For clients who have not licensed the content management capabilities, Instructors or other users with the appropriate Course role can access the Course Files area by clicking **Files** in the Control Panel on the left side of the screen. Clicking on a directory in the Files panel displays its contents (files and folders) in the right-hand content panel of the Course environment.

For clients who have licensed the content management capabilities, users will see the traditional Content Collection view that displays all available Course Files and content management functionality, including individual Course Content (which is equivalent to the content on the **Files** panel seen by users who have not licensed the content management capabilities), My Content, All Courses Content, All Organizations Content, and Institution Content.

For all clients, Course Files can also be accessed when attaching files to a content item. The **Browse My Computer** button, which allows the user to browse their local computer for files, is now accompanied by a **Browse Course Files** button to select files from Course Files (or any Content Collection if the content management capabilities have been licensed). The **Browse Course Files** button brings up the Course Files interface in a pop-up window for file selection.

Did this feature change any existing workflows?

Yes, there are several workflow changes.

Attached Files Location: Prior to Release 9.1, for clients who had not licensed the content management capabilities, the only way to add a file to a Course was to upload that file from the local computer and attach that file to a content item (or question or forum post, and so on). When an Instructor took that action, the attached file was placed in a “hidden” files system within Blackboard Learn. Although the workflow for uploading that file from the desktop remains the same, all files uploaded by an Instructor will be placed automatically in Course Files.

Selecting Files: For all clients, the workflow for attaching files now allows users to:

- Select items to attach from the local computer or from the Course Files area (or Content Collections if the content management capabilities have been licensed).
- Select multiple files from multiple directories (or multiple Content Collections if the content management capabilities have been licensed) without having to attach each file separately.

Unpackaging Files: Prior to Release 9.1, if an Instructor had created a website to add to a Course, the Instructor would have to 1) make sure that the website used relative links, 2) zip up the files, 3) attach the zip file to a content item, 4) unpackage the files to the “hidden” file system, and then 5) select a launch page. If the Instructor wanted to edit that website, the previous attachment had to be deleted and the entire process repeated.

With Release 9.1, this approach has been streamlined. Instructors 1) upload a zip package directly to Course Files, 2) unzip it, and then 3) create a link from the content item to the index page in Course Files. If the Instructor wants to make a change to the site, the affected files can be edited and uploaded to Course Files individually.

What's the difference between Course Files and the Content Collection?

Course Files is available to all Blackboard Learn clients and provides basic file management capabilities within a Course. In short, Course Files does not change a lot about what you can do with uploaded files in a Blackboard Learn Course, but it changes how you do those things by providing more control and management capabilities to the Instructor.

The content management capabilities provide a much wider array of content management capabilities within the Course and across the institution.

What happens to content created in a previous release of Blackboard Learn when we upgrade?

By default, when an earlier version of Blackboard Learn is upgraded to Release 9.1, nothing changes. For existing Courses, the files used in the Course will still be stored in the existing, hidden server-side file system that is not visible or exposed to Instructors. Any new files added to an existing Course will be added to Course Files. For new Courses created after the upgrade, all files will be added to Course Files.

Release 9.1 provides tools to move files from the old, hidden file system to Course Files. If Instructors will be recreating their Course content, the content does not need to be moved. If Instructors will be reusing their Course content from the earlier version, the content should be moved.

Administrators and Instructors can move content for an individual Course using the user interface. Only Administrators can move the Content for multiple Courses using the command line. For more information, see the Course Files topics in [Blackboard Help](#).

What happens with content added to Course Files if we upgrade our Blackboard Learn system to include the Content Collection?

If a client licenses only the course delivery capabilities and later adds the content management capabilities, no additional action is necessary to continue using Course Files. Because Course Files is built on the same underlying file storage system as the Content Collection, the Course Files directory and a Course's Content Collection are one and the same. The Instructor will now be able to take advantage of the full Content Collection view and the expanded Files panel (described above).

Can you set a default “landing” directory for the file picker when launched from Course Files?

No. The file picker defaults to the current Course Files directory.

If the content management capabilities have been licensed, administrators can change the default directory for an individual Course by clicking **Properties** under **Customization** in the Course Control Panel. Administrators can also change the default directory for an individual Course or multiple Courses using a command line tool.

Course/Organization Role Customization

Administrators can now create custom Course/Organization Roles based on the standard Course/Organization Roles that ship with Blackboard Learn. Standard and custom roles can be made available to specific Courses and with special privileges. Custom roles inherit their parent role privileges by default, but these privileges can be changed.

Administrators can permit or restrict the more than 100 privileges available for standard or custom roles to best fit the needs of their institutions. As a result, users will have more granular permissions that align more closely with what they are expected to do in Blackboard Learn.

This flexibility focuses on separating Course design privileges from teaching privileges. This is particularly important to institutions that have strict expectations about the responsibilities of different types of faculty and staff. For example, some institutions designate a set of users as designers who are responsible for creating Course templates. The Courses are then passed to another set of users whose sole purpose is to teach the Course. This capability enables such institutions to enforce this separation of responsibilities. These privileges may, for example, allow a school to create a Manager role that is available only in organizations and has fewer privileges than an Instructor in a Course as well as an Assistant role that has no privileges to add or delete content in Course.

The Snapshot tool and the Batch and GUI enrollment tools fully support custom roles.

Custom Course/Organization Roles with Community Engagement

If the community engagement capabilities have been licensed, standard and custom roles can be made available separately to specific organizations. This allows an institution to treat Courses and the relationship among their enrolled users differently than those in organizations.

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. Enterprise Edition clients have no restrictions for this feature. Basic Edition clients can review available privileges, but they cannot create custom roles or grant or revoke privileges.

Where does this feature appear?

Administrators can configure these roles from the Administrator Panel under **Users** by clicking **Course/Organization Roles**. Roles that can be copied to create new roles will have a **Copy** option in the role's contextual menu.

Privileges can be added from the Administrator Panel under **Users** by clicking **Course/Organization Roles** and then clicking **Privileges** in the contextual menu for the role.

Can all standard roles be used to create new roles?

The following are the default roles that can be copied to make new roles:

- Course Builder/Organization Builder
- Grader/Grader
- Instructor/Leader
- Teaching Assistant/Assistant

Can the privileges for all standard roles be changed?

No. The privileges for the Student and Guest roles cannot be changed.

How will the Quick Enroll capability be impacted?

The Quick Enroll capability will not be impacted by any new roles created. It will continue to function as before.

Are all privileges available to be added to Course and organization roles?

In this release, only a subset of privileges will be made available to be granted or revoked. The following are the product areas that are impacted:

- Course Content
- Course Files
- Adaptive Release
- Standards Alignments
- Discussion Board
- Groups
- Course Settings Management
- Course Tools

Privileges associated with the Grade Center have not been made flexible. Any access that the source role has to the Grade Center will be inherited by the derived role and cannot be changed.

How are System Roles impacted by the additional privileges?

System Roles can also be granted the new privileges that have been made available. This means that a given user with a System Role does not have to quick enroll into a Course to get the privileges of a particular Course role as long as they have been granted the corresponding privileges.

Can the same Course or organization role have different capabilities based on the Course or organization it is enrolled in?

No. Each Course or organization role has the same privileges regardless of which Course or organization they are enrolled in. An administrator would have to create as many unique custom roles (with their associated privileges) to cover all of the unique Course-level capabilities desired.

Grade Center

The function of the Grade Center feature is the same as the previous release of the product, but a number of Grade Center enhancements have been included in Release 9.1.

Feature Enhancement

+ Grade Blogs and Journals

Journals and Blogs can now be graded for individuals and for Groups. After a Journal or Blog is set to be graded, a column is automatically created in the Grade Center.

Instructors can enter grades for Blogs and Journals for individuals and for Groups within the Blog and Journal areas without having to navigate to the Grade Center, or they can enter them directly in the Grade Center. This enables Instructors to enter grades within the Blog or Journal so that the grading process is completed in context. All grade entries made within the Blog and Journal areas are automatically added to the Grade Center.

In addition to entering a grade, Instructors can enter grading notes and submit feedback to the Student. The grade and Instructor feedback is visible to Students, but the grading notes are not visible. For Group Blogs, Instructors can assign a Group-wide grade that applies to all Group members or assign individual grades for each Student. Instructors also have the flexibility to override the Group grade for particular Students.

Students can view their grades for Blogs and Journals within the Blog and Journal areas or in My Grades. Students will see their grade as well as any feedback provided by the Instructor.

This feature appears along the right hand margin of the Blog or Journal in the About this Journal or About this Blog section under the Student's name. Instructors can also grade Blogs or Journals from the Grade Center. Instructors will be able to set a Blog or Journal as gradable on the Create or Edit Blogs or Journals pages, which are accessed from the Control Panel by clicking **Course Tools** and then **Blogs** or **Journals**.

+ Rubrics for Grading and Completing Assignments

Instructors can create a Rubric to provide guidelines for grading an item. Instructors can associate the Rubric to a grading column and view the Rubric while assigning a grade. The Rubric needs to include how many entries will be required, the minimum length of entries, and the grading criteria.

This feature is accessed through the Course Tools menu.

+ Anonymous Grading

Instructors can grade assignment and test attempts while information identifying the Student remains concealed. Only after the grade for the attempt has been submitted will the identity of the Student be exposed.

The objectives of grading anonymously include creating a grading workflow that is less prone to bias or favoritism on the part of the Instructor. It also serves as a protection for Instructors who may be subject to a complaint of unfair grading.

The Instructor will have the option of selecting to grade anonymously before beginning the grading process for the item. The order of the attempts is scrambled during the anonymous grading process to address scenarios where an Instructor may have a class somewhat memorized by alphabetic order.

This feature is accessed through the column contextual menu in the Grade Center. In addition, it can be activated when grading by test attempt as well as when grading by question.

+ Grade by Question Attempt

Question-by-question grading accommodates Instructors whose preferred workflow for assignments and assessments is to enter grades by question for all Students as opposed to by all questions by Student. For example, an Instructor may want to gain an overall feel for how the class has answered an essay question by moving through all of the Students' attempts at that question before moving to the next question. Question attempt grading also provides great efficiency for the grading process by enabling Instructors to immediately start grading without having to open each assessment or assignment.

This feature is accessed through the column contextual menu in Grade Center.

+ Smart Views

Instructors can use Smart Views to view specific information and data as desired in the Grade Center. The system views include viewing only Assignments, Assessments, Blogs, Discussion Boards, or Journals. These views can be customized so that Instructors may select criteria of categories, status types, or users.

Instructors can also create custom Smart Views with different variations on these configurations. Instructors can designate any system or custom Smart View as a favorite, which will result in it displaying in the Control Panel. By doing this, Instructors can directly access their preferred views from the Control Panel without having to enter the Grade Center and then select a Smart View. By default, Smart View favorites for Assignments and Tests are available on the Control Panel. In addition, the Full Grade Center is now accessible from the Control Panel.

Instructors can instantly manipulate the Grade Center grid display by selecting category and status filters that have been placed on the main Grade Center page. This feature enables Instructors to quickly view specific categories and status types, such as assignments that need to be graded, without having to configure a Smart View.

The Smart View feature is accessed in the Manage menu of the Grade Center. After Smart Views have been created and designated as favorites, they are accessible either through the Control Panel or in the Smart View list under the Manage menu. The Category and Status filters are located on the main page of the Grade Center.

Frequently Asked Questions

Are there any exceptions based on licensing?

No.

Where do these features appear?

- **Grade Blogs and Journals:** This feature appears along the right hand margin of the Blog or Journal in the About this Journal or About this Blog section under the Student's name. Instructors can also grade Blogs or Journals from the Grade Center. Instructors will be able to set a Blog or Journal as gradable on the Create or Edit Blogs or Journals pages, which are accessed from the Control Panel by clicking **Course Tools** and then **Blogs** or **Journals**.
- **Rubrics for Grading:** This feature is accessed through the Course Tools menu.
- **Anonymous Grading:** This feature is accessed through the column contextual menu in the Grade Center. It also can be activated when grading attempts.

- **Grading by Question Attempt:** This feature is accessed through the column contextual menu in Grade Center.
- **Selectively View and Filter Grade Center:** The Smart View feature is accessed in the Manage menu of the Grade Center. After Smart Views have been created and designated as favorites, they are accessible either through the Control Panel or in the Smart View list under the Manage menu. The Category and Status filters are located on the main page of the Grade Center.

Can Instructors grade individual Blog and Journal entries?

No. Blogs and Journals are only gradable in Release 9.1 as a single grade per Student as opposed to an individual grade for each entry.

Learning Modules

Learning Modules from Blackboard Learn Release 9.0 has been enhanced in Release 9.1 to incorporate the navigable table of contents available in Learning Modules in CE and Vista.

These enhancements help Instructors present material in a more meaningful and engaging way to keep Students organized and on track with Course materials. Release 9.1 provides enhanced capabilities for all user roles:

- **Faculty and Instructional Designers** will use Learning Modules to organize and present content to Students in their Blackboard Learn Courses. These enhancements will provide a way to select how material is presented and how Students proceed through the material in the most appropriate way for the content being used and how the Instructor plans to teach.
- **Students** will use Learning Modules to access Course content and navigate Learning Module content using the Table of Contents.

Feature Enhancement

+ Table of Contents View

The Instructor can choose whether to present the content contained in the Learning Module in a hierarchical, outline-style format. Using this view, a Student will be able to navigate through the Learning Module in the manner prescribed by the Instructor. If the Table of Contents is selected, the Instructor can also select the numbering or lettering format to be used in the Table of Contents.

Instructors may create folders and sub-folders within Learning Modules and populate them with content. As the Learning Module is populated, the Table of Contents will be created accordingly and numbered or lettered automatically in the format selected by the Instructor. New content items in Release 9.1, such as Mashups and Lesson Plans, can be incorporated into Learning Modules.

The Table of Contents can be manipulated by Instructors and Students to accommodate individual viewing preferences. It can be minimized and oriented on the left side or along the bottom of the screen.

+ Content Folder Structure

Instructors may create folders and sub-folders within Learning Modules and populate them with content. As the Learning Module is populated, the Table of Contents will be created accordingly and numbered or lettered automatically in the format selected by the Instructor. New content items in Release 9.1, such as Mashups and Lesson Plans, can be incorporated into Learning Modules.

+ Sequential Navigation of Content

When an Instructor chooses sequential navigation, items in the Learning Module will become viewable as users progress through the content. Without sequential navigation, all content items in the Learning Module are viewable and users may navigate the content at will.

Frequently Asked Questions

Are there any exceptions based on licensing?

No.

Where does this feature appear?

Instructors access Learning Modules from the Build action bar button as a content creation menu item.

Students access Learning Modules from Content Areas in the Course Menu.

Can Learning Modules contain Folders?

Yes. The only kind of content a Learning Module cannot contain is another Learning Module.

Can Learning Modules support direct file uploads?

Yes. You can upload individual files directly to Learning Modules and folders from the **Create File** and **Create Item** pages. To upload multiple files, you must use the **Create Item** page.

Lesson Plans for HigherEd and ProEd Clients

The Lesson Plan feature enables Instructors and Course designers to create a structured unit plan with distinct and customizable sections that provide a means of documenting information such as description, learning level, delivery instructions, and so on. Lesson Plans also include content designed for an individual unit using any type of content or tool enabled in the Course.

This feature will meet the challenge of developing unit plans and incorporating content in blended environments where classroom Instructors use Blackboard Learn as an instructional tool in the classroom as well as for online teaching. Another challenge that Instructors have is reducing the time spent planning and creating materials to focus on instructional activities. As a planning tool, the Lesson Plan feature will benefit Instructors who can centrally plan and consolidate materials and resources. Instructors will also have a streamlined means of selectively exposing information and resources to Students as part of the planning process.

Creating Customized Lesson Plans

Each section of a Lesson Plan can be individually renamed and reorganized however the Instructor wishes. There is a high degree of variation in institutions as to what information and details are required in Lesson Plans. The Lesson Plan feature has maximum flexibility to accommodate these variations.

Controlling Visibility

The Lesson Plan feature enables Instructors to select which Lesson Plan sections are visible to Students. This enables Instructors to include non-Student-facing instructional information (such as instructions for delivery in the classroom, comments, suggestions for use, and so on) in the Lesson Plan while also including Student-facing information (such as learning objectives, materials needed, Student team assignments, and so on). In effect, Lesson Plans provide a planning tool for Instructors and Course designers as well as a tool for organizing Student-facing instructional materials.

Frequently Asked Questions

Are there any exceptions based on licensing?

No.

Where does this feature appear?

The user will be able to create a unit plan from any content area or content list page within a Course or an organization.

Can the administrator change the names of the lesson sections for all users?

It is expected that institutions may have specific terminology used in lesson plans and instructional materials. As with any text within Blackboard Learn, system administrators can use the language pack editor to change the pre-defined unit plan sections and provide Instructors familiar section titles. Changes made within the language pack will apply to all instances of the Lesson Plan feature. For more information about the language pack editor, see *Working with Language Packs* available on [Behind the Blackboard](#).

Can the administrator define templates for lessons?

Release 9.1 does not provide an explicit template tool as part of the Lesson Plan. However, Instructors or Course designers may create shells by constructing Lesson Plans with the appropriate sections, section titles, and organization, and then use the Course or item copy functionality to reuse the defined format and structure for additional Lesson Plans within this or other Courses. These pre-defined lesson plans could be included by default in a Course shell.

Can I copy a lesson?

Lesson plans, their included content items, and all standards alignments will be maintained during a full Course copy, Course archive, or Course export operation. In addition, Instructors can share individual or groups of Lesson Plans with colleagues. Although there is no explicit export feature for individual Lesson Plans, the Course export operation can be used to accomplish this task. To do so, create Content Areas containing one or more Lesson Plans, use the Course export operation to export those Content Areas, and then upload the resulting .ZIP packages into another Course or email the packages to other teachers with whom you want to share resources.

Content that is owned by the Lesson Plan as well as all standards alignments will be included in the export. Links to content not explicitly owned by the Lesson Plan (such as Assignments, Tests, Surveys, and content linked using Course links) will be included, but the original content items will not. If the referenced content items do not exist in the destination Course, the links will be broken and the content will need to be recreated.

Lesson Plans for K-12 Clients

The Lesson Plan feature enables teachers to create a structured lesson plan with distinct and customizable sections that provide a means of documenting information such as description, grade level, delivery instructions, and so on. Teachers may also incorporate any kind of content type or tool enabled in the Course within an individual lesson.

Developing Lesson Plans and integrating them into the instructional process has traditionally been a time consuming, paper-based exercise. The Lesson Plan feature will meet the challenge of developing Lesson Plans and incorporating content in blended environments where classroom teachers use Blackboard Learn as an instructional tool in the classroom as well as for online teaching. Another challenge teachers have is reducing the time spent planning and creating materials to focus on instructional activities. As a planning tool, the Lesson Plan feature will benefit teachers who can centrally plan and consolidate materials and resources. Teachers will also have a streamlined means of selectively exposing information and resources to Students as part of the planning process.

Creating Customized Lesson Plans

Each section of a Lesson Plan can be individually renamed and reorganized by the teacher. There is a high degree of discrepancy in schools, school districts, and states as to what information and details are required in lesson plans. The Lesson Plan feature has maximum flexibility to accommodate these variations.

Controlling Visibility

The Lesson Plan feature enables teachers to select which Lesson Plan sections are visible to Students. This provides a means for teachers to include non-Student-facing instructional information (such as instructions for delivery in the classroom, comments, suggestions for use, and so on) in the Lesson Plan while also including Student-facing information (such as learning objectives, materials needed, Student team assignments, and so on). In effect, the Lesson Plan feature provides a planning tool for teachers, curriculum specialists, and Course designers as well as a tool for organizing Student-facing lessons and instructional materials.

Aligning Content to Learning Standards

Lesson Plan content items may be aligned to learning standards. Content built inside the Lesson Plan can also be aligned to standards independently from the Lesson Plan. There is no correlation or transfer of standards alignment of the Lesson Plan and its content. Each must be individually aligned. For more information about Standards Alignment, see [Standards Alignment for K-12 Clients](#).

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. Aligning content to learning standards requires a Blackboard Learn for K-12 license.

Where does this feature appear?

The user will be able to create a Lesson Plan from any content area or content list page within a Course or an organization.

Can the administrator change the names of the lesson sections for all users?

It is expected that school districts and institutions may have specific terminology used in Lesson Plans and instructional materials. As with any text within Blackboard Learn, system administrators can use the language pack editor to change the pre-defined Lesson Plan sections and provide teachers familiar section titles. Changes made within the language pack will apply to all instances of the Lesson Plan feature. For more information about the language pack editor, see *Working with Language Packs* available on [Behind the Blackboard](#).

Can the administrator define templates for lessons?

Release 9.1 does not provide an explicit template tool as part of the Lesson Plan. However, teachers or curriculum specialists may create shells by constructing Lesson Plans with the appropriate sections, section titles, and organization, and then use the Course or item copy functionality to reuse the defined format and structure for additional Lesson Plans within this or other Courses. These pre-defined lesson plans could be included by default in a Course shell.

Can I copy a lesson?

Lesson plans, their included content items, and all standards alignments will be maintained during a full Course copy, Course archive, or Course export operation. In addition, K-12 teachers and curriculum specialists can share individual or groups of Lesson Plans with colleagues. Although there is no explicit export feature for individual Lesson Plans, the Course export operation can be used to accomplish this task. To do so, create Content Areas containing one or more Lesson Plans, use the Course export operation to export those Content Areas, and then upload the resulting .ZIP packages into another Course or email the packages to other teachers with whom you want to share resources.

Content that is owned by the Lesson Plan as well as all standards alignments will be included in the export. Links to content not explicitly owned by the Lesson Plan (such as Assignments, Tests, Surveys, and content linked using Course links) will be included, but the original content items will not. If the referenced content items do not exist in the destination Course, the links will be broken and the content will need to be recreated.

Mashups

Increasingly, sites and services on the Web offer the means for end-users to consume and re-use the site's content outside of the site itself. In Web 2.0 applications, the term "Mashup" refers to displaying data from one third-party application in another application. For example, a real estate listing service that maps the homes-for-sale listing data onto Google Maps.

In educational settings, this ability to consume and re-use external content offers the opportunity for Instructors to incorporate content generated and hosted elsewhere into instructional or learning activities.

The new Mashup integrations with popular services allow Instructors and Students to discover, select, and embed content from those services without ever leaving the Blackboard Learn interface. This provides a seamless, easy-to-use experience that does not require the user to jump between Blackboard Learn and other sites or to have any particular knowledge about or comfort with HTML codes.

The Mashup tools, which are delivered as Building Blocks, are available by default. As long as a Mashup tool remains available, Instructors can add that Mashup type anywhere in a Course and Students can add Mashups anywhere the text editor is available to them, such as when creating Discussion Board or Blog posts.

Uploading Mashups Content

This release supports the uploading of Mashups content from the following third-party services:

- **YouTube:** YouTube enables users to share videos.
- **Flickr:** Flickr enables users to share photos.
- **SlideShare:** SlideShare enables users to share presentations.

Building Block Developers can also take advantage of new APIs to create their own Mashup integrations.

Filtering YouTube Content

Administrators can configure the YouTube Mashup to filter out videos that have been flagged as inappropriate by YouTube users. This setting can be especially useful for K-12 clients.

Note Because YouTube users flag content based on their perceptions, inappropriate content may still appear in search results even when this option is enabled.

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. Uploading Mashups content requires an Enterprise Edition license. Basic Edition clients cannot upload Mashup content.

Where does this feature appear?

Users can add Mashup content using the action bar menu in content areas or through the text editor (VTBE).

The action bar item is available only to Course roles with the ability to add content to a content area. Each individual Mashup will have its own content handler under the main Build Content action bar button. Clicking this button presents a drop-down to choose the specific type of Mashup.

The VTBE action is available to all users anywhere that a VTBE is displayed, as long as the third row of buttons has been enabled.

If created from the action bar, Mashup content will appear as its own content item. If created through the VTBE, Mashup content will appear within a content item.

System Administrators manage Building Blocks from the Administrator Panel under **Building Blocks** by clicking **Building Blocks** and then clicking **Installed Tools**.

Did this feature change any existing workflows?

This feature introduces new search, select, and embed workflows for third-party content. It does not change any existing workflows.

Can anything be a Mashup?

No. Mashups are not automatic. A developer has to create a Mashup building block to pull the third-party service's content into Blackboard Learn. Also, not all services have APIs that allow that sort of integration to occur.

Why didn't Blackboard build a Mashup with _____?

For this release, Blackboard targeted stable, free, web-based services that focus on sharing user generated content. Mashups may be possible with other types of services, but the goal was to provide an easy and effective way to incorporate user-generated content from these services into Blackboard Learn.

In addition, not all services allow for use of their public APIs in commercial products.

Can we build our own Mashups?

Yes. The APIs necessary to take advantage of the Mashups deployment points in the action bar and VTBE and the Mashups framework are available as part of the Release 9.1 Building Blocks APIs. For more information, see <http://www.blackboard.com/Support/Extensions.aspx>.

Will Blackboard build more Mashups with other services?

Blackboard may build additional Mashups, but the hope is that the client base will be proactive in creating new Mashups using the Building Blocks APIs.

Standards Alignment for K-12 Clients

K-12 instruction is based on meeting standards of learning that are determined at the state level. Districts engage in a complex process of associating curriculum resources, lesson plans, and assessment items with specific state standards to ensure that instructional programs (Course, Unit, and Lesson Plans) are in alignment with those standards. Although state learning standards are unique from state to state, there is considerable overlap. Also, standards are hierarchical in nature. That is, each state learning standard has two or more levels of description. In practice, most alignment happens at the deepest level, but this relationship rolls up to inform general alignment at all levels.

The problems encountered by teachers and administrators include time consuming and error prone processes, constrained collaboration because of voluminous paper-based resources and materials, and limited use of web-based and electronic tools.

The problems are exacerbated because state standards change periodically and realignment is often necessary. Districts create their own scope and sequence for teaching to the standards and often identify “power standards” to emphasize priority based on instructional programs and alignment. They must establish a relative priority and consistency must be maintained through standards changes.

Schools and institutions are challenged by not having data available to assist with guiding instructional resource development. Curriculum and instructional resources are often dispersed and inconsistently maintained thereby making it difficult to accurately assess what materials are available and how those materials support the learning of specific standards.

Release 9.1 includes a number of new features that enable learning standards to be incorporated into Blackboard Learn Courses and ultimately to align Course content with specific standards. This is part of an overall effort to support standards-based learning within the Blackboard Learn environment. The following sections describe the major components of this effort.

For more information than is included in this document, see *Standards and Alignments for K-12* available on [Behind the Blackboard](#).

Importing Standards into Blackboard Courses

All published Learning Standards from all 50 states and the District of Columbia will be available for use in Release 9.1. The System Administrator can download the desired Standards from [Behind the Blackboard](#) and import them into Blackboard Learn.

Curriculum specialists with system administration privileges can import state learning standard documents into Blackboard Learn and make the standards available at the Course level for the purposes of content alignment. The standards are presented in the system in a structured manner that uses each state’s language, numbering schema, and organizational framework to maintain familiarity to users.

Curriculum specialists can associate specific Courses to a set of learning standards so that during the content alignment process, users may have starting points of standards commonly associated with content used in those specific Courses. This does not limit users in any way to what standards can be aligned within a Course.

Aligning Content to Standards

Curriculum specialists and teachers can browse and search for standards that have been imported into Blackboard Learn. Content items within their Courses or organizations can be specifically aligned to one or multiple standards. Users may also align Grade Center columns individually to standards.

Updating Standards

When users download a new version of any standards document from [Behind the Blackboard](#), it includes a map between the previous version and the current version. This significantly reduces the time spent comparing standards and understanding what has changed.

In addition, a user can create a map between any two standards documents that exist in Blackboard Learn. This enables users to map state standards to national standards and standards from one state to those in any other state that has been imported. Additionally, users can create cross-discipline maps for areas of study that may fall in science and math, for example.

Running Standards Coverage Reports

The data contained in the Standards Coverage Reports help teachers, curriculum specialists, and district administrators to focus curriculum development efforts. This data shows Course content alignments and helps identify gaps in coverage of standards.

Administrators can run a number of reports from the Standards Documents pages on the Administrator Panel that show content alignments for standards across all Courses, all available Courses, or all unavailable Courses. These reports include:

- **Full Standards Coverage Overview:** This report shows coverage across all imported standards for a specific state and document type showing both Covered standards and Gaps in coverage.
- **Discipline Coverage Overview:** This report shows coverage overview of standards for a specific discipline broken out across all its learning levels, such as Math 2004 for Grade 5.
- **Learning Level Coverage Detail:** This report shows detailed coverage information for the standards within a specific Learning Level, such as for Grade 5.
- **Learning Standard Coverage Detail:** This report shows detailed coverage information for a single standard within Blackboard Learn.

In addition, teachers can run a **Course Coverage Detail** report from the Evaluation section of the Course Control Panel that shows detailed coverage information for a single Course.

Creating Custom Standards

Many school districts and institutions incorporate their own learning standards into their respective states' published standards to enhance or extend the state standards and define learning goals and objectives that exceed state expectations of Student learning. With the K-12 Standards feature, school district administrators can create custom standard line items that are integrated into their respective state learning standards.

Note Release 9.1 does not include the functionality to enable a district to create custom sets of standards.

Frequently Asked Questions

Are there any exceptions based on license level?

The Standards Alignment feature requires a Blackboard Learn for K-12 license.

Where does this feature appear?

System Administrators download the desired Standards from [Behind the Blackboard](#) and import them into Blackboard Learn.

System Administrators manage standards availability, active/inactive status, Course association, and document mapping from the Administrator Panel under **Tools and Utilities** by clicking **Standards Documents**.

Instructors and Course designers align content using content contextual menus and column contextual menus in the Grade Center.

Am I allowed to have standards from other states installed on my Blackboard Learn system?

Yes. All published Learning Standards from all 50 states and the District of Columbia will be available for use in Release 9.1. System Administrators can download the desired Standards from [Behind the Blackboard](#) and import them into Blackboard Learn. There are no limitations on the standards that can be downloaded providing districts and institutions with the ability to integrate standards from multiple states into a single Blackboard Learn environment.

Can I report against performance metrics from my standards alignments?

In Release 9.1, the focus is on integrating the standards with the content created within the Course and allowing both teachers and district administrators to review standards coverage data for a single Course or across multiple Courses. Reports focusing on performance against the state standards are not available in Release 9.1, but the foundation for this kind reporting has been provided. Performance data is available in the Grade Center (in which columns can be explicitly aligned to state standards), the Early Warning System, the Assessment Statistics reports, and the Performance Dashboard.

Blackboard is continuing to investigate standards performance reporting and the specific needs surrounding it for possible inclusion in a future release. The Blackboard reporting framework also provides the ability for custom report development and can be leveraged to develop additional reports to address specific reporting needs you may have.

Is there any additional cost for getting state standards into my Blackboard Learn system?

No. There are no additional fees for downloading any of the standards available on [Behind the Blackboard](#). All state standards are included in the current Blackboard Learn license fee.

Can I share already aligned content with other schools or districts?

Yes. Alignments can be optionally included in any Course copy, Course export, or Course import operation provided that the specific content items have also been included. All content alignments are automatically included in any Course archive or Course restore operation. The visibility of imported or restored alignments depends on the availability of the appropriate state standards in the destination system.

Can my district develop its own set of standards?

Custom standards line items may be authored and incorporated into the existing state standards framework. There is no capability for creating and incorporating an entirely new set of standards within Blackboard Learn.

Tests, Surveys, and Question Pools

In Release 9.1, Instructors and Course Builders have expanded question management capabilities available for use when creating Tests, Surveys, and Question Pools. These changes allow for more centralized control over question content and reduce the amount of time required to make global edits.

Feature Enhancement

+ Question Finder

Instructors and Course Builders have a new interface from which to discover questions.

Instructors and Course Builders can create Tests, Surveys, and Pools by reusing questions that have been collected in the Question Finder repository. The list of questions available under “Find Questions” can be filtered by Test, Survey, or Pool, or by such attributes as question type, category, topic, or level of difficulty. As the user selects these attributes, the list of questions updates dynamically. The filtering capability is further enhanced by a search capability, which allows the user to refine the filtered list.

The discovery process is also aided by a new section in the user interface that acts as a staging area for questions. The user can peruse and select or deselect as many questions as they want. When they are finished, this collapsible staging area will contain their selected questions. The staging area allows users to keep track of how many questions they have selected.

+ Link to Questions

Instructors and Course Builders can choose to link to or copy questions from any Test, Survey, or Pool within a Course. Linking to a question ensures that any changes to the original question are reflected in all links. Copying a question creates a separate question that is not affected by changes to the original question. Questions can be copied between Courses, but they cannot be linked across Courses.

+ Question Sets

In addition to Random Blocks, Instructors can use Question Sets to randomly select a set number of questions to appear on a Test that are pulled from a specific group of questions selected by the Instructor. Instructors can select to include questions from one or more existing Tests and Pools. From this set, the Instructor specifies how many questions to display on the Test. The specific questions displayed are chosen randomly each time the Test is taken. This provides Instructors and Course Builders with a better idea of what will be displayed to Students than when using Random Blocks. This will make it easier to review the appropriateness of questions and help reduce the need to recreate Question Sets.

+ Random Block Improvements

The process to create or edit Random Blocks includes more capabilities.

+ Batch Deletion and Point Updates

Instructors and Course Builders can perform basic actions such as question deletion and point updates as batch actions, which can be targeted by question type. Users can update points for individual questions as well as points per question and number of questions to display for Random Blocks or Question Sets directly from the Canvas page. Taken together, these changes improve Instructor productivity and allow them to edit tests in less time.

+ Copy Test, Surveys, and Pools

Instructors and Course Builders can now copy a Test, Survey, or Pool directly from the List page. This addresses a common scenario in which an Instructor needs to provide a pre-test and post-test and needs to create two assessments that have more or less the same form. This capability also allows users to easily create new, smaller pools that contain a subset of questions of a larger pool. It is a much faster way to create similar tests compared to the import feature, which requires more steps.

Feature Loss

- Files Cannot Be Attached to Assignments from the Content Collection

Instructors cannot attach files from the Content Collection to Assignments. These files can be downloaded from the Content Collection to the Instructor's local desktop and attached to Assignments.

Frequently Asked Questions

Are there any exceptions based on licensing?

No.

Where do these features appear?

The Question Finder interface can be accessed from the Canvas page for a Test, Survey, or Pool. For example: **[Course Name] > Course Tools > Tests, Surveys, and Pools > Tests > Test Canvas: [Test Name]**.

Questions Sets can be created and questions can be added from the task bar of the Canvas page. Click **Reuse Question** and then select the **Create Question Set** option or the **Find Questions** option. Both options will display the new Question Finder interface.

How has the question discovery and revision workflow been changed?

The process to discover and update questions that will be added to a Test, Survey, or Pool has been consolidated. The user is able to perform these tasks either directly on the Canvas page for the Test, Survey, or Pool, or at most only one more click away. Previously, the user had to navigate through several pages to perform the same task.

Textbook

A new button is available in a Content Area that enables Instructors to add a textbook to a Course. Instructors can manually add textbook information to the Course, or they can locate Textbooks in an external source, searching by title, author, subject, and ISBN.

Web Services and Building Blocks

Developers will use these new features to customize and extend the functionality of Blackboard Learn. Administrators will use these new features to install and manage Building Block using the Command Line.

Proxy Tool code and Web Service documentation is available from <http://www.edugarage.com/>.

Feature Enhancement

+ New Web Services

In Release 9.1, a number of web services have been created, including web services to:

- Retrieve and manage announcements, including system, Course, and organization announcements.
- Retrieve and manage calendar items, including Course, institution, and user calendar items.
- Retrieve and manage content, including files, links, and tables of content.
- Retrieve and manage Courses, organizations, groups, Course categories, and Course cartridges.
- Modify Course membership, group membership, and Course roles.
- Retrieve and modify user information, system roles, institution roles, address book entries, and observer information.
- Retrieve and modify Grade Center columns, assignment attempts, and assignment grades.

Note Release 9.0 had an experimental Grade Center web service. In Release 9.1, this web service is now official. The 9.1 web service is not backward-compatible with the 9.0 web service.

+ Upload and Delete Custom Web Services Using the Administrator Panel

The Web Services Administrator Panel now allows Administrators to upload new web services (.jar files) and delete previously uploaded web services. Previously, this ability was available only through the file system.

+ Web Service Code Samples Published for Java and .NET

Developers can now download sample code in Java and .NET from the Proxy Tools link on the Administrator Panel. These code samples will help developers, especially .NET developers who can no longer use .NET APIs and Building Blocks, understand how to use the new web services.

+ Additional Support for Emerging LTI 2.0 Standard

The Learning Tools Interoperability (LTI) specification, published by IMS Global, defines a standard way for Learning Management Systems (LMSs) to securely connect to external tools and resources. Individuals and organizations can use existing web development practices to create LTI-compliant, web-based learning tools that can then be embedded into the user experience of any LMS that conforms to the LTI specification.

By adding incremental support for the LTI specification as it evolves, Blackboard is in a better position to support the final specification when it is released.

In Release 9.0, Blackboard was the first LMS to support early versions of the LTI 2.0 specification.

In Release 9.1, Blackboard Learn supports the new naming conventions and formats found in the LTI 2.0 standard. No new features have been added, but Blackboard is now closer to supporting the final version of LTI 2.0 when it is released. All changes are backward compatible.

+ **New Bundled Building Blocks from Premier Partners**

Blackboard has worked closely with key partners to deliver valuable new functionality through its Building Block infrastructure. Four new Building Blocks will ship with Release 9.1 and be available to both Enterprise and Basic Edition clients:

- **Horizon Wimba-Pronto** - Instant messaging, online collaboration client
- **Acxiom** - Identity verification for use in managing the delivery of tests
- **Echo 360** - Lecture capture
- **NBC** - Rich media content from NBC for use in the Course

Institutions must register each Building Block with the respective vendor before using it.

+ **Improved Command Line Building Block Management Tool**

The B2Manager command line tool now includes all of the functionality that is available on the Building Blocks page accessible from the Administrator Panel.

All clients can use this tool, but because Basic Edition clients do not have access to the Building Blocks page, the command line tool enables them to manage their Building Blocks.

Administrators will be able to do the following using the B2Manager tool:

- List all installed Building Blocks.
- Install and remove Building Blocks.
- Change the system availability and default Course availability of a Building Block
- Retrieve a URL to the configuration page for each Building Block.

For more information, see the Building Blocks topics in [Blackboard Help](#)

+ **Additional Touch Points for Building Blocks Exposed**

Building Block developers can now register Building Blocks to be displayed in new places within Blackboard Learn, including:

- The User context menu on the User List page
- The Course context menu on the Course List page
- The Manage Grade Center menu
- The Mashups Menu on any content page
- A button on the Visual Text Box Editor (Mashups only)

For more information, see the Blackboard Learn Building Blocks API specifications available on [Behind the Blackboard](#).

Feature Loss

- .NET APIs and .NET Building Blocks Deprecated

Blackboard no longer supports the .NET APIs and .NET Building Blocks.

Blackboard has found that most institutions were using .NET Building Blocks to automate administrative tasks such as creating users and Courses. These tasks can be accomplished using the new [Web Services](#).

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. The Premier Partner Building Blocks are available to all license levels including Basic Edition, but they are limited to specific market licenses as defined in the following table.

	NAHE	K-12	ProEd	INTL
Wimba-Pronto				
Acxiom				
Echo360				
NBC				

Where do these features appear?

System Administrators manage Web Services from the Administrator Panel under **Building Blocks** by clicking **Web Services**.

System Administrators download Java and .NET sample code from the Administrator Panel under **Building Blocks** by clicking **Building Blocks** and then **Proxy Tools**.

System Administrators manage Building Blocks from the Administrator Panel under **Building Blocks** by clicking **Building Blocks**.

Does Blackboard Learn fully support LTI 2.0?

No. It is currently impossible to support the full LTI 2.0 specification because it is still in draft form and constantly changing. The improvements bring Blackboard Learn closer to what the specification will be when it is complete.

Wikis

The new Wiki tool allows Instructors to create Wikis for Courses, organizations, and groups to host collaborative content and group projects.

Course and organization Wikis allow the entire Course or organization to participate. Group Wikis allow a subset of the Course or organizations members to work on collaborative projects. Instructors specify whether and when Students are allowed to view or edit a particular Wiki.

For the Wiki feature to be available in Courses, the administrator must enable the Wiki Building Block.

Supporting Collaborative Learning

For clients who have licensed only the Course delivery capabilities, Wikis provide a collaborative area for Course content that allows Student participation and contribution. Both Students and Instructors can easily create content within the Wiki such as study guides and shared notes. For clients who have licensed the community engagement capabilities, Wikis provide organizations with a powerful collaborative editing tool that can be used for any content that requires collaboration and change tracking, such as meeting minutes, by-laws, or simple pieces of content.

Instructors can also use the Wiki for collaborative group projects where the Wiki's history and participation summary tools give the Instructor more in-depth insight when assessing individual contributions of the Students while grading as well as throughout the collaborative process.

Students can use the Wiki to collaborate on content for the Course as well as for group projects. The Wiki's collaborative capabilities and history features help Students see what other Students have contributed and help avoid overwriting each other's work. For groups, the Wiki can be used to simply share ideas or to host the final output of a group project.

Creating and Editing Wikis

Wikis are created and edited using the same Visual Editor (VTBE) that is used throughout Blackboard Learn. Users do not need to learn a special Wiki markup language.

Users can create multiple pages in a Wiki as well as create multiple Wikis. Users can link between Wiki pages to make it easy to interconnect pages. Page navigation is provided to quickly navigate between the pages of a Wiki even if the users do not add links within page content.

Versioning and Comparing Pages

Versioning at the page level allows for complete tracking of content changes in the Wiki. Users can view a comparison of two versions of a Wiki page to see the specific changes that a user made to a Wiki page.

Grading Wikis

Instructors can grade Wikis without having to leave the Wiki and go to the Grade Center. Students can be given group or individual grades to allow grading based on individual contribution.

Viewing Participation Summaries

Instructors are provided with a summary of Student participation in a Wiki that allows them to drill down to detailed views to help assess each Student's contribution. Instructors can view a summary of participation as counts and percentages of words and saves for each Student. Instructors can then drill down for each Student to see a summary and details for that Student's contributions. Instructors also can compare a Student's saved version with the previous version of the page to evaluate that Student's contribution. Grading is integrated at this level to help Instructors grade based on an individual Student's contribution.

Commenting on Wiki Pages

Users can comment on the pages of a Wiki to give feedback and facilitate collaboration.

Creating Wiki Links as Course Content

Instructors can link to a Wiki or Wiki page in Course content.

Using Adaptive Release

Wikis support the standard Adaptive Release options.

Importing and Exporting Content

Wikis support standard Blackboard Learn content exchange to export/import and copy with Courses.

Aligning Wikis with K-12 Standards

Wikis support the K-12 Standards and Alignment functionality available in Release 9.1. For more information, see [Standards Alignment for K-12 Clients](#).

Frequently Asked Questions

Are there any exceptions based on licensing?

Yes. This feature requires an Enterprise Edition license. Wikis are not available for Basic Edition clients.

Where does this feature appear?

The Wiki appears as a tool in Courses and organizations as well as a tool that can be made available for groups. In addition, it is possible to add a link to a Wiki or Wiki page in Course content.

Did this feature change any existing workflows?

No. The Wiki is a new feature.

Will the Blackboard Learn Wiki feature affect clients who use third-party Wiki products such as Learning Objects TeamsLX Wiki?

No. Clients may continue to use other Wiki products such as Learning Objects TeamsLX.

Why would someone use the Blackboard Learn Wiki feature versus a third-party Wiki tool?

The Blackboard Learn Wiki feature offers basic Wiki functionality with strong tools for assessing individual contribution and grading Wikis. It has the advantage of being integrated in the Blackboard Learn environment and providing users with a familiar user experience.

Is the Wiki a Building Block? If so, can it work with older releases?

The Wiki is a Building Block, but it will not work in previous releases because it relies on infrastructure that is new to Release 9.1.

Content Management Features

All users who have licensed the content management capabilities of Blackboard Learn will enjoy a more powerful experience when managing their content in Release 9.1.

The following content management features have been enhanced:

- [Building Content](#)
- [Passes and Permissions](#)
- [Recycle Bins](#)
- [Search Content](#)
- [Views](#)

Building Content

Feature Enhancement

+ Upload Multiple Files or Folders

As in Course Files, Instructors can upload multiple files or entire folders from the local computer into the Content Collection using Browse or by dragging the items directly from the desktop to the interface. Instructors can also upload a package of HTML files to be unpackaged automatically into the Content Collection. The same options for defining certain settings and metadata that currently exist when uploading a single file will be available during the process and can be applied to multiple files.

+ Create Folders In-Line

Instructors can create a new folder in the Content Collection without being taken to a separate page. When an Instructor clicks **Create Folder** on the main page, the name of the new folder can be typed in the text box that appears. To add the folder using the default folder settings, the Instructor clicks **Submit**. To add the folder using customized folder settings, the Instructor clicks **Create and Customize**.

Frequently Asked Questions

Did this feature change any existing product workflows or behavior?

Yes. Instructors upload multiple files at once using is a new option that is separate from the upload a single file option. In addition, Instructors now create folders on the main Content Collection page.

What technology is used to support the ability to Upload Multiple Files and Folders?

This capability was implemented as a Java applet with the same client-side requirements that currently exist for the Virtual Classroom feature of the Course delivery capabilities.

The Upload Multiple Files applet works on all browsers and operating systems supported by Blackboard Learn.

Passes and Permissions

Feature Enhancement

+ Create Passes to Content that Allow for Deletion

Administrators can now optionally create a pass that allows for Read/Write/Delete permissions on the associated content. The default setting has not changed and is still Read only.

Frequently Asked Questions

Did this feature change any existing product workflows or behavior?

Yes. In previous releases, ticket permissions were Read-Only and Read/Write. Adding the Delete permission allows for full collaboration between users via passes.

Recycle Bins

Recycle Bin improvements include the following:

- Replacing shared Recycle Bins for Users, Courses, and Organizations with individual Recycle Bins for each User, Course, or Organization
- Scheduling Recycle Bin retention and purging
- Setting the Recycle Bin View Policy

Providing Individual Recycle Bins for Users, Courses, and Organizations

The Recycle Bin capabilities have been improved to replace shared Recycle Bins for Users, Courses, and Organizations with individual Recycle Bins for each User, Course, or Organization. If the administrator has enabled the Recycle Bin feature for an area, the Recycle Bin folder will be located within each User, Course, or Organization folder.

Users will be able to empty their own Recycle Bins.

Scheduling Recycle Bin Retention and Purging

To better manage the growth of the Content Collection and related hardware costs, system administrators can now define a system-wide schedule for purging old files from the Recycle Bins. Administrators can define both the number of days that deleted files will be kept in the Recycle Bins and the specific time of day to perform the purge.

Setting the Recycle Bin View Policy

The **Recycle Bin View Policy** setting enables administrators to control default read access to Recycle Bin folders. Administrators can allow only the owner of the parent folder or both the owner and the user who is deleting the item to view the contents. Regardless of the option selected, users will retain existing permissions on the item being deleted but will not gain permissions on other files. This setting is especially useful in cases where many users share a common content area, such as the Institution folder. In these cases, it may be beneficial to define an explicit set of users.

This setting also applies differently to shared Recycle Bin folders than to individual Recycle Bin folders. When the **Recycle Bin View Policy** is set to **No Special Permissions**, shared Recycle Bins are visible to all users while individual Recycle Bins are visible only to the owner of the Recycle Bin and to users with explicit permissions on that folder.

Frequently Asked Questions

Where does this feature appear?

Recycle Bins for each Content Area are enabled from the Administrator Panel under **Content Management** by clicking **Content Area Management** and then **Manage Recycle Bins**. Clients who already have the Content Collection and are upgrading to this release will see an additional option for activating user, Course, and organization Recycle Bins.

Recycle Bin retention and purge settings are configured from the Administrator Panel under **Content Management** by clicking **Content Area Management** and then **Recycle Bin Settings**.

The Recycle Bin View Policy setting is configured from the Administrator Panel under **Content Management** by clicking **Content Area Management** and then **Recycle Bin Settings**.

The quota for the individual Recycle Bins is shared with the quota for the parent folder, which is set from the Administrator Panel under **Content Management** by clicking **Content Area Management** and then **Default Folder Creation Settings**.

Did this feature change any existing product workflows or behavior?

Users already using Recycle Bins will not notice any significant changes to the experience. What users will notice is that the behavior of managing individual Recycle Bins is more in line with their expectations.

Recycle Bins are more secure than in previous releases. Recycle Bin is now a special folder and does not function the same as other folders. When files are moved into a Recycle Bin, their permissions are changed to inherit the permissions from the Recycle Bin itself. Only those who can manage the Recycle Bin, the original owner of the file, and the user who recycled the file may restore the file. All other users can only see the file listed. This prevents other users with access to a Recycle Bin from viewing or restoring files to which they did not originally have access.

How does the new Recycle Bin affect existing Academic Suite or Blackboard Learn clients?

For clients who are licensing the content management capabilities for the first time or upgrading from systems where the Recycle Bins had not been activated, individual Recycle Bins will be created when Recycle Bins are activated.

For clients who have previously activated Recycle Bins for Users, Courses, or Organizations, the Recycle Bin behavior will not change automatically. Administrators will have the option to activate individual User, Course, or Organization Recycle Bins from the Administrator Panel under **Content Management** by clicking **Content Area Management** and then **Manage Recycle Bins**.

After Individual Recycle Bins have been activated, any existing content in the shared Recycle Bins will not be purged automatically. Users can still access the shared Recycle Bins. Existing permissions are respected and users will be able to restore files from the shared Recycle Bins. Administrators will need to use existing capabilities to determine their plan for moving or deleting that content.

As an existing Academic Suite or Blackboard Learn client, can I go back to shared Recycle Bins after I've turned on the new functionality?

No. Once the new individual Recycle Bins have been activated for an area, it is not possible to revert to shared Recycle Bins.

After Individual Recycle Bins have been activated, can users still access the original, shared Recycle Bins?

Yes. After Individual Recycle Bins have been activated, users can still access the shared Recycle Bins. Existing permissions are respected and users will be able to restore files from the shared Recycle Bins.

Search Content

Feature Enhancement

+ Improved Discovery of Shared Content

Users can now more easily search for shared content directly from the Content Collection tab. Clicking **Search Content** in the left-hand frame provides access to Basic, Advanced, Portfolio, and previously Saved Searches.

Views

Feature Enhancement

+ New Thumbnail View

As in Course Files, users in the Content Collection can switch between **View List**, which lists the files in a directory, and the new **View Thumbnails**, which shows a resizable thumbnail of image files. All non-image files will display the appropriate icon for the file type. Clicking a file's icon displays a new quick view of the file including its image, file size, enabled features, and comments.

Outcomes Assessment Features

All users who have licensed the outcomes assessments capabilities of Blackboard Learn will enjoy a more powerful assessments experience in Release 9.1.

The following outcomes assessments features have been enhanced or added to Release 9.1:

- [Artifacts](#)
- [Batch Operations](#)
- [Criteria List Operators](#)
- [Deployments](#)
- [Gradable Content Alignment](#)

Artifacts

Artifact template builders now have more control over the appearance of artifact templates and Students will have a more intuitive interface to respond to artifact requests.

Feature Enhancement

+ Additional Artifact Management Capabilities

Artifact Template builders can choose to reveal or hide certain sections of the request from recipients. This capability allows users to provide the proper amount of information to Students. In particular, unused sections can be hidden so that the recipient does not view a cluttered page.

In addition, request instructions can now contain rich text attributes such as italicized text, ordered lists, and multimedia elements such as video, images, or audio. This provides builders with the flexibility that they need to create instructions that will help recipients successfully submit the artifact.

The preview tool has been updated to provide a faithful reproduction of how the request will appear to recipients. This is a vital enhancement that allows builders to quickly iterate through intermediate versions of a template. It will also save time by eliminating the need for builders to send sample requests to themselves for review.

The disclaimer text that appears to recipients can now be customized. This enhancement allows the institution to create disclaimers that are appropriate for each request and is especially important when Institutional or Educational Review Board oversight mandates specific disclaimer language.

Finally, the builder has additional control over when recipients can resubmit an artifact. To save clients the effort and time of accidentally reviewing extraneous artifact submissions, builders can choose to not allow resubmissions after an evaluation of the Artifact has been saved or published.

+ More Intuitive Interface Artifact Response Interface

Artifact recipients can view and respond to an Artifact request from one page. Additionally, all of the content sections are expanded by default so that essential tasks can be scanned quickly. This makes it easier for Students to understand what is required of them and should result in higher response rates.

Frequently Asked Questions

Where does this feature appear?

Outcomes Artifact Templates are accessed from the Unit, Program, Course, Educational Experience, and Workspace context homepages that are found on the Outcomes Assessment tab.

Outcomes Artifacts can be accessed under the **Portfolios** link on the Content Collection tab.

Did this feature change any existing workflows?

The tasks required to complete and submit an Outcomes Artifact have been consolidated onto one page.

Which sections can be hidden from recipients?

The following sections can be hidden from artifact recipients:

- Collect Evidence
- Associated Standards, Objectives, and Goals
- Rubrics

These correspond to the Build, Associated Standards, Objectives, and Goals and Rubrics tabs, respectively, that are displayed to the Artifact Template Builder.

Can the disclaimer be customized for each Artifact Template?

Yes. Disclaimer customization occurs per Artifact Template. This is an improvement over the previous capability in which any changes made to the language pack editor affected all Artifact Templates.

Batch Operations

The batch operations available to Outcomes Assessment clients have been enhanced to allow administrators to be even more productive.

Feature Enhancement

+ Batch Delete Outcomes Entities Directly from the User Interface

Outcomes Assessment administrators now can batch delete Outcomes entities directly from the user interface without having to contact the Blackboard Managed Hosting. This new operation will save clients a great deal of time and is as simple as the other batch operations (add and edit) available to them in previous releases.

+ Batch Processing Notifications

Administrators no longer have to wait for Blackboard Learn to process a batch file before continuing their work. For all add, edit, and delete batch actions, Outcomes Assessment administrators will receive immediate feedback that an uploaded batch file has been queued for processing. They then can continue to perform other tasks in the system. When the batch operation is complete, they will receive an email indicating the processing status (success or failure) for each record.

Frequently Asked Questions

Where do these enhancements appear in the Product?

Batch deletion is available from the Administrator Panel under **Outcomes Assessment** by clicking **Batch**. The **Batch Delete** option is located in the contextual menu of each Outcomes entity.

The message that tells the user that their file has been queued for processing appears at the top of the same page after the batch operation has been submitted.

Did this feature change any existing workflows?

This feature introduces a new capability that allows batch deletion. The practical impact to users is minimal because the workflow is enabled by selecting the **Batch Delete** option in the contextual menu of the Outcomes entity. Additionally, the System Tasks Status page (available from the Administrator Panel under **Tools and Utilities** by clicking **Logs** and then **System Tasks Status**) will now list batch actions that are in process or have been completed.

Which Outcomes entities can be batch deleted?

Batch deletion is now available for the following Outcomes entities:

Contexts	Person Records and Affiliations	Standards, Objectives and Goals	Memberships
Units	Person Records	Standards	Courses Memberships
Programs	Course Sections Affiliations	Standards Categories	Educational Experiences Memberships

Contexts	Person Records and Affiliations	Standards, Objectives and Goals	Memberships
Courses	Educational Experience Sections Affiliations	Unit Goals	Programs Memberships
Course Sections	Programs Affiliations	Program Goals	Units Memberships
Educational Experiences	Units Affiliations	Course Objectives	Workspaces Memberships
Educational Experience Sections		Educational Experience Objectives	

Criteria List Operators

Outcomes administrators will have more flexibility when creating distribution lists. A distribution list builder can create criteria lists using the new sub-string match and logical negation operators.

Feature Enhancement

+ New Sub-String Criteria List Operator

The sub-string operator matches attributes that start with, end with, or contain a user supplied text string. The text search operators will allow users to take advantage of naming conventions that are used to categorize Course Sections, Programs, and other components in the institutional hierarchy.

+ New Negation Criteria List Operators

The logical negation operators will allow more complex criteria logic. The negation operators available to the user depend on the attribute type that is selected. For example, attributes of value type Unique ID have only the Does Not Equal negation operator available.

Frequently Asked Questions

Where does this feature appear?

Criteria are defined for existing Criteria Lists from the Outcomes tab by clicking **Discover**, **Distribution Lists**, and then **Criteria** in the contextual menu for that list.

Did this feature change any existing workflows?

The change in workflow is very minimal. Users will now see additional operators in the operator drop-down lists when creating criteria lists

Are these new operators available to all attributes?

No. Numeric and date attributes do not have an associated negation operator because the preexisting operators allow for negation.

Is the sub-string match case sensitive?

No. The sub-string match ignores case.

Deployments

Users now will be able to deploy assessment instruments with less effort and be confident that they are reaching the intended recipients.

Feature Enhancement

+ Schedule Deployments and Reminders

Users can specify a future start or end date for a deployment. The deployment settings can be changed later if the deployment has not started or ended.

Reminders can be scheduled to be sent to recipients who have not yet completed a deployed instrument. The reminder start time can be a specific time and date or made relative to the deployment start or end dates. Additionally, users can specify that a reminder be sent on a recurring basis after the initial reminder is sent.

These improvements reduce the amount of time required to manage a deployment and allow users to focus on more important tasks such as creating messages for deployment recipients.

+ New “Wizard-like” Deployments Process

Users now have a tabbed interface with which to create a deployment. Each tab is focused on a set of related sub-tasks. Users can access each tab in any order and have the option to save, exit, and return to their work.

The new tabbed interface makes it easier for the user to focus on specific deployment sub-tasks. This results in a less overwhelming experience and will lead to fewer user errors.

+ Message Preview

Users can preview deployment messages to see them as a recipient would. In preview mode, placeholder variables are replaced with the value (if known in advance) that recipients will see. The system will generate a warning if any placeholder variables are overwritten.

This preview capability provides an additional layer of quality control for users. This will result in less errors and fewer resent deployments.

+ Recipient Verification

Users can review the email addresses or names (if available) of deployment recipients before a deployment starts. In a small scale deployment, this capability allows the user to quickly identify whether an intended recipient is missing or an unintended recipient has been included. For larger deployments, this capability can be used to spot check if the recipients have been correctly identified.

Users also have the option to send an email to themselves and other Outcomes users that contains summary information about the deployment. Users with the proper entitlements will also be able to view the email addresses of deployment recipients.

Finally, a deployment manager can add new deployment recipients after a deployment has started. If any duplicate recipients are mistakenly added after a deployment is running, the system will not send out duplicate instruments.

These capabilities are safeguards that decrease the likelihood of erroneous deployments and their unintended consequences.

Frequently Asked Questions about Deployments

Where does this feature appear?

This feature is accessed from the same touch points (instrument creation tabbed interface, instrument landing page, and deployment list page) that led to the single-page deployment process in previous releases.

Did this feature change any existing workflows?

Deployment tasks no longer exist on the tabbed interface used to create an instrument. When the instrument is complete, users are taken from the instrument creation interface to the instrument deployment interface. The interface separates the tasks over four tabs.

Which messages have the preview capability?

The Notification Method and Automated System Response messages have preview capabilities.

What happens if there are many names in the deployment when the user chooses to review the recipient list?

The recipient list is displayed in a scrollable popup window.

What are the ways in which a new recipient can be added to an already running instrument deployment?

New recipients can be added using an uploaded file (survey deployments only) or an existing criteria distribution list.

Gradable Content Alignment

Instructors can align content items with Outcomes goals and objectives. Instructors will have the option to align gradable content found in their Courses to Outcomes Course objectives. An assessment director will be able to create reports that provide a snapshot in time of how learning goals are being addressed.

This feature lets an institution show how desired learning goals are being addressed and in which classes this is being done. It replaces current manual processes that are labor intensive and difficult to enforce. Additionally, this feature is a prerequisite for the evidence collection capability that most clients have requested. By allowing this capability now, clients will have the opportunity to create a wealth of alignments from which to draw evidence of learning outcomes.

Feature Enhancement

+ Course Delivery Content Aligned to Outcomes Course Objectives

Instructors can now align Outcomes Course objectives to individual Course delivery Course content. The objectives come from the Outcomes Course Sections that have been associated to the Course. Instructors can filter by Outcomes Course Section and Course objective type to make the appropriate alignment.

+ Course Objectives Report

Instructors can access a Course Coverage Detail report. This report shows the Instructor which objectives have been made available to the Course and how many of them have been covered. It also shows which content types are used to cover the objective.

+ Program Goals Report

Outcomes managers have access to two new coverage reports. In the Program Coverage Overview report, for each program goal in a program, the report displays how many of the Course objectives that are aligned to that goal are covered or not covered for a given Course delivery Course. This is done for each Course delivery Course that the program connects to indirectly.

The Program Course Overview report provides the same information as the Course Coverage report, but it spans all Courses that are aligned to the Program.

Frequently Asked Questions

Where does this feature appear?

Instructors can align gradable content to Outcomes Course objectives. The objective alignment interface can be accessed from the content object's contextual menu. Completed alignments are viewable in the Edit View.

Can Students view aligned Course objectives?

Yes. Instructors can enable or disable this privilege.

Which content types can be aligned to Outcomes Course objectives?

The following content types can be aligned to Outcomes Course objectives:

- Assignments
- SafeAssignments
- Self and Peer Assessments
- Surveys
- Tests
- Test Questions
- Blogs
- Journals
- Discussion Forms
- Discussion Threads
- Wikis

Users can align to objectives from the content's contextual menu or from the Grade Center column that corresponds to the gradable content.

Did this feature change any existing workflows?

This feature introduces a new workflow that allows the user to align gradable content to Outcomes Course objectives.

Blackboard Learn Release 9.1, Service Pack 1 (SP1)

This addendum is designed to supplement Understanding the Change from Blackboard Learn 9.0 to Blackboard Learn 9.1 in order to provide information on the features and functions of Blackboard Learn™, Release 9.1, Service Pack 1 (SP1).

Blackboard Learn 9.1 Service Pack 1 (SP1) includes enhancements and innovations that are grouped in the following categories:

- [Course Delivery](#)
- [Community Engagement](#)
- [Content Management](#)
- [Outcomes Assessment](#)
- [System Administration](#)

Course Delivery Features

Assessments

Creating and taking Tests have several enhancements to reduce errors and increase efficiency.

- Test-takers are reminded to submit answers before they are allowed to leave a test.
- Random Blocks and Question Sets are both available for instructors to add groups of questions to tests. Random Blocks pull questions into a test from a pool based on certain criteria. They are dynamic and reflect changes to the question pool. Question Sets are static and are made up of specific questions selected to be in the Question Set used in the Test.
- Question and response statistics are displayed for each question on the Tests Statistics page. For K12 licensed clients, Standards that are aligned to test questions are viewable from this centralized location.

Copying and Moving Items

Move and Copy are now two distinct options for content items. This allows items that cannot be copied such as Tests, Surveys, and Assignments to be moved to another location.

Course Links

When Course Links are created, the link and the location are automatically populated, providing consistency across the link name and location.

Discussion Board

The Discussion Board has two enhancements to streamline grading and create consistency across all collaborative tools.

- Instructors can clearly identify and grade users who are members of Groups participating in group discussions.
- Instructors can enter grades, comments, and feedback when viewing Discussions similar to the experience in Wikis Blogs, and Journals.

Grade Center

The Grade Center has been enhanced to improve grading efficiencies and reduce errors.

- Instructors are prompted to save or delete specific Grade Center columns when deleting a Group with gradable Blogs, Journals, Wikis, or Discussion Forums or Threads.
- Instructors navigating away and then back to the Grade Center in one login session are returned to the last scroll point they viewed or graded in the grid.
- Instructors can color code Grade Center cells that meet certain criteria such as grade threshold, exempted grade and so on. This new feature helps instructors spot trends and action areas in large Grade Centers.

Learning Modules

Items hidden in the table of contents in Learning Modules are made unavailable so they cannot be accessed directly. Additionally, Learning Modules have been enhanced so that when they are copied, links to any tests, assignments, or surveys, are created.

Mashups

Mashup links are now visible when the Text Editor is off.

Standards and Alignments

Standards that have been aligned to test questions can be viewed from the Test Statistics page, providing teachers with a centralized location to view question and response statistics as well as alignments.

Text Editor

The text editor allows users to select right-to-left or left-to-right language orientation of text.

Community Engagement Features

Modules

Availability and role settings, as well as custom layouts for modules and tabs, are preserved upon upgrade. The following user defined settings are preserved:

- Tabs
- Tab Groups
- Modules
- Tab Modules – default layouts
- Tab Modules – user layouts

Administrators have the ability to fix modules to the top row of a page, ensuring high-priority modules will always appear in the desired location. Fixed modules cannot be moved or deleted by users, even on user-customizable tabs.

Administrators can control the availability of modules by date and time, allowing for time sensitive content to be scheduled for release, removing the need to set availability manually.

My Organizations Module

The My Organizations module now has all the same customization features as the My Courses module.

Users have the ability to re-order their courses or organizations in the My Courses and My Organizations modules, adding another level of personalization to the modules.

Notifications

Notifications are now processed in priority order. For example, Due or Past Due notifications are sent before the thousands of "new content" notifications. The priority of a notification is determined internally based on factors such as due date and message type.

RSS Support

Blackboard Learn now supports updated RSS infrastructure including support for contemporary, as well as legacy syndication formats including RSS 1.0, RSS 2.0, Atom 0.3, and Atom 1.0.

User Identification and Avatars

When logged in, users now have a visual indicator that displays their name and avatar if avatars are available in the system.

Content Management Features

Navigation and Shortcuts

The Shortcut View takes up less space vertically to reduce scrolling. A Bookmark link has been added for immediate access to bookmarks. Jump To... and Search Content have also been added to the left side for consistency and improved access.

Breadcrumb Navigation uses the separator between folders as an active button to open a drop-down menu. Items in the drop-down include all the folder's associated subfolders, making navigation in the folder hierarchy much faster. The Content Collection breadcrumb brings users to the "top" folder where they can select any of the content areas.

The current folder name is not displayed in the title with the content area name, and basic operations such as edit, set permissions, and bookmark can be performed from a contextual menu on the current folder.

Sharing Content using Email

When emailing content to users the To, CC, and BCC labels are now buttons that allow selecting individual users, courses or organizations, a group, or roles within the course or organization.

The system will now check that recipients have access to the emailed files or folders. Users will be warned if recipients do not have access to read the files. If recipients do not have access to read the files, the system can automatically set read permissions after confirmation with the user.

WebDAV

Instructions for setting up and using WebDAV have been improved to be clearer and give specific operating system instructions where possible.

Automatic Web Folder opening has been restored for Windows Internet Explorer on Windows XP and Windows Vista with SSL (HTTPS). Users may have to re-authenticate in the Web Folder client. Users with Windows 7 cannot open Web Folders due to a Microsoft bug. Users that are not connecting with SSL have instructions provided in the user interface.

Outcomes Assessment Features

Batch Uploading

Course-to-program associations can be made using a batch file. Standards, objectives and goals can be aligned using a batch file.

Adding and modifying system data can be done with the same batch file operation.

Curriculum Maps

Curriculum Maps are now easier to navigate and edit. A warning appears to users if they attempt to navigate away from an open curriculum map before saving their work. Curriculum Maps can now be moved and copied. Comments entered in Curriculum Map cells now appear in 360° Reports.

Evaluation

The evaluation process is now much easier for users who rate artifacts and portfolios. The list of submissions now has contextual information about existing evaluations including how many evaluations there are, who last evaluated the submission, when it was last evaluated and on in progress evaluations. The Evaluate page includes the rubric directly on the page along with the artifacts being assessed.

Improvement Project Templates and Modules

Improvement Project templates can be more fully customizable, putting all aspects under users' control.

Improvement Projects and Initiatives listed on Unit pages link to their respective project and initiative pages.

Moving

Users can copy and move improvement initiatives to locations to which they have permission to do so.

Users can copy and move improvement projects to locations to which they have permission to do so.

System Administration

Building Blocks

Developers can improve Building Block performance and data persistence by adding requests for installing Building Block specific database objects to their Build Blocks. A tool which allows the System Administrator to approve or deny installation of Building Blocks which request creation of database objects is also provided.

Administrators experience improved dialog notification for Build Block management actions and retention of persisted data and location of upgraded Building Blocks.

Improved Disk Storage Information

System Administrators are provided with an improved display of disk storage information.

Open Database Schema

Database Schema information can be automatically generated by the Learn application allowing system administrators to perform more affective troubleshooting, reporting and analytics on their institutional data. For more information see the System Administrator Manual available from Behind the Blackboard.

Search

Administrators can more easily find users and courses using two new search fields, Student ID and Data Source

Blackboard Learn Release 9.1, Service Pack 3 (SP3)

This addendum is designed to supplement Understanding the Change from Blackboard Academic Suite 8 to Blackboard Learn 9.1 in order to provide information on the features and functions of Blackboard Learn™, Release 9.1, Service Pack 3 (SP3).

Blackboard Learn 9.1 Service Pack 3 (SP3) includes enhancements and innovations that are grouped in the following categories:

- [Course Delivery](#)
- [Community Engagement](#)
- [System Administration](#)

Course Delivery Features

Adaptive Release

Instructors can now set Adaptive Release rules using a calculated column. Categories for each item in the Grade Center appear in the **Select a Grade Center column** drop-down list. This helps instructors better use adaptive release rules for teaching and learning such as a scenario of deploying selected remedial content to students that do not pass 70% threshold in a calculated column.

Announcements

New Announcements now appear directly below a repositionable bar. Priority Announcements can be moved above the bar so they always appear first in the list. Students do not see the bar.

Assessments

Instructors now have the ability to view question numbers while building and editing assessments. Questions can be referenced by number throughout the assessment and can be used to sequence questions in an assessment.

Early Warning System

Instructors can now set Early Warning System rules using a calculated column. Categories for each item in the Grade Center appear in the **Select a Grade Center column** drop-down list. This helps instructors better use Early Warning System settings for teaching and learning by using calculated columns for measuring groups of gradable items or monitoring specific progress points in a course.

Grade Center

Several features in the Grade Center have been enhanced to improve communication between the instructor and students and make navigation easier.

Feedback and Comments

To augment the existing ability to download columns from the Grade Center and grade offline, Instructors can now include comments in the download. Comments can be added or edited offline, and are associated with the grade when the column information is uploaded to the Grade Center.

The full features of the Text Editor are now available for feedback to users and Grading Notes from the Grade Details page and within the Grade Center. The Text Editor can also be used for feedback on Tests, Assignments, Group Assignments, Blogs, Wikis, Journals, and posts to the Discussion Board. Incorporating all the features of the Text Editor allows instructors to leverage the full range of functions for formatting text and adding external links, attachments, images, Mashups, and multimedia to Feedback and Grading Notes.

Students are able to view the feedback added using the Text Editor on their My Grades page.

Needs Grading Page

Instructors can access assignment and test attempts that need grading from a new Needs Grading page accessed in the Grade Center section of the Control Panel. On the Needs Grading page, instructors can view how many attempts are ready for grading and sort and filter the items. Attempts are placed in a queue for easy navigation among items when grading or reviewing. Once an attempt is graded, it no longer appears on the Needs Grading page.

Smart Views

Smart Views added as Favorites appear as an indented list in the Grade Center section of the Control Panel.

Column Delete Alert

When groups with graded Blogs, Journals, Wikis, or Discussion Boards are deleted, an alert appears prompting the instructor to save or delete the corresponding Grade Center columns. Managing columns for groups becomes part of the same process as deleting groups.

Text Editor

The symbol font is removed from the Text Editor and a symbol picker has been added.

Community Engagement Features

Modules

Users can browse and search for modules to add to their My Institution Page and Notifications Dashboard.

System Administration

Course Quota Updates

Course Quota changes can now be made through the Quotas page accessed from the contextual menu next to a course name in the Courses list on the Administration Panel. Options are now available for Course Quota and Legacy Files.

Different values can be entered for Courses and Legacy Files. The value will also appear in the Content Collection or Course Content Quota page for each course. The value can be changed from those pages and the change will appear from both the Course page and the Administration page. The value entered from the Administration panel is the default for newly created courses once the value is set.

Blackboard Learn Release 9.1, Service Pack 4 (SP4)

This addendum is designed to supplement Understanding the Change from Blackboard Learn 9.0 to Blackboard Learn 9.1 in order to provide information on the features and functions of Blackboard Learn™, Release 9.1, Service Pack 4 (SP4).

Blackboard Learn 9.1 Service Pack 4 (SP4) includes enhancements and innovations that are grouped in the following categories:

- [Course Delivery](#)
- [Community Engagement](#)
- [Outcomes Assessment](#)
- [Blackboard Connect](#)
- [System Administration](#)

Course Delivery

Support for Common Cartridge

Common Cartridge 1.0 and 1.1 are integrated into Blackboard Learn. Course content packages saved in this standard can be imported into Blackboard and course content created in Blackboard can be exported as Common Cartridge packages.

Important Note: Cartridges exported from Blackboard are automatically exported in Common Cartridge 1.0 unless the **Export as Common Cartridge 1.1** box is checked. In which case, the export is saved as Common Cartridge 1.1.

Learning Tools Interoperability

The Basic Learning Tools Interoperability (LTI) is an IMS derivative of the full Learning Tools Interoperability specification that provides a simple integration for instructors to install external learning tools and applications anywhere within their courses. Users do not have to sign in to multiple tools. External content and tools are added to a course the same way a URL is added. The tool or content is launched by clicking the link.

Developers can add Basic Learning Tools Interoperability extensions to their Building Blocks, increasing their market value.

Assessments

Feedback for each answer is now available for Multiple Answer questions.

Community Engagement

Discovering Modules

Users can locate modules to add to their My Institutional page more easily using categories and search. Modules can be categorized by the system administrator. Search is based on key words in the module title and description.

Outcomes Assessment

Curriculum Maps

The workflow for creating and building a Curriculum Map has been improved to reduce the number of clicks so that users go directly to the build tasks from the creation page.

Distribution Lists

The workflow for creating a distribution list and adding criteria to it has been combined into one workflow.

Blackboard Connect

Country Codes Available

Blackboard Learn and Connect are now integrated and support international phone codes. Integration automatically populates email addresses and phone numbers from Learn to Connect. A default country code can be used in the event that no code is provided from Blackboard Learn.

System Administration

Data Sources

System Administrators can navigate to **Administration Panel > System Reporting > Data Sources** to create new data sources and open existing data sources to view details about each type of record currently associated with that data source. Existing keys can also be modified or deleted. Records can be disabled and purged as well.

Search and Select All

A large list of items, such as users or courses, is often returned from a search that uses the filter Not Blank or a generic character in the filter Contains. This list is displayed on multiple pages, the number of which is based on the setting of number of items to display on a page. Checking the top Status box selects all the items displayed on the page, but now gives you the additional option of selecting all items returned in the search. This option allows you to select the entire set so you do not have to go to each page and select all, or set the number of items displayed on the page to a very high number, causing performance problems.

Support for Google Analytics™

Google Analytics™ is a free service offered by Google for mining web traffic data to a website or application. The process for setting up Google Analytics is the same for each Blackboard Learn codeline including 9.0 SP5 and 9.1 SP4 and beyond.

1. Register with Google Analytics (<http://www.google.com/analytics/>)
 - Identify a test server outside your firewall and note its domain name
 - Create a Google Analytics Account
 - Register the domain name of your server through the Google Analytics setup pages
 - Save the script provided by Google Analytics
2. Open `sharedDir"/web_analytics/googleAnalyticsSnippet.vm` (For example `c:/blackboard/content/web_analytics/googleAnalyticsSnippet.vm`), paste your script, and save the file.
3. You can restart Blackboard Learn Services for the changes to take effect immediately or wait until the .vm file cache is refreshed, once every 12 hours.

For information on Secure and Non-Secure sites, visit

<http://www.google.com/support/analytics/bin/answer.py?hl=en&answer=55483>

Resource Governor

A new command line feature that allows certain performance intensive database operations to run at a lower priority so that they do not consume CPU resources is shipped with SP4. This feature, a resource governor, is turned off by default.

To Activate

First contact Blackboard support. Next, navigate to the main configuration file:

`/blackboard/config/bb-config.properties` and locate this property:

`bbconfig.database.query.prioritization.enabled`, which is set to `False`. Follow the instructions from support to activate.

Once activated the resource governor is added to the Blackboard database. The resource governor regulates the CPU utilization of connections configured to run at a lower priority. Until activated, there is no impact on the system.

The resource governor is only installed on systems that use the following databases:

- Oracle 10 Enterprise Edition
- Oracle 11 Enterprise Edition
- SQL Server 2008 Enterprise Edition

It will **not** be installed for any other versions, and the low-priority connection feature will not take effect on those systems, even if enabled.

To Disable

Set the `bbconfig.database.query.prioritization.enabled` property to `False`. The resource governor can also be turned off at the database level. This does not remove the resource governor from the database, but disables it. It can be enabled at any point.


For Oracle:

1. Log on as the sys dab
`sqlplus "/ sysdba"`
2. Turn off the resource manager by setting it to an empty plan
`alter system set resource_manager_plan = ''`

For SQL:

Bring up the SQL Server Manager.

1. Navigate to Management > Resource Governor
2. Right click on Resource Governor and select Properties
3. Change Classifier Function Name to "None"

 The 9.1 SP4 uninstaller does **not** remove the resource governors. This will be addressed in future service packs. Until it is, the follow artifacts will be left behind after the uninstaller executes:

Oracle

1. A resource plan, called **BB_PLAN**
2. Two consumer groups: **OLTP**, and **BATCH**
3. The database's `RESOURCE_MANAGER_PLAN` will be set to **BB_PLAN**

SQL Server

1. A workload group, called **groupLowPriority**
2. A classifier function, called **get_priority_workgroup**
3. The resource governor is updated to point to the **get_priority_workgroup** function

To Delete

Delete the Resource Governor if you think it is causing issues on your system that disabling it will not address or if you uninstall your SP4 Learn environment and want to remove the resource governor as well.

For Oracle:

1. Log on as the sys dab
sqlplus "/ sysdba"
2. Disable the BB_PLAN resource plan
3. Remove the plan and all its descendants by executing the following code:

```
alter system set resource_manager_plan = '';  
  
exec dbms_resource_manager.create_pending_area();  
exec dbms_resource_manager.delete_plan_cascade('Bb_plan');  
exec dbms_resource_manager.validate_pending_area();  
exec dbms_resource_manager.submit_pending_area();
```

For SQL:

In a production environment, wait for all sessions that are using low-priority connections to complete or simply kill those sessions before attempting to uninstall the resource governor. Otherwise, the drop will fail.

1. Delete the low priority resource group
2. Disable the resource classifier
3. Delete the resource classifier function

```
DROP WORKLOAD GROUP groupLowPriority;  
GO  
  
-- Update the Resource Governor in-memory configuration  
ALTER RESOURCE GOVERNOR WITH (CLASSIFIER_FUNCTION=null);  
GO  
ALTER RESOURCE GOVERNOR RECONFIGURE;  
GO  
  
DROP FUNCTION dbo.get_priority_workgroup;  
GO
```

Global XSS Filtering

To prevent cross-site scripting (XSS) attacks, Blackboard Learn now can globally filter user HTML input. The filtering changes the greater-than sign, ">" to ">" and the lesser-than sign, "<" to "<". This applies to all data entered using HTML forms, such as submitting a Create Discussion Board Forum Message form. Global XSS filter is also applied to file uploads, and will be apparent when rendering the contents of a form submission back to the screen.

Global XSS filtering only occurs for un-trusted user roles such as students. Trusted users, such as course instructors are allowed to post data and will not have their HTML filtered.

Global filtering can be turned on and off for the entire server using the `bbconfig.global.xss.enable` property in `bb-config.properties`. This property is ON by default starting with 9.1 SP4. This property is OFF by default in 9.1 SP1 through 9.1 SP3.

Global filtering can also be turned on or off selectively by URL. When global xss filter is ON for the entire system (`bbconfig.global.xss.enable=true`), filtering can be turned off for specific URLs. This option could be used in the case of a Building Block that allows any user, with trusted role or not, to submit HTML content. To prevent the global xss filter from changing the HTML, the developer can modify the code to get the unfiltered data using the new APIs, or create an exception text file.

To create an exception file, add the URL prefixes, one per line, in a text file named in the `config/internal/bb-xss-global-filter-exceptions.txt`.

For building blocks, the BBUID is embedded in the URL (and is VI specific), so the placeholder `{bbuid}` can be used in the prefix. This will get replaced by the actual BBUID when URLs are being compared against the prefix.

For example `/webapps/bb-my-b2-{bbuid}` would get changed to `/webapps/bb-my-b2-BBLEARN`

Blackboard Learn Release 9.1, Service Pack 5 (SP5)

This addendum is designed to supplement Understanding the Change from Blackboard Learn 9.0 to Blackboard Learn 9.1 in order to provide information on the features and functions of Blackboard Learn™, Release 9.1, Service Pack 5 (SP5).

Blackboard Learn 9.1 Service Pack 5 (SP5) focuses on bug fixes, course files, and security.

Default Maximum Upload Limit

The default size limit for content uploaded through the user interface has been raised from 250 MB to 2.5 GB. When attempting to upload files larger than 2.5 GB, Web Folders must be used.

Known and Resolved Issues

Many critical client-reported issues have been resolved. For a detailed list, see the [Resolved Issues Page](#) of the Maintenance Center.

The list of known issues in Blackboard Learn Release 9.1 is available on the [Known Issues](#) page of the Maintenance Center. The Known Issues page provides a list of the issue ID, description, and resolution path. This page is updated regularly with new client-reported issues.

Course Files Move Utility

Course Files migration is an integral part of the recommended upgrade path to Blackboard Learn 9.1. Full support and a renewed recommendation for using the Move Files Utility for all customers upgrading has been restored.

With the release of Learn 9.1, file management and storage was fundamentally changed. A new file storage system was implemented through the Control Panel of a course and is called "Course Files". Course Files gives users a way to manage their content files, file uploads, and attachments. It also provides a way for users to manage who has permission to see and change files stored here. Course Files provides a very basic file management interface.

For clients with a Content Collection license, Course Files is a window into their Content Collection files through the course Control Panel. All the functions of the Content Collection remain, but easy navigation to and from a course is available.

The Move Files Utility was created to populate the new file storage system with the course files from a legacy course. Since Blackboard Learn 9.1 GA was released, problems related to files moved using the utility after upgrading to 9.1 were discovered. With this release, we have holistically addressed this key area and can renew our recommendation for use of the Move Files Utility for all customers.

Restoring legacy courses in Blackboard Learn 9.1 without using the Move Files Utility places the files in a legacy storage area that is not revealed to users, although the files remain accessible in the course. New material developed after the course is upgraded is stored in the Files or Content Collection area. This does not give a consistent user experience managing files for a course. By using the Move Files Utility to move course files during an upgrade, legacy files are placed in Course Files, providing a consistent way to manage files in a course.

Security

Service Pack 5 addresses three key security vulnerabilities.

- **Cross-site Request Forgery** – Cross-site Request Forgery is an attack that attempts to execute actions on behalf of a user authenticated into Learn. SP5 provides further hardening of Learn Release 9.1 from cross-site request forgery by protecting key parts of the application such as the Grade Center.
- **Cross-site Scripting Attacks** – Cross-site Scripting is an attack where malicious scripts are injected into Learn. This occurs when specially crafted values are entered into a variable of a web page or stored and displayed by the application. Oftentimes, an attacker would need to convince an authenticated user to access a malicious web page or record in order for the attack to occur. Key parts of the application are now protected.
- **Authorization Vulnerabilities** – authorization vulnerabilities in the Address Book, Calendar, Grade Center, Portfolio Comments and Display, and Tasks have been eliminated.