KMx Version 10

Developer & Administrator Guide

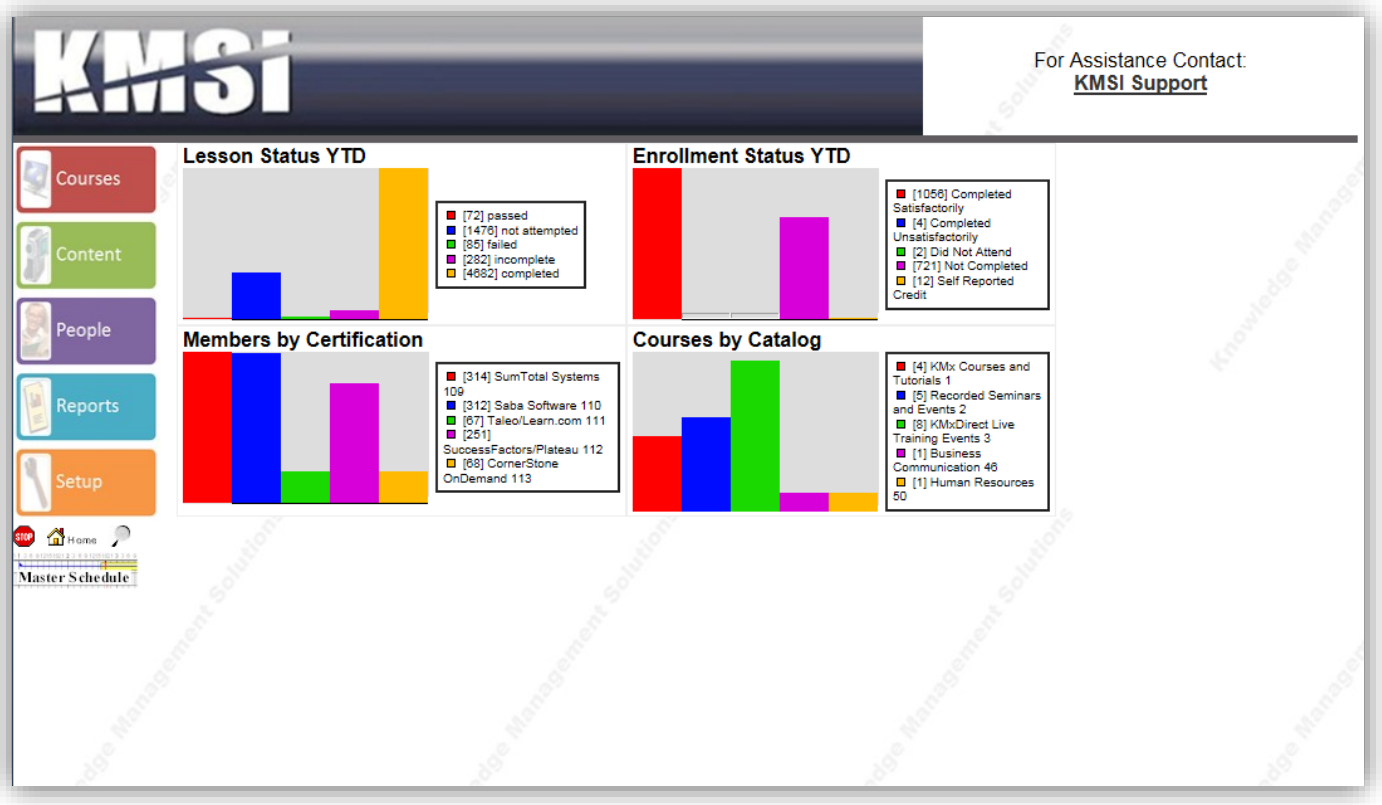


Table of Contents

1 Introduction 8
1.1 Site Hierarchy 8
1.2 Organizations 8
1.3 Companies and Company Types 9
1.4 Language Types and Email Templates 9
2 KMx Developer/Administrator Interface 10
2.1 Help information 12
2.2 Basic/Advanced Features Toggle 12
2.3 Required and Maximum Form Entries 13
2.4 Logoff, Home and Search Icons 13
2.4.1 Logoff 14
2.4.2 Home 14
2.4.3 The Search Icon and Search Content Form 14
2.5 Master Class, Resource and Activity Schedule 15
2.6 Forms 15
2.7 Basic Form Items 16
2.8 Advanced Form Items 16
2.8.1 Slide Control 16
2.8.2 Indicator Control 17
2.8.3 Filter Control 17
2.8.4 Auto Refresh Control 17
2.9 Multi-Selection with Sorting Control 17
2.10 Drop-Down Control Key Seeking 18
3 KMx Student, Instructor, Supervisor Interface 19
3.1 Course/Class Search 19
3.2 Catalogs 20
3.3 Event Calendar 21
3.4 FAQs and Help Screens 22
3.5 Browser Test Tools 22
3.6 User Registration 23

3.7 Lost Password Utility 24
3.8 Category Profile 24
3.9 Current Enrollments 25
3.10 Student Records (Transcript) 26
3.10.1 Student History Page Options 26
3.10.2 Certificates of Completion 27
3.11 Student Activity Calendar 27
3.12 Student Content Search (Just-in-Time Training) 27
3.13 Instructor Options 28
3.14 Supervisor Options 29
3.15 Company Administrator Options 30
4 Courses 31
4.1 Course Records 31
4.1.1 Course AutoComplete 33
4.1.2 Course Universal Prerequisites 33
4.1.3 Completion Reminders 33
4.1.4 Instructor Qualification 34
4.1.5 Enable Launch from Student History Page/Transcript 34
4.1.6 Certification Assignments 34
4.1.7 Catalog Assignments 34
4.2 Course Outlines 35
4.2.1 Create/Review the Course Outline 36
4.3 Course Content 36
5 Classes 38
5.1.1 Administrator Class Search 38
5.1.2 Waitlist / Cancellation / Notification 39
5.1.3 Automated Reminders 39
5.1.4 Self-Cancellation 39
5.1.5 Student Messaging 39
5.2 Resources 39
5.2.1 Advanced Resource Scheduling Options 40
5.2.2 Instructors 40
5.2.3 Classrooms 40

5.3 Class Activities 41
5.3.1 KMxLive Activities 42
5.4 Locations 42
5.5 Class Batch Enrollment 42
5.6 After Class Notifications 42
6 Knowledge and Skill Inventory Tables (K/S Tables) 43
7 Content Management 43
7.1 Content Relationships 44
7.2 Content Types, Status and Versioning 44
7.2.1 Exams, Surveys and Performance Evaluations 45
7.2.2 Adobe Flash 45
7.2.3 Adobe PDF 45
7.2.4 Image (JPG/GIF) 45
7.2.5 Microsoft Word 45
7.2.6 Microsoft PowerPoint 46
7.2.7 Advanced MS PowerPoint Navigation Option 47
7.2.8 PowerPoint for Mobile Devices 48
7.2.9 Microsoft Excel 48
7.2.10 External URLs 48
7.2.11 SCORM Sharable Content Objects, Resources and Assets 48
7.2.12 SCORM 1.3 (2004) Information 49
7.2.13 Video/Audio Files 49
7.2.14 Presentation Broadcast Media (KMxLive Recordings) 49
7.2.15 Message Boards 49
7.2.16 HTML/ZIP Files 49
7.3 Content Window Framing/Sizing 50
7.4 Advanced Content Record Options 50
7.4.1 Content That Requires Its' Own Window 50
8 Exams, Surveys and Performance Evaluations 51
8.1 Preparing a Test Item Import Spreadsheet 54
8.2 Test Items 54
8.2.1 Drop-Down Lists 55
8.2.2 Expanded Multiple Choice Options 55

8.2.3 Creating Matching Type Questions 55
8.2.4 Fill-in-the-blank questions 55
8.2.5 Drag & Drop Test Items 56
8.3 Tests and Exams 57
8.4 Surveys 58
8.5 Performance Evaluations 58
8.5.1 Supervisor Options 58
9 People and Companies 59
9.1 Review a Member Record and Member Search Features 59
9.2 Company Assignment 61
9.2.1 Ad Hoc Email to Company 61
9.3 Dynamic Calcuation of Organizational Personnel Hierarchy 61
9.4 Personnel Categories 61
9.4.1 Personnel Category Assignment 61
9.5 Supervisor Options 61
9.6 Instructor Options 61
9.7 Enrollments 61
10 Certifications 62
10.1 Certification Setup 62
10.1.1 Summary and Detailed Dynamic Reporting Options 63
10.1.2 Cascading and Prerequisite Certifications 63
10.1.3 Ad Hoc Email to Certification 63
10.1.4 Member Certification Notification 63
10.1.5 Pre-Calculate Certification Percent Complete 63
10.1.6 Maintenance of Courses in a Certification 64
10.1.7 Dynamic Certifications 66
11 Reports 67
11.1 Standard Reports 67
11.2 KMx Dynamic Reports 67
11.2.1 General Dynamic Report Types 67
11.2.2 Advanced Report Types 68
11.2.3 Dynamic Report Help Information 69
11.3 KMx Dynamic Graphs 69

11.3.1 Standard HTML Graph Types 70
11.3.2 HTML5 Graph Types 70
11.4 Building a Report 70
11.4.1 Dynamic Reports - Dynamic Sorting and Filter Controls 72
11.5 Building a Graph 73
11.6 Row link URLs: 74
11.7 Drill-Down Reports 75
11.8 New Color Coding Functions by Report Type: 75
12 KMx Dynamic Charts 77
12.1 Optional columns: 78
12.1.1 KMX Dynamic Chart Formatting Options 78
13 Google Maps ™ Integration Tools 79
13.1 Maps based on Tabular Information 79
13.1.1 Setting the "Map display string" value 80
13.2 Maps Based on Group/Location Statistical Data 81
14 Setup and System Administration 82
14.1 Organization Configuration 82
14.2 Member Authorization Levels 85
14.3 Catalog Setup 86
14.4 eCommerce Options 88
14.4.1 Shopping Cart 89
14.5 Advanced User Management and Batch Import 89
14.6 Email Templates 90
14.6.1 Supervisor Approval Request – Email Template 90
14.6.2 Send Notification to Instructors when Assigned to Class 90
14.6.3 Enrollment by Supervisor with Class 90
14.6.4 Enrollment by Supervisor 90
15 KMxLive (KMx Enterprise Clients Only) 91
15.1 Configuring the KMx Live Broadcast Workstation 91
15.2 Upload the WME file to KMx 93
15.3 Setup the Class Activity in KMx 93
15.4 Test your Activity and Encoder Settings 94
15.5 After the Broadcast 96

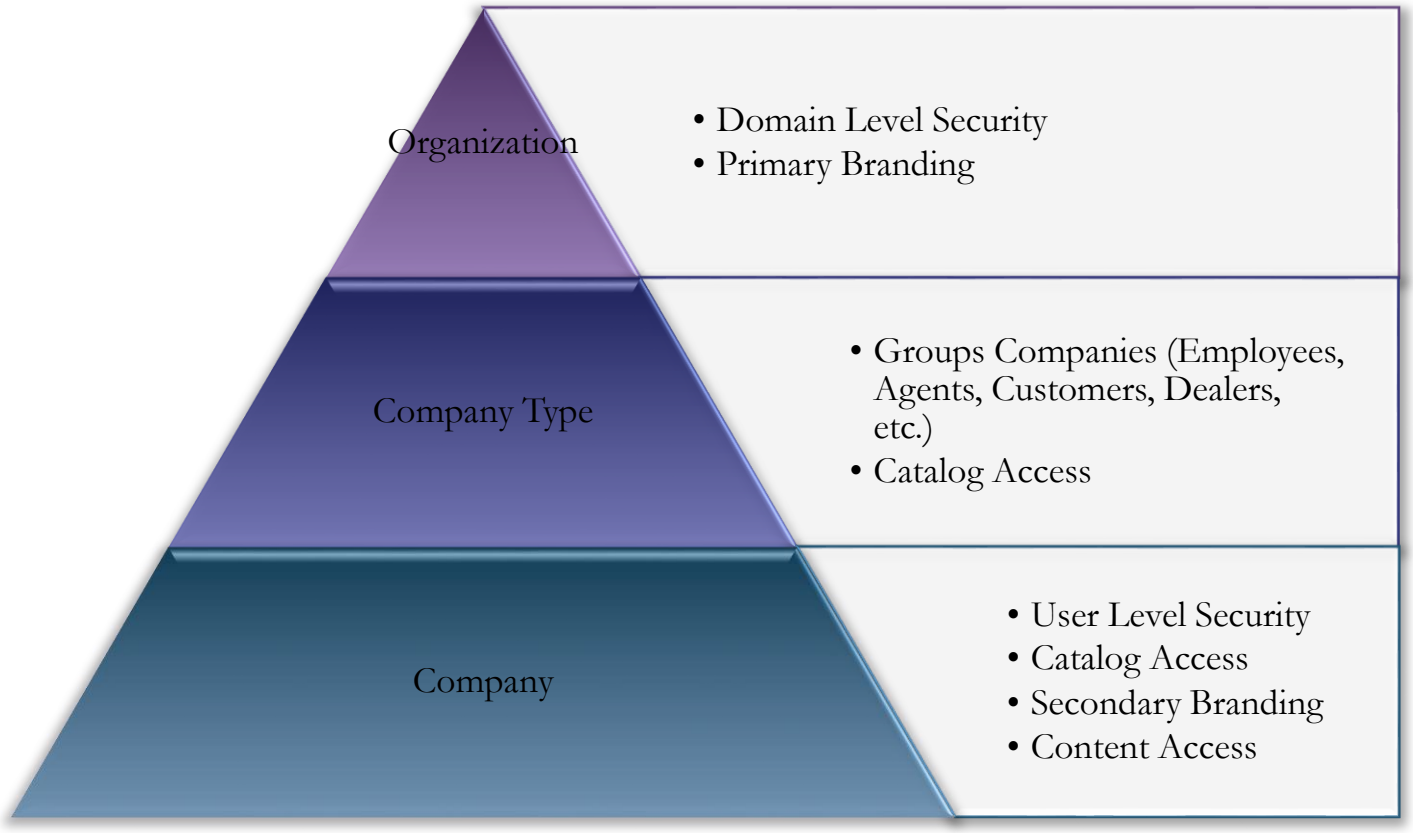
The KMxLive Instructor Console 98
15.5.1 Use of Content, Exams and Surveys during Presentation 98
15.5.2 Full Screen Video Controls 98
15.5.3 Content "Push" Controls 98
15.5.4 Survey/Exam Results Sharing Controls 99
16 KMxMobile 100
16.1 Test/Survey Navigation 101
16.2 Course Navigation 102
16.3 Device Specific Video Content Behavior 102
16.4 SCORM Run-Time Environment 102
17 Web Services 102
17.1 Catalog web service 102
17.2 Company web service 102
17.3 Course Finder web service 102
17.4 Enrollment Web Service 103
18 Integration and Session Security Management 104
18.1 Single Encrypted Session Variable 104
18.2 Single Sign-on 104
19 Student Workstation Testing 105
20 Using the KMx V10 WYSWYG HTML Editing Tools to Create Course Content 106

1 Introduction

KMx was designed to enable client organizations to reduce costs attributable to development, delivery and maintenance of training and documentation. The performance based architecture provides employees/users targeted training, documentation and performance support. KMx will create an Enterprise Knowledge Repository within your Organization designed using a learning and performance support paradigm to maximize potential uses of the content while minimizing the development effort. KMx can significantly reduce the number of applications required to provide an Enterprise Learning, Performance and Talent Management solution.

1.1 Site Hierarchy

The highest level in the KMx hierarchy is a site. A site is an installation of the KMx application and associated utilities in either the customer data center or in a KMSI provided data center. A site has at least 1 "Organization" that is designated for receipt of system updates as the baseline configuration for all other "Organizations" on the site. Refer to the figure below for an illustration of the KMx Site Hierarchy.



1.2 Organizations

Organizations are the highest operational entities within a KMx site installation. Most KMx clients operate with a single KMx Organization. Some KMx Enterprise clients have multiple Organizations to provide complete segregation of users, content and record keeping. The decision to launch multiple Organizations is normally based on legal and regulatory agency

requirements. All KMxASP clients operate within a single Organization. Primary security and the default branding of a KMx Site installation is controlled at the Organization level.

1.3 Companies and Company Types

Companies are a logical subdivision of an Organization. Companies are normally used to segregate user populations (stores, affiliates, subsidiaries, etc.). Each company can have unique branding, style sheets, catalogs, class schedules and other elements. Personnel are assigned to companies and their company affiliation determines their ability to access Organization offerings. A Member (person) can only be associated with one company at a time. Company types are used to group Companies (All Dealers, All Franchises, All Stores, etc.). Catalog, class and other elements that can be restricted to a Company can also be restricted to a Company Type for ease of administration.

1.4 Language Types and Email Templates

KMx incorporates a unique technology known as "Language Packs" to enable clients to provide user interfaces in multiple languages and multiple variants of a single language within an Organization. There are currently 12 base language packs as follows:

1. English
2. French
3. Spanish
4. Portuguese
5. Italian
6. German
7. Korean
8. Chinese
9. Japanese
10. Russian
11. Dutch
12. Polish

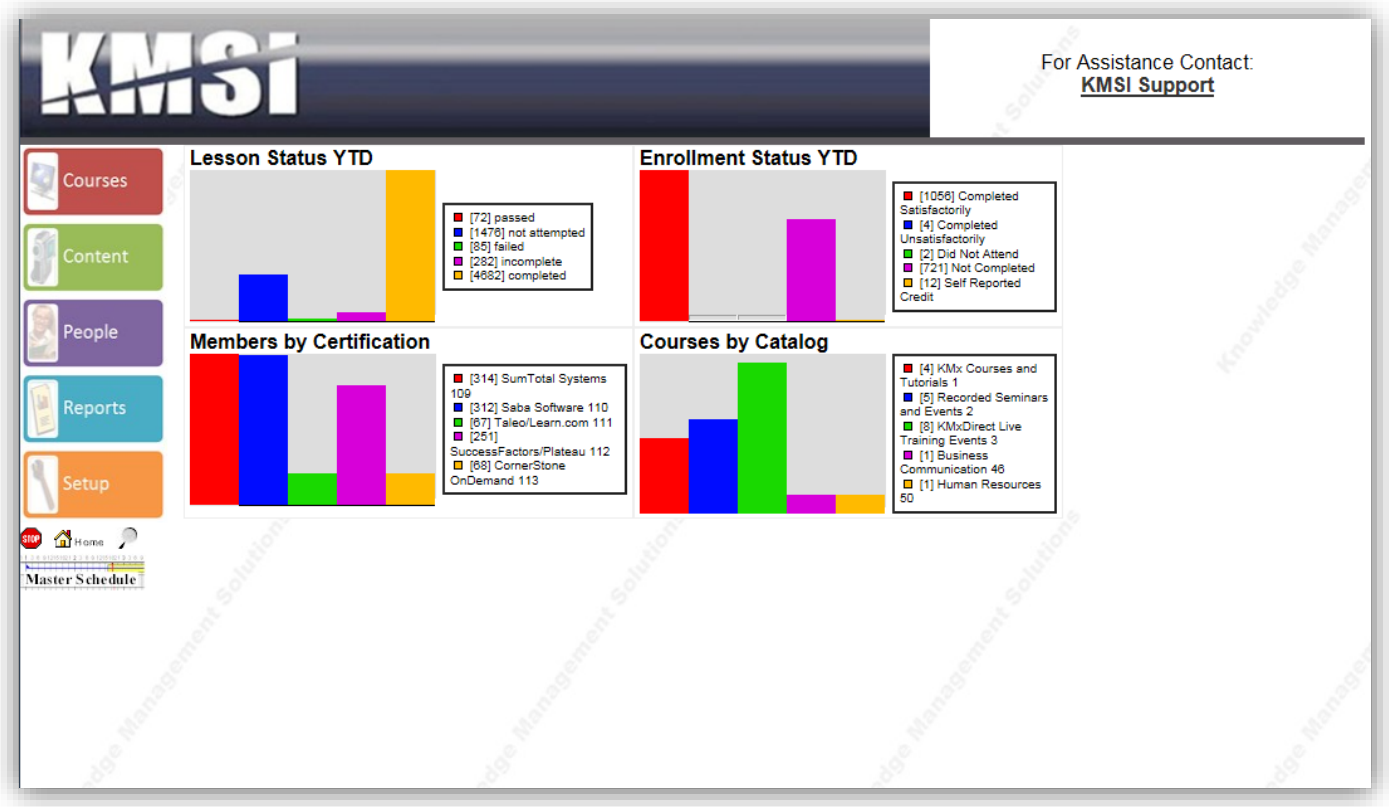
At the request of customers, KMSI has commissioned new language packs for localized variants of the above languages and also for languages not maintained in our base selection. A language pack consists of roughly 500 phrases and icons that are displayed on the user interfaces. Each of the phrases and icons can be changed by the client by submission of a language pack revision to KMSI support. The packs are provided to clients in an Excel spreadsheet format for easy editing and maintenance. Language packs also include a series of client customizable Email Templates that are used for user notifications, confirmations, reminders and other site email correspondence. Email template modification and maintenance is more thoroughly covered in the System Administration chapter.

2 KMx Developer/Administrator Interface

The KMx application architecture is divided into two distinct applications:

- The Developer/Administrator Interface
- The Student/Instructor/Supervisor Interface

This division enables developers and administrators with easy access to the KMx data system using a highly dynamic, form driven user interface. Students and instructors are presented with a much simpler user interface that enables interaction with the data in the KMx data system to accomplish registration, conduct and recording of training functions.



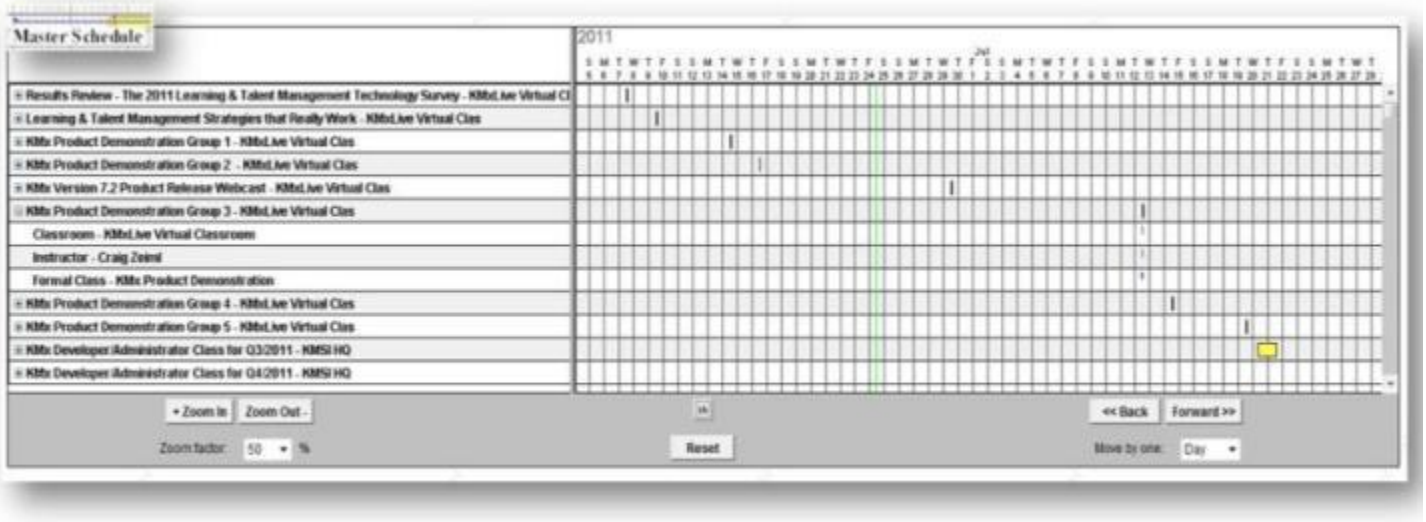
The KMx developer/administrator interface is arranged into 5 tabs organized by function. The five tabs are grouped along the left side of the KMx developer/administrator interface in an area called the sidebar.

These tabs organize primary KMx functions as follows:

- Courses and Classes
- Content, Exams and SCORM Import Utilities
- People, Labor Categories and Certifications
- Reports and Report/Graph Creation
- Setup and System Administration

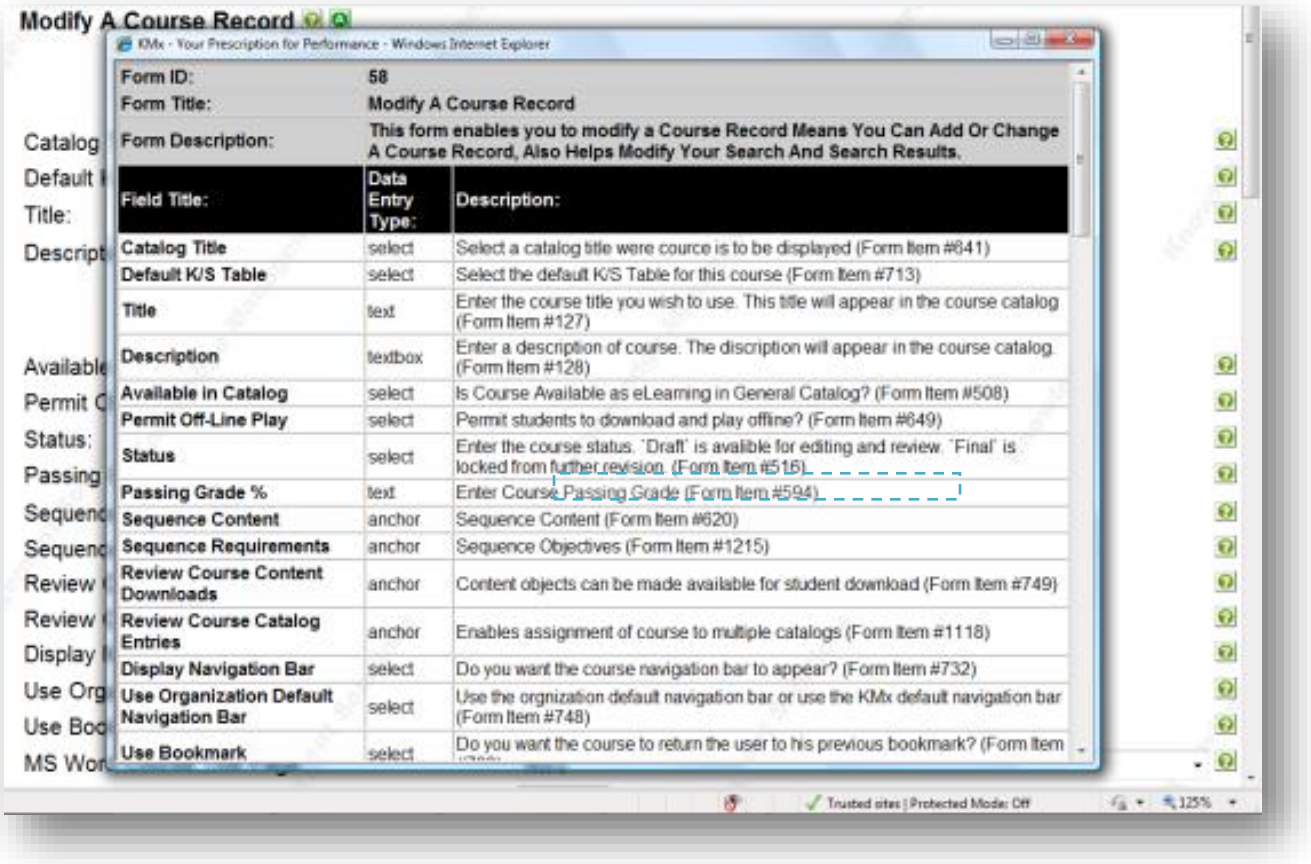
In addition to the 5 tabs, the KMx sidebar also provides the following options:

- Stop – to logoff
- Home – returns the user to the main option screen
- Search – enables the user to search the content management system
- Master Schedule – provides a Gantt chart of all organization classes, activities and scheduled utilization of resources



2.1 Help information

In addition to the help icons available on each data entry field and dropdown on the administrative interface, KMx includes help icons at the top of each form. These icons provide a description of the forms purpose and use on hover-over and provide a popup reference for all possible entries on click.



2.2 Basic/Advanced Features Toggle

KMx includes a Basic/Advanced Features toggle that enables the administrator to "hide/display" advanced form settings. The small orange "A" icon at the top of each form can be clicked to put the entire administrative interface into either Basic (orange) or Advanced (green) mode. Once a mode is selected, the interface will continue in that mode unless the icon is clicked to toggle the mode. In the Basic mode, all advanced options will appear as grey (see below) options that cannot be changed unless the mode is toggled. This toggle is designed to assist new developers and administrators focus on the important or "basic" elements of a form before experimenting with more advanced features.

2.3 Required and Maximum Form Entries

All KMx Administrative Forms ensure that "Required" data entry fields are clearly indicated with a green background when the form is displayed. Green fields must be completed in order for the record to be saved. Required field backgrounds will turn white once data entry in the field has commenced.

Should a required entry not be completed, the user will receive a warning if the user attempts to save the record in an incomplete state. This warning will also return the background color of the required entries to green to make it easy to identify which field(s) still requires an entry.

Field background colors will change to yellow if the current entry exceeds 85% of the field's length and red when the entry is at the maximum field length.

2.4 Logoff, Home and Search Icons

Directly beneath the Function Tabs, there are three icons. These icons are selectable from any screen on the KMx Developer/Administrator interface.

2.4.1 Logoff

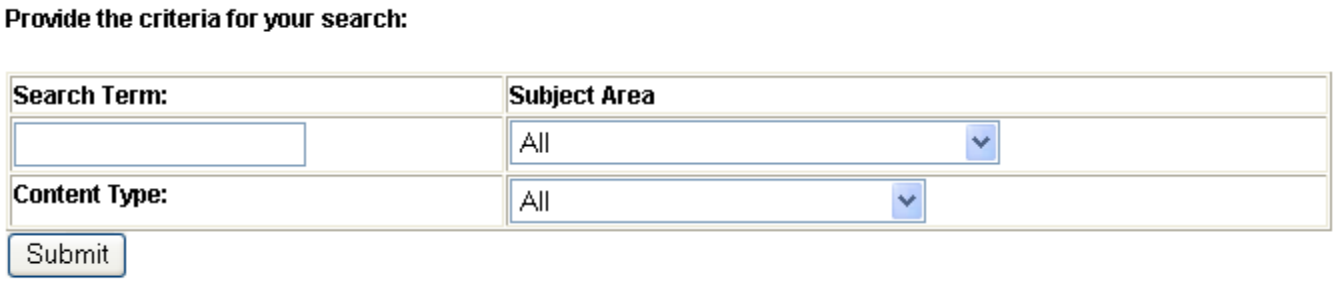
This stop sign icon enables the developer/administrator to terminate the security session with the KMx servers. It should be used to logoff (vice closing the browser). Selection of this icon clears all security tokens and ensures that a complete login cycle will need to be completed to access the Developer/Administrator interface.

2.4.2 Home

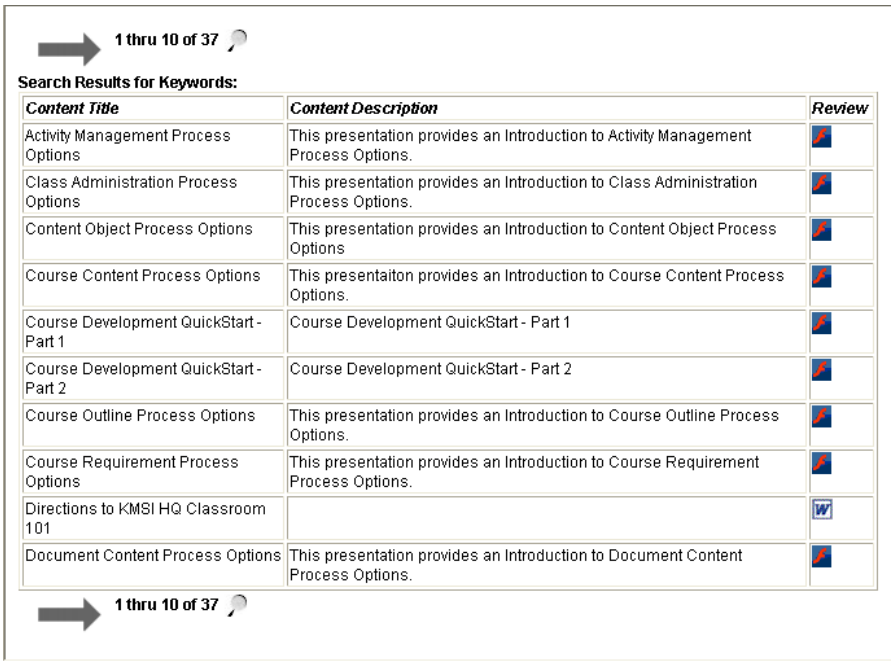
This house icon enables the developer/administrator to return to the main menu from any process option or form and terminates any AutoGen wizard in process. If selected from a form, all data entry since the last record save or refresh cycle will be abandoned.

2.4.3 The Search Icon and Search Content Form

All content items with the exception of exams can be retrieved using the search content form.



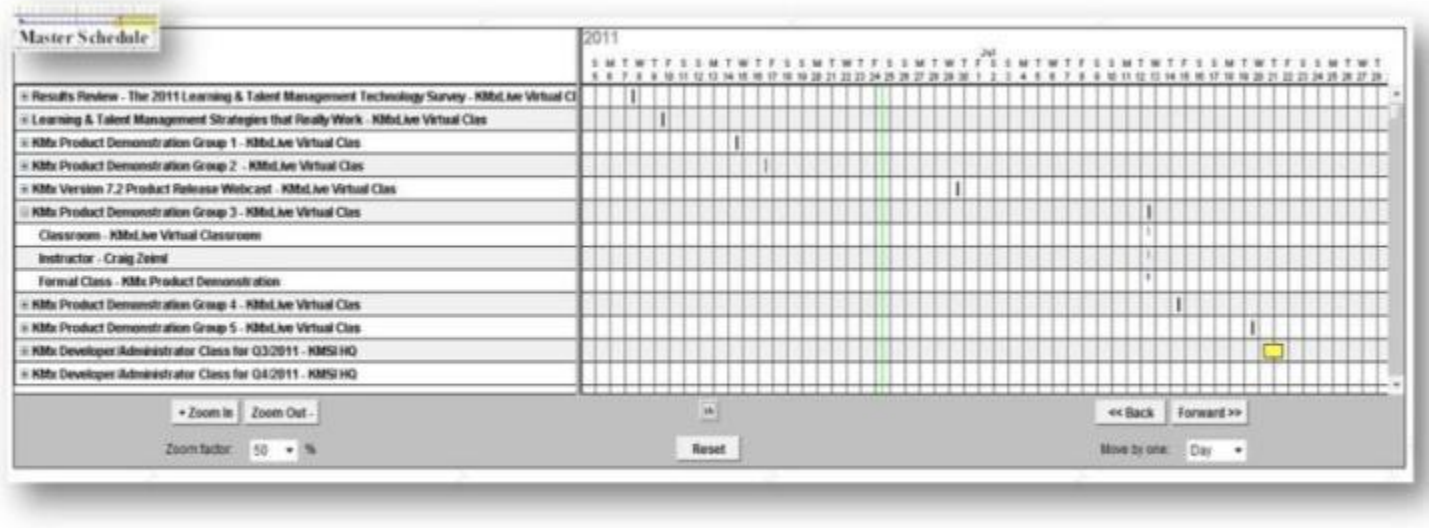
Search results are depicted below:



Selecting Review will open the content record selected up for preview. This feature is useful when developing a course or a document and the need to determine the availability of a content item is required.

2.5 Master Class, Resource and Activity Schedule

The master schedule provides an illustrated view of all Classes and Activities. It is designed to provide a project management tool that allows direct access to the Class and Activities record system.



As depicted above, the Organization Master Schedule provides a tool for review of all scheduled classes and associated activities. This tool provides advanced scrolling and zoom features to enable the administrator to view various time periods and open or close class objects. The reset button will center the graph on the current day in the default time period view. The Master Class/Activity/Resource Schedule will load with a collapsed tree of displayed classes and dependant items (resources and activities). This approach makes it easier for clients with hundreds or even thousands of upcoming scheduled classes to view and find information about a particular class. This approach also provides a view more suitable for printing.

2.6 Forms

KMx data entry forms are generated by the KMx data system. This approach simplifies maintenance and modification of forms and form items. The button selections at the bottom of each form perform the following:

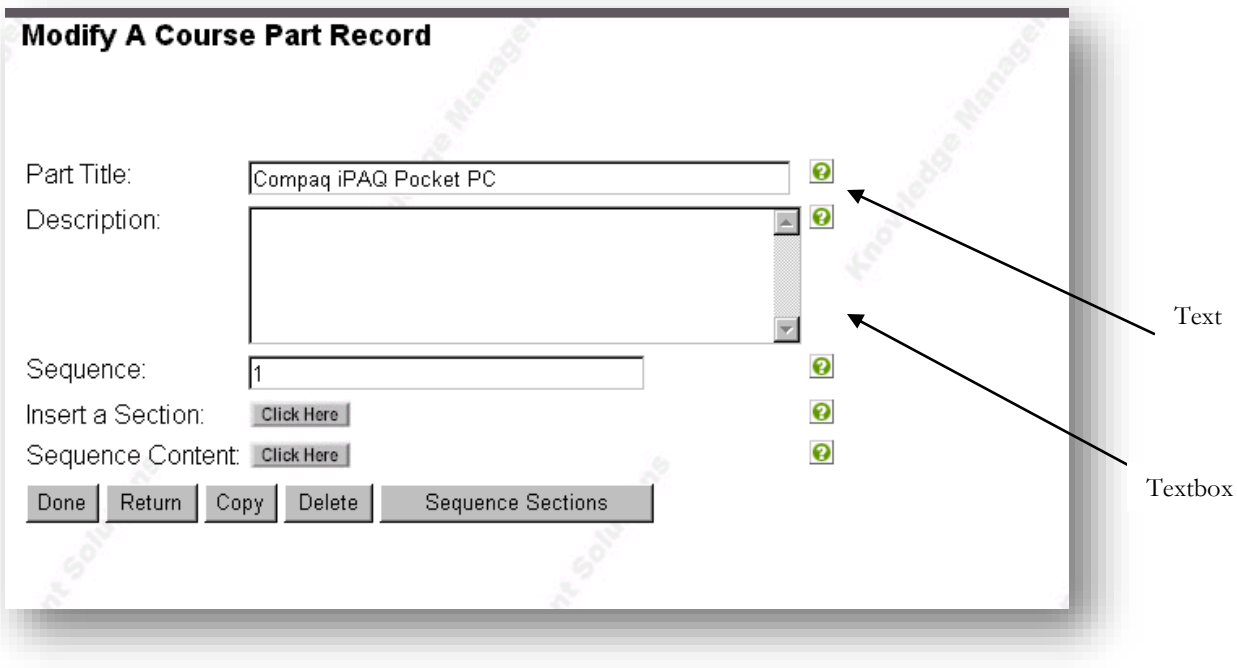
Form Button	Button Function
Done	Saves the record and returns the user to the Main Menu
Return	Saves the record and returns the user to the previous Form
Copy	Creates a duplicate of the record for immediate editing
Delete	Deletes the record and returns to the previous menu option
Refresh	Saves the record and updates any relationships to other records in the data system
Sequence	Enables sequencing of the selected information

2.7 Basic Form Items

There are several types of basic form items, each with a special function as described in the following table:

Form Item Types	Form Item Function
Display	Displays text information, but does not permit changes
Text	Displays text information and allows changes
Text Box	Displays lengthy text information and allows changes
Select	Display drop-down lists for element selection
Anchor	Displays "Click Here" button to launch editorial popup windows
Date	Display date information for editing

The ? icon to the right of each form item provides additional information regarding by hovering the curser over it. If MS Agent is enabled (see Review Member Information) the ? icon will launch the MS Agent help genie.



2.8 Advanced Form Items

In addition to the standard form item controls, KMx includes a number of advanced form item elements that are used for specialized data entry and display of information on a form.

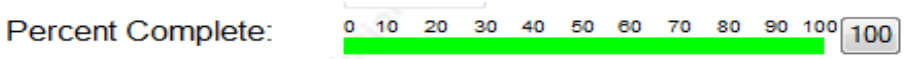
2.8.1 Slide Control

The Form Slide Control was created to enable easier entry of fixed range numeric values. To change a value on a form using the slide control, simply drag the blue slide element to the desired value. If the value button is highlighted (not grey), then

further information is available about the element by clicking on the value button. The following is an example of a Slide Control Form Item:

2.8.2 Indicator Control

The Form Indicator Control was created to provide a graphical display of progress or completion percentage information on a Form. The control does not allow the value displayed to be changed. If the value button is highlighted (not grey), then further information is available about the element by clicking on the value button. The following is an example of an Indicator Control Form Item:



2.8.3 Filter Control

The need for Forms to filter items to enable ease of selection has been an element of KMx Forms since our initial release. Most form filters are K/S Table dropdown lists that enable other form elements to be selected based on the K/S Table selected. Another example of the use of a Filter Control is the use of personnel classifications to limit the number of users on a dropdown list to only those users in the selected classification. The addition of the Filter Control icon to the Form elements that are performing filter functions was designed to make it easier for developers and administrator to know which Form elements were performing filter functions.

2.8.4 Auto Refresh Control

Numerous forms contain options that are so extensive that they require the ability to refresh based on selections within the form. If a form item is designated as a key form element that controls other selection and/or options on the form, the Auto Refresh Control indicator will be displayed to indicate these items. An example of this element is the ecommerce options on the Course record. If ecommerce is disabled for the course, then there is no need to display the various pricing, coupon, and payment options. This approach simplifies the administrative data entry on the form and ensures that interlocked elements cannot be selected to create a conflict. Changes to a form item with this indicator will cause the form to reload with revised selections based on the change(s) to the Auto Refresh Control Element.

2.9 Multi-Selection with Sorting Control

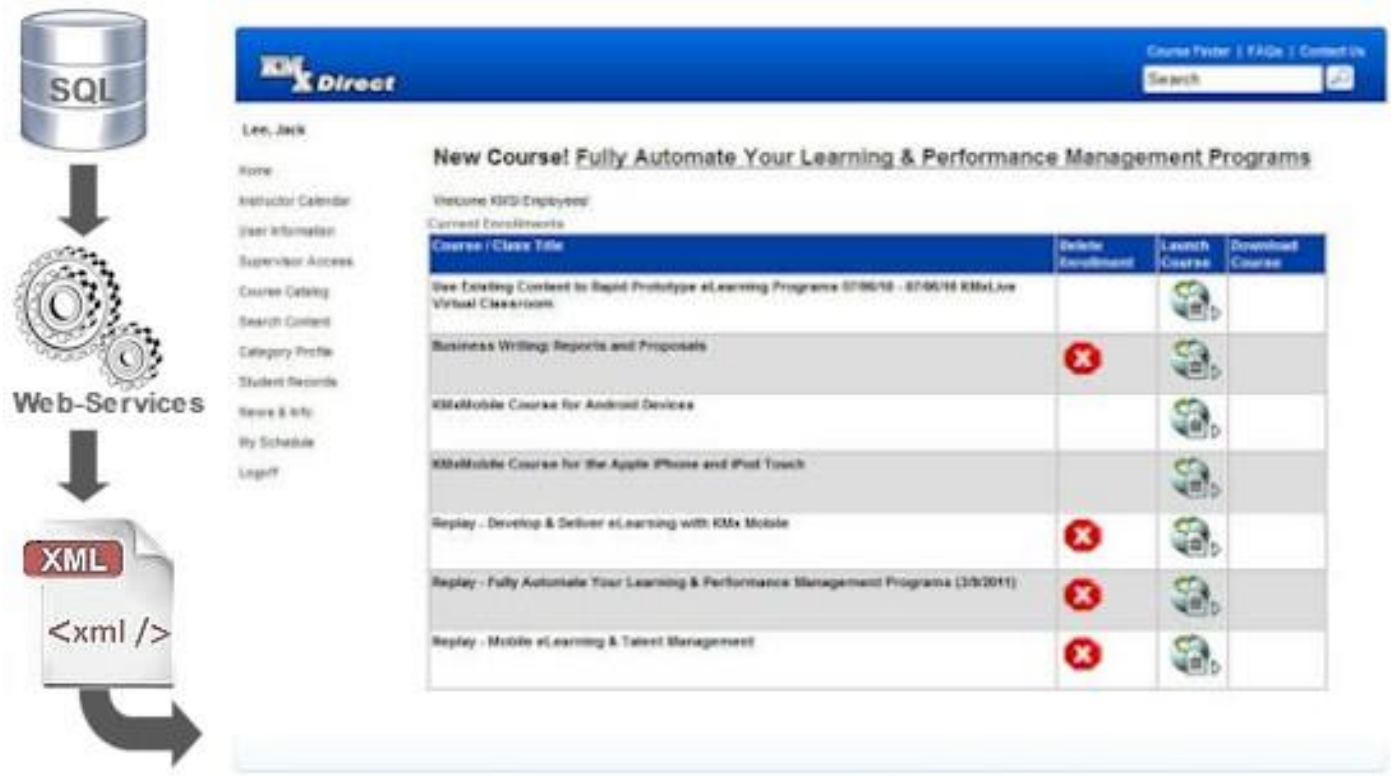
Numerous forms contain drop-down selection lists that enable more than one selection. For a long list of items this can make the selection process difficult because the administrator may have to scroll to select all of the elements required and not be able to see on one screen all of the elements that have been selected. An example is the list of courses that are prerequisite requirements for another course. In order to simplify this process, we have added the Multi-Select with Sorting Control. To use this control, simply select the items from the dropdown and then press the icon to sort the list to indicate the selected items and unselected items. You can use the CTRL Key to select additional items without resetting the items already selected. You can use the SHIFT key to select a range of items.

2.10 Drop-Down Control Key Seeking

Many users familiar with standard browser drop-down controls and used to being able to press a key on their keyboard to automatically seek the first item in the drop–down that begins with the keyed character. In KMx, all drop-down items are numbered to make identification of elements easier. This numbering approach makes the use of the keyboard to seek the first element impractical (since the first character in a KMx administrative drop-down is always a number). In order to enable both the identification numbering and the ability to use the keyboard to seek to the first keyed item in a dropdown, KMx V8 incorporates a revision that allows both approaches to co-exist in a dropdown. This capability does not extend to Auto-Refresh Controls or to Filter Controls, both of which would refresh the form based on a change in selection by the administrator.

3 KMx Student, Instructor, Supervisor Interface

The KMx user interface was designed for easy customization and branding and is available with language packs to provide for localization and multilingual distribution. The interfaces are also supported by a complete web-services kit for Intranet or a custom portal integration.



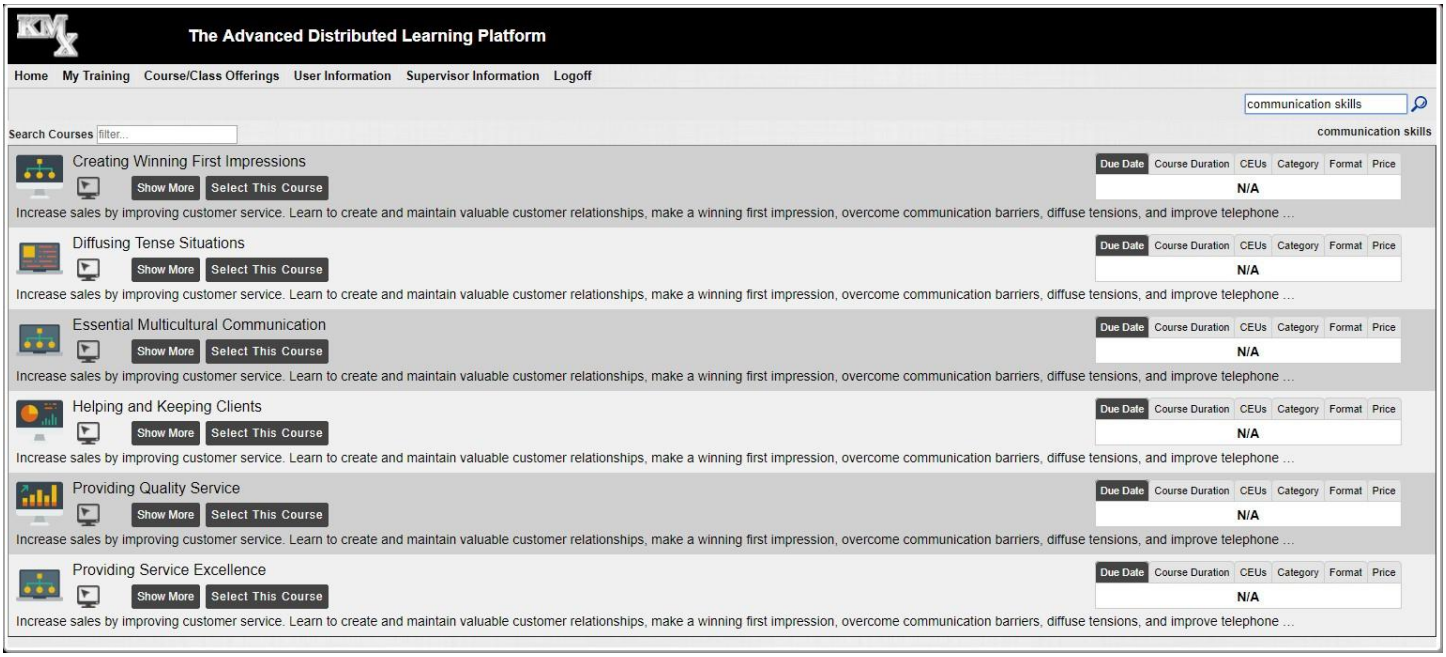
KMx provides a default Student/Instructor/Supervisor interface kit that is based on the Web 2.0 methodology. This approach presents a clean and user friendly interface for end-users and is easily branded with client custom graphics and style sheets. For an example of the default interface kit, please visit www.KMxDirect.com.

3.1 Course/Class Search

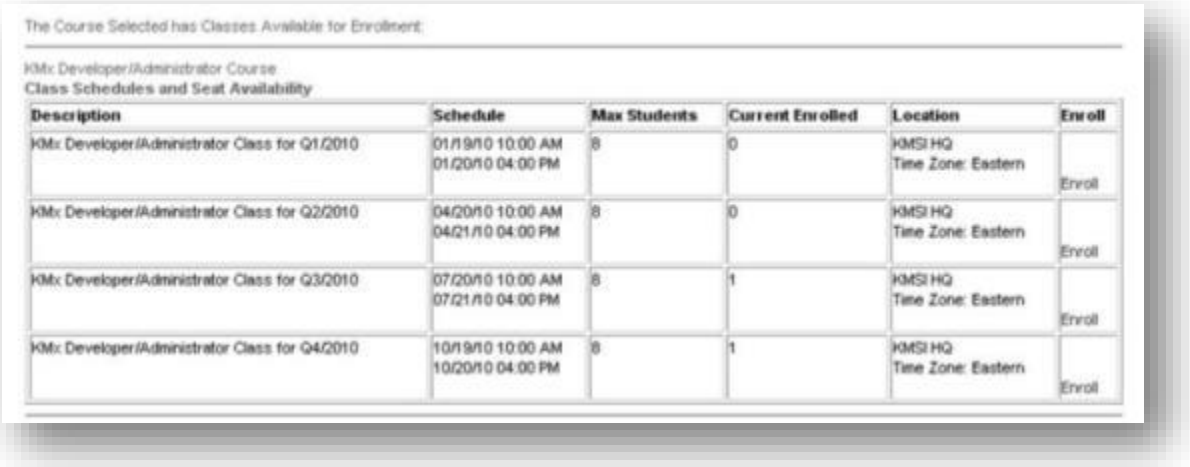
Most clients include a simple search box (usually in the site header) that provides access to the Advanced Course/Class Search features if the desired course/class is not found using a simple search or to restrict the search output to more relevant courses/classes.

3.2 Catalogs

KMx provides numerous catalog options, including the ability to restrict catalogs to a user's company, personnel category, and company type. Catalog can be nested to any number of indentured levels. Courses can be resident in one or many catalogs depending on the site configuration. See System Administration, Catalog Setup for additional information.



Courses that have scheduled class convening's will display the following information to assist the user with selection of an appropriate class:



The Course Selected has Classes Available for Enrollment:

KMx Developer/Administrator Course
Class Schedules and Seat Availability

Description	Schedule	Max Students	Current Enrolled	Location	Enroll
KMx Developer/Administrator Class for Q1/2010	01/19/10 10:00 AM 01/20/10 04:00 PM	8	0	KMSI HQ Time Zone: Eastern	Enroll
KMx Developer/Administrator Class for Q2/2010	04/20/10 10:00 AM 04/21/10 04:00 PM	8	0	KMSI HQ Time Zone: Eastern	Enroll
KMx Developer/Administrator Class for Q3/2010	07/20/10 10:00 AM 07/21/10 04:00 PM	8	1	KMSI HQ Time Zone: Eastern	Enroll
KMx Developer/Administrator Class for Q4/2010	10/19/10 10:00 AM 10/20/10 04:00 PM	8	1	KMSI HQ Time Zone: Eastern	Enroll

All enrollment selections can require supervisor approval based on course setup (see Course Record Options). Classes can be further restricted to companies or company types (see Site Hierarchy description above).

3.3 Event Calendar

The Event Calendar provides a calendar of upcoming training events and seminars restricted using the catalog assignment logic (see Catalogs, under System Administration). Use the month-to-month navigation links at the bottom of the calendar to review and enroll in upcoming events.

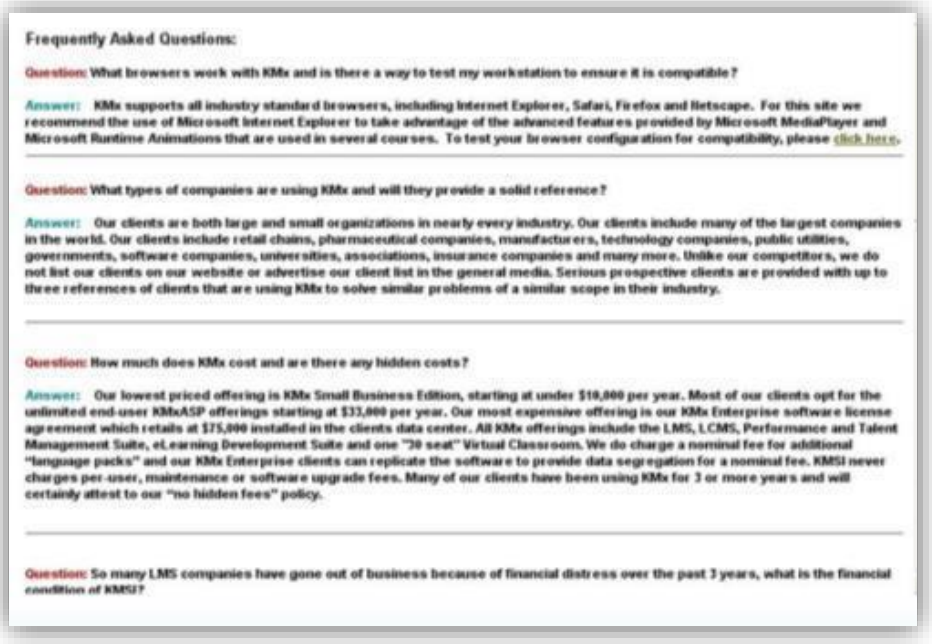
Schedule of Events

January 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

3.4 FAQs and Help Screens

Most clients develop an FAQ to provide users with answers to frequently asked questions related to the site.



Frequently Asked Questions:

Question: What browsers work with KMx and is there a way to test my workstation to ensure it is compatible?

Answer: KMx supports all industry standard browsers, including Internet Explorer, Safari, Firefox and Netscape. For this site we recommend the use of Microsoft Internet Explorer to take advantage of the advanced features provided by Microsoft MediaPlayer and Microsoft Runtime Animations that are used in several courses. To test your browser configuration for compatibility, please click here.

Question: What types of companies are using KMx and will they provide a solid reference?

Answer: Our clients are both large and small organizations in nearly every industry. Our clients include many of the largest companies in the world. Our clients include retail chains, pharmaceutical companies, manufacturers, technology companies, public utilities, governments, software companies, universities, associations, insurance companies and many more. Unlike our competitors, we do not list our clients on our website or advertise our client list in the general media. Serious prospective clients are provided with up to three references of clients that are using KMx to solve similar problems of a similar scope in their industry.

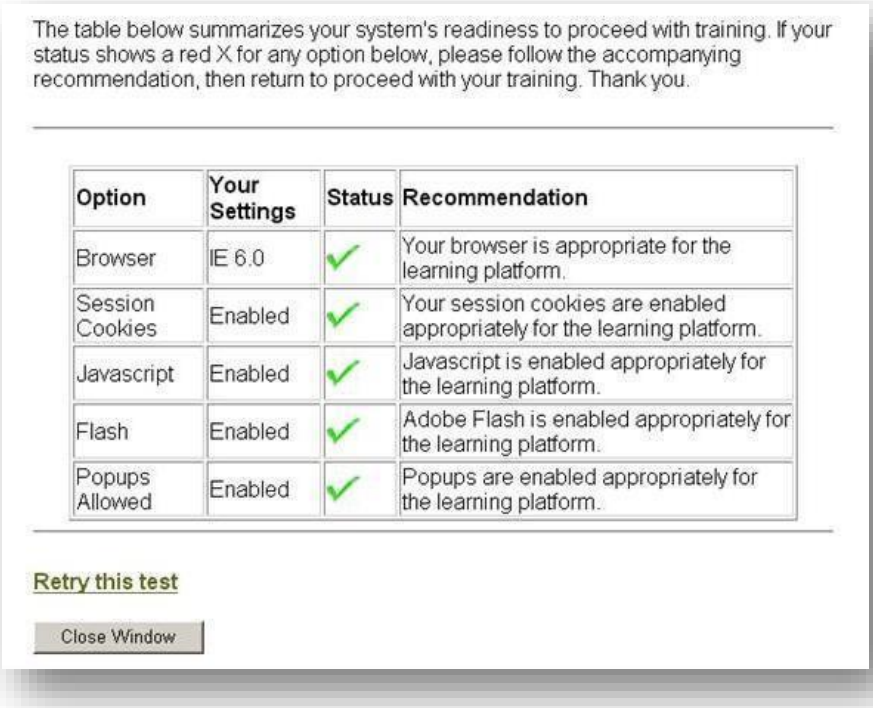
Question: How much does KMx cost and are there any hidden costs?

Answer: Our lowest priced offering is KMx Small Business Edition, starting at under $10,000 per year. Most of our clients opt for the unlimited end-user KMxASP offerings starting at $33,000 per year. Our most expensive offering is our KMx Enterprise software license agreement which retails at $75,000 installed in the clients data center. All KMx offerings include the LMS, LCMS, Performance and Talent Management Suite, eLearning Development Suite and one "20 seat" Virtual Classroom. We do charge a nominal fee for additional "language packs" and our KMx Enterprise clients can replicate the software to provide data segregation for a nominal fee. KMSI never charges per-user, maintenance or software upgrade fees. Many of our clients have been using KMx for 3 or more years and will certainly attest to our "no hidden fees" policy.

Question: So many LMS companies have gone out of business because of financial distress over the past 3 years, what is the financial condition of KMSI?

3.5 Browser Test Tools

KMSI offers our hosted clients with access to BrowserHawk user diagnostics to enable customers to ensure that their user's browser is ready for use with the site.



The table below summarizes your system's readiness to proceed with training. If your status shows a red X for any option below, please follow the accompanying recommendation, then return to proceed with your training. Thank you.

Option	Your Settings	Status	Recommendation
Browser	IE 6.0	✓	Your browser is appropriate for the learning platform.
Session Cookies	Enabled	✓	Your session cookies are enabled appropriately for the learning platform.
Javascript	Enabled	✓	Javascript is enabled appropriately for the learning platform.
Flash	Enabled	✓	Adobe Flash is enabled appropriately for the learning platform.
Popups Allowed	Enabled	✓	Popups are enabled appropriately for the learning platform.

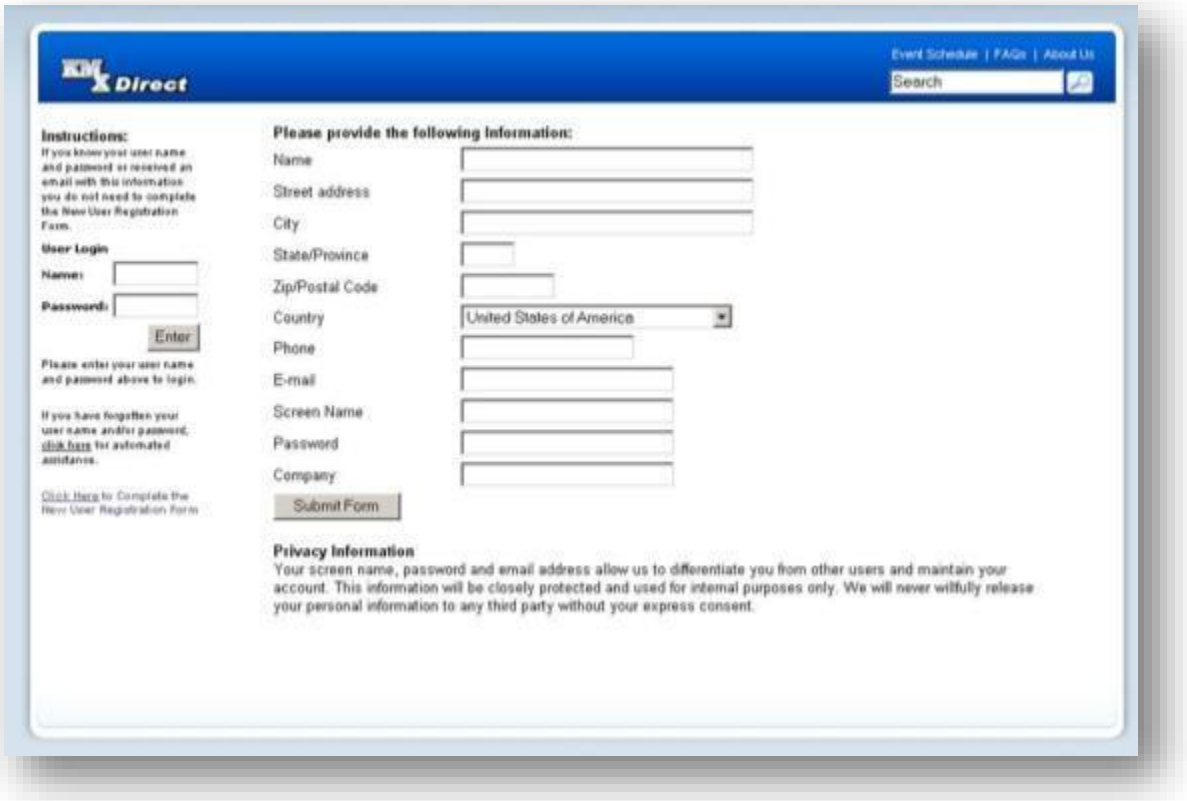
Retry this test

Close Window

While KMx has no browser, plug-in or user operating restrictions, many customers incorporate technologies such as Adobe Flash into their learning content. Providing the BrowserHawk test tool to ensure that users have the required plug-ins (like Adobe Flash) can significantly reduce the customer service issues experience by end-users.

3.6 User Registration

Clients that allow for user self-registration will offer a registration form (usually designed during site setup) to capture the information required to provide the user with site access and provide a mechanism for creation of the users login name (screen name) and password.

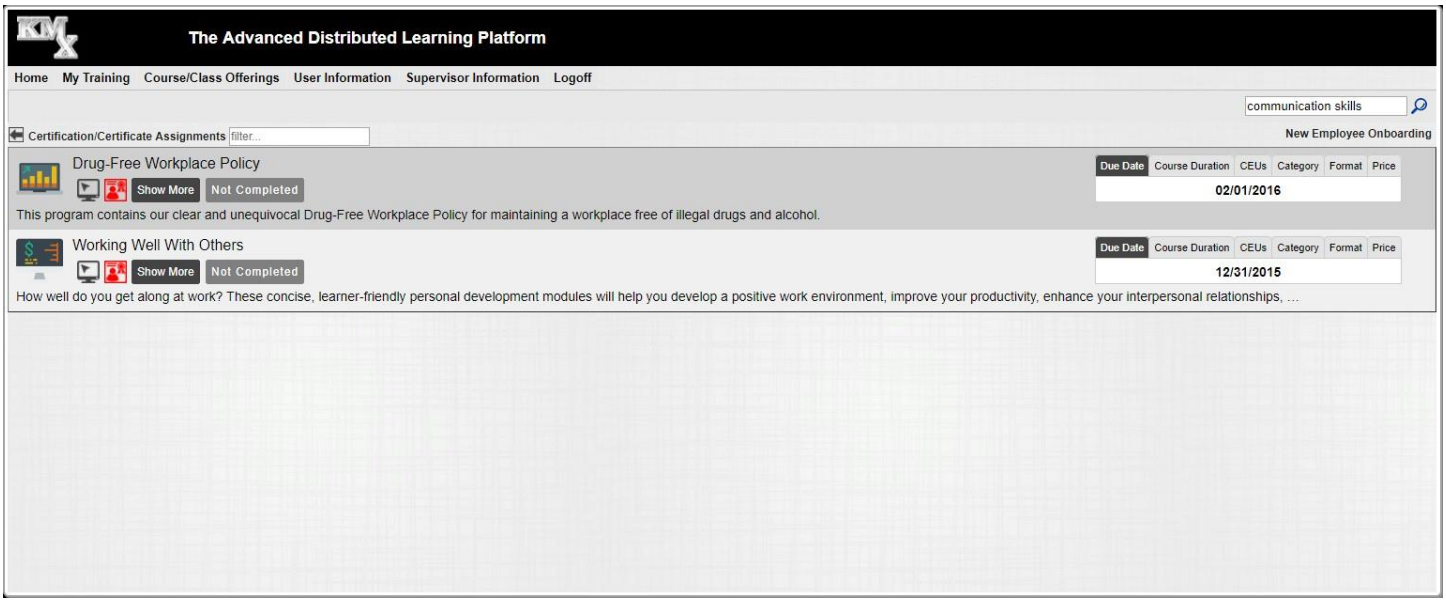


3.7 Lost Password Utility

Sites that provide for user login (instead of requiring access via a single sign-on method) normally provide the user with the ability to retrieve their password via email.

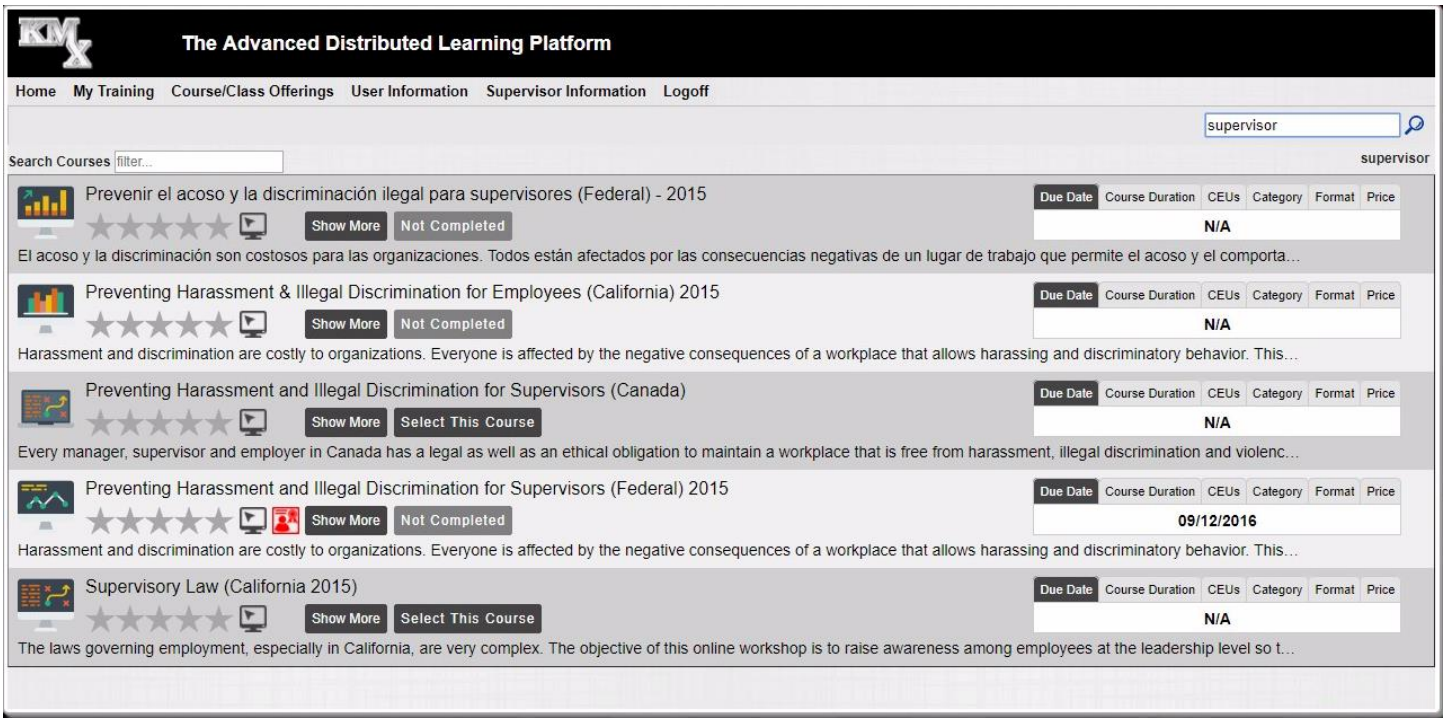
3.8 Category Profile

Personnel classifications and certifications can provide training assignments for designated users. The category profile provides a summary of the user assignments and enables the user to enroll in courses/classes required to complete their assignments.



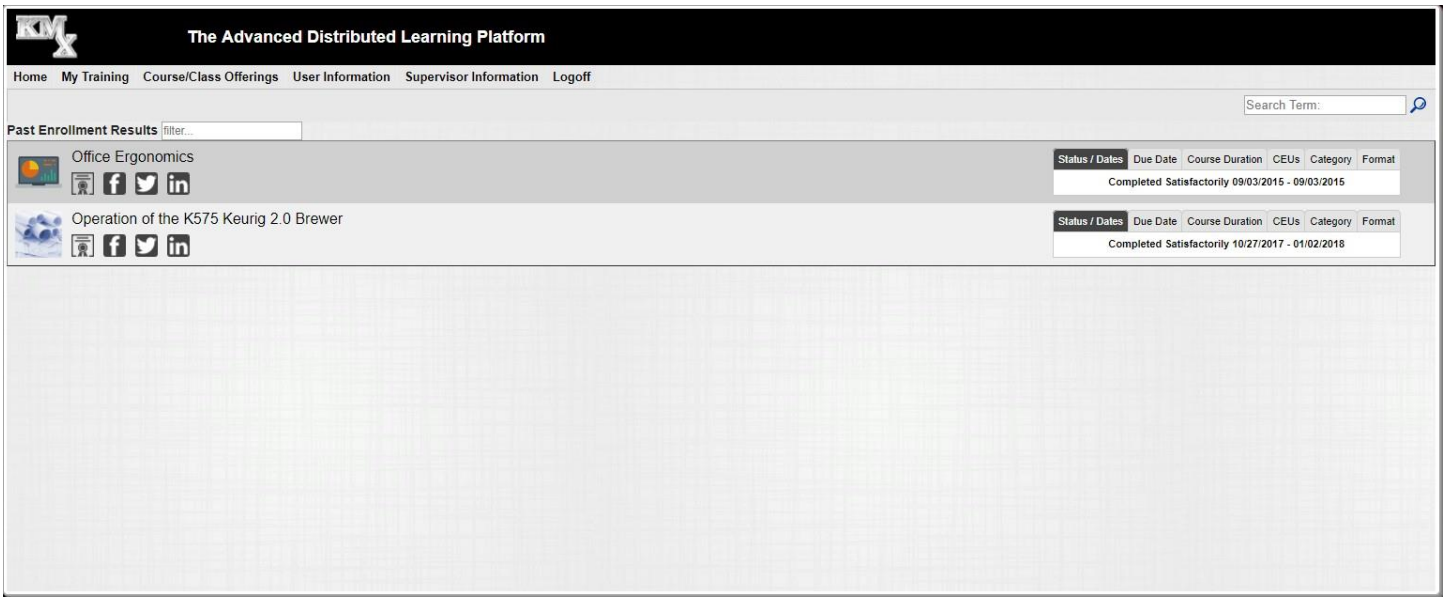
3.9 Current Enrollments

The current enrollments page (normally set as the initial student home page) provides the user with access to courses and classes where a current (not completed) enrollment has been established. The user can launch eLearning courses, download courses for offline review, review their grades and other options (see Review Organization Information under System Administration).



3.10 Student Records (Transcript)

The Student Records page provides the user with a complete transcript of completed courses/classes/ The page also provides the user with the ability to produce a certificate of completion, access to grade book information and the ability to review content from completed courses (not for credit).



3.10.1 Student History Page Options

KMx includes the ability for the administrator to turn off the Launch Course, Student History and Grades, and the Download Course columns on the Student History page. Configuration of these items is controlled using the Review Organization Information option under the Setup main menu option.

3.10.2 Certificates of Completion

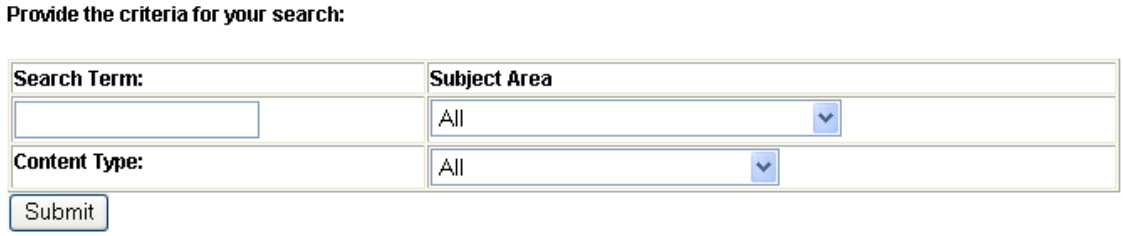
During site setup, most clients design a custom certificate of completion format to be used to award certificates to users from the Student Record page. The certificate is a simple HTML page that is dynamically populated with user and enrollment information.

3.11 Student Activity Calendar

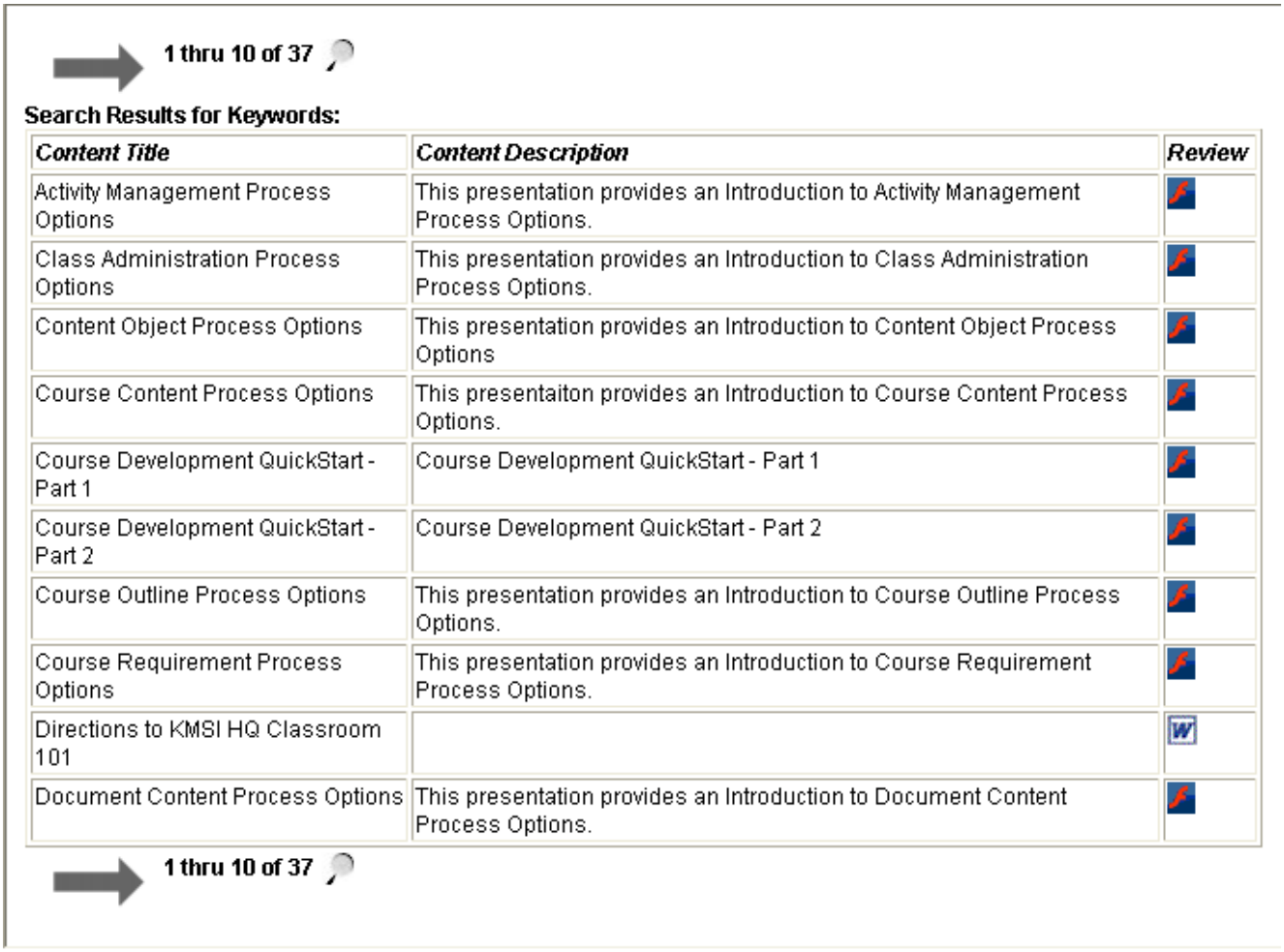
Client that leverage KMxLive and/or use Class Activities to schedule events associated with a class normally provide the user with either a My Schedule link that displays a personalized user activity calendar. The Student Activity Calendar provides links to access content and/or retrieves additional information regarding a scheduled activity. Configuration of these items is controlled using the Review Organization Information option under the Setup main menu option.

3.12 Student Content Search (Just-in-Time Training)

Many clients organize their content into libraries using the K/S Table architecture. Content items that are useful for just-in-time training or other performance support can be searched using the Student Search feature. Configuration of these items is controlled using the Review Organization Information option under the Setup main menu option. All content items with the exception of exams can be retrieved using the search content form.



Search results are depicted below:



1 thru 10 of 37

Search Results for Keywords:

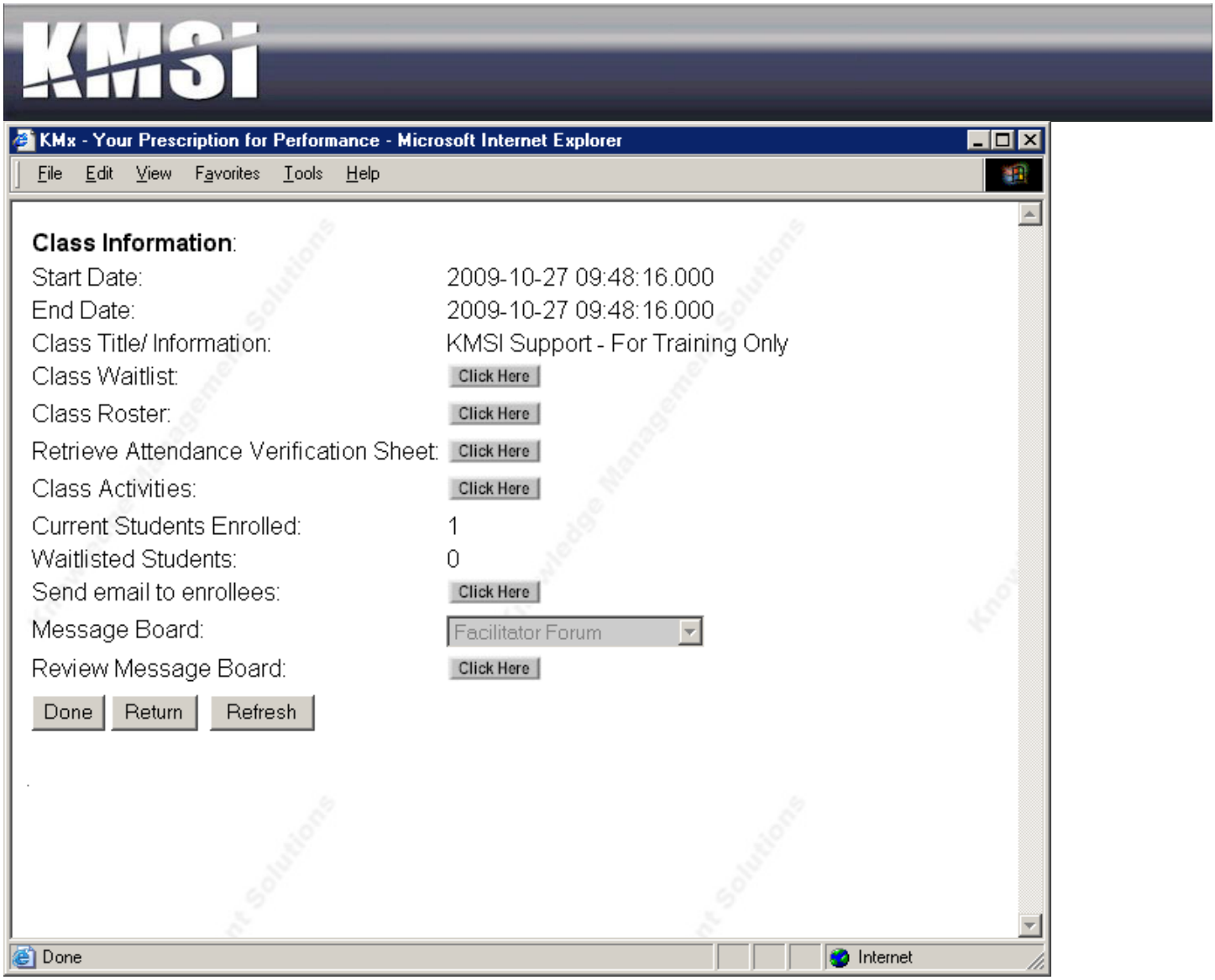
Content Title	*Content Description*	*Review*
Activity Management Process Options	This presentation provides an Introduction to Activity Management Process Options.	
Class Administration Process Options	This presentation provides an Introduction to Class Administration Process Options.	
Content Object Process Options	This presentation provides an Introduction to Content Object Process Options	
Course Content Process Options	This presentaiton provides an Introduction to Course Content Process Options.	
Course Development QuickStart - Part 1	Course Development QuickStart - Part 1	
Course Development QuickStart - Part 2	Course Development QuickStart - Part 2	
Course Outline Process Options	This presentation provides an Introduction to Course Outline Process Options.	
Course Requirement Process Options	This presentation provides an Introduction to Course Requirement Process Options.	
Directions to KMSI HQ Classroom 101		
Document Content Process Options	This presentation provides an Introduction to Document Content Process Options.	

1 thru 10 of 37

Selecting Review will open the content record selected up for preview. This feature is useful when developing a course or a document and the need to determine the availability of a content item is required.

3.13 Instructor Options

The KMx security and session management system has the ability to identify an Instructor to enable clients to delegate via the Student/Instructor/Supervisor Interface, both administrative and reporting options. Please review the following screen shot for an example:



Setup of the Instructor options is normally accomplished during initial site setup; however a trained customer support representative can add or remove administrative and reporting options from the instructor access form(s).

3.14 Supervisor Options

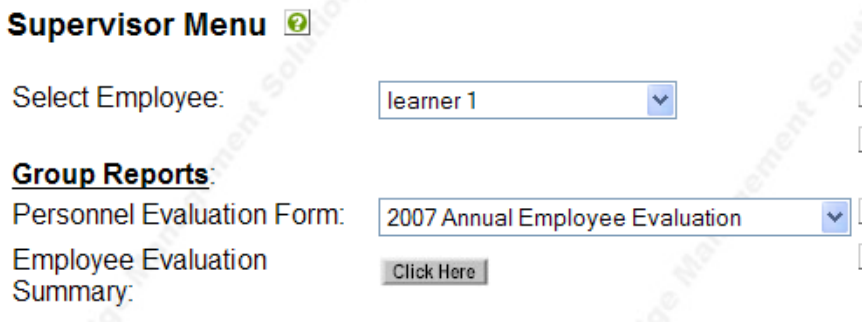
The KMx security and session management system has the ability to identify Supervisors and enable clients to delegate via the Student/Instructor/Supervisor Interface, both administrative and reporting options. The option must be enabled under System Administration, Review Organization Information (Enable Supervisor Access from Student Interface). The "Is Supervisor" option on the Member record determines if the user is provided with the Supervisor Access link upon login. The "Is Supervisor" option is set to "Yes" when an imported or synchronized user record identifies another user record as the supervisor.

There are three methods for identifying member/supervisor relationships to enable supervisor access to subordinate information:

Member Supervisor ID – Under Administer Personnel, Review a Member Record, the KMx Member ID of the current Members Supervisor can be set manually via a dropdown menu.

Supervisor Directory Services ID - During a batch user import or synchronization with a HRIS or payroll service, the Directory Services ID of the Supervisor for each user record can be provided.

Member Company Mask – A string that represents the organizational hierarchy position for each individual is calculated during a daily batch process. This string is the KMx Member ID with a dash for each user in an organization in the supervisory chain until no additional supervisor can be identified (i.e. the CEO or president.).



Setup of the Supervisor options is normally accomplished during initial site setup; however a trained customer support representative can add or remove administrative and reporting options from the Supervisor access form(s).

3.15 Company Administrator Options

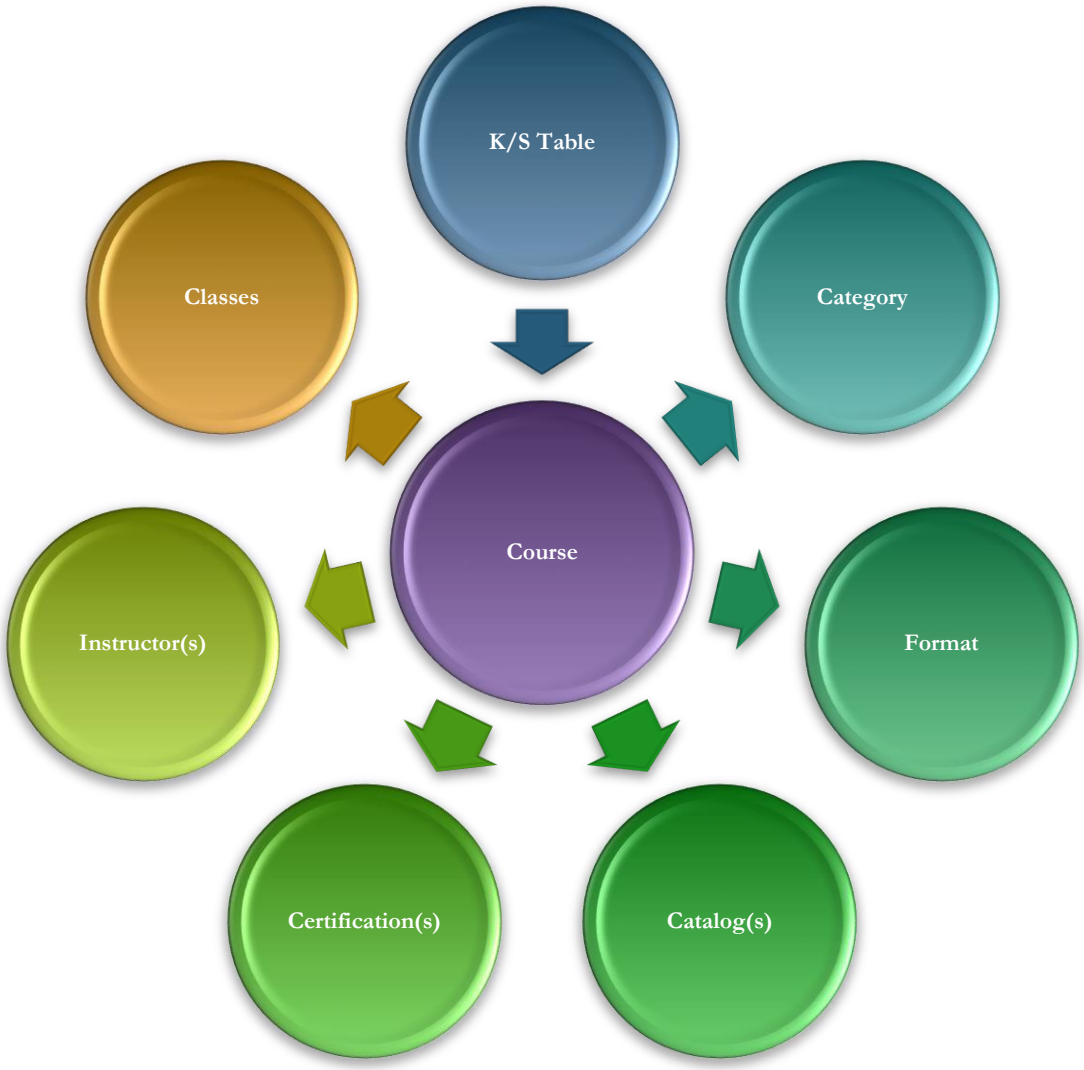
The KMx security and session management system has the ability to identify Company Administrators and enable clients to delegate via the Student/Instructor/Supervisor Interface, both administrative and reporting options. Company Administrators are assigned via System Administration, Review Member Authorization Level. A Company Administrator (Member Authorization Level #10) is able to review and administer personnel within a designated Company (see Site Hierarchy topic above). Setup of the Company Administrator option is normally accomplished during initial site setup; however a trained customer support representative can add or remove administrative and reporting options from the Company Administrator access form(s).

4 Courses

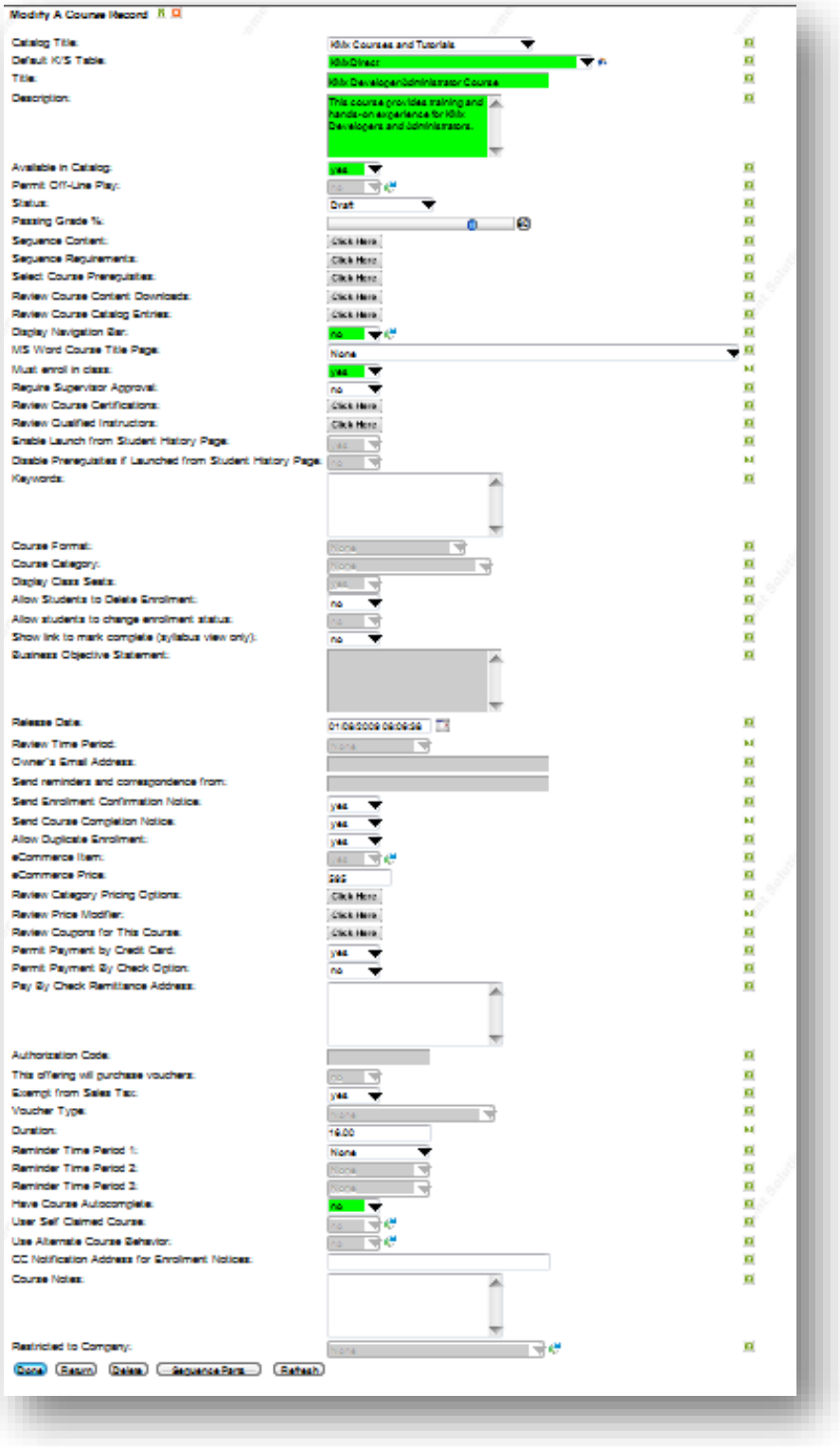
In KMx, Courses are a primary data element. Course Records provide the definition of what the course consists of, including the association of course content (lessons), eCommerce information and course execution parameters (passing score, Course AutoComplete, etc.).

4.1 Course Records

Development of a course within KMx requires the creation of a course record. The course record captures title and descriptive data as well as provides numerous options for course presentation and display options. From the main menu, select Courses to Insert a new Course Record. The Course Record provides overall course level information and meta-data for a course.



There are numerous options associated with the course record that will assist you in tailoring your offering to your students. These options include Must Enroll in Class (makes the course only available for self-registration if it is the subject of a scheduled class) and MS Word Title Page (provides a expanded description of the course for use by the course.



We suggest you try different combinations of the options provided prior to placing the course in the Course Catalog to determine which combination best meets your needs.

4.1.1 Course AutoComplete

KMx includes capabilities to automatically set the enrollment completion status based on the completion of all SCOs and the availability of retakes for scored SCOs. This setting is optional.

If the AutoComplete Enrollment option is set to "Yes" the system will determine overall enrollment pass/fail status based on all SCOs and all available scored event retake options. If the student has a passing weighted score and has completed all SCOs the result will be "Completed Satisfactorily". If the student has a weighted failing grade and has completed all SCOs, then the result will be "Completed Unsatisfactorily". All other conditions will leave the enrollment in a "Not Completed" state.

4.1.2 Course Universal Prerequisites

The ability to set universal course prerequisites is available in a popup Form to minimize the load times associated with the Course Record Form. The control is a Multi-Select with Sorting Control to make the process of selecting multiple prerequisite courses easy. Unlike the prerequisites established as part of a certification or personnel category continuum, Universal Prerequisites are designed to force a sequence of courses to be completed in a specific order for all users. This new feature is enabled on the Course Record and is activated by selecting one or more courses as prerequisite to the current course.

4.1.3 Completion Reminders

KMx includes up to three timed completion reminders to be sent to the end-user post enrollment unless they have completed the course. This is particularly helpful for clients that have established required training programs that want to automate the reminders for end-users to complete training within a prescribed timeframe. Each reminder can be set to be delivered at any time period available.

4.1.4 Instructor Qualification

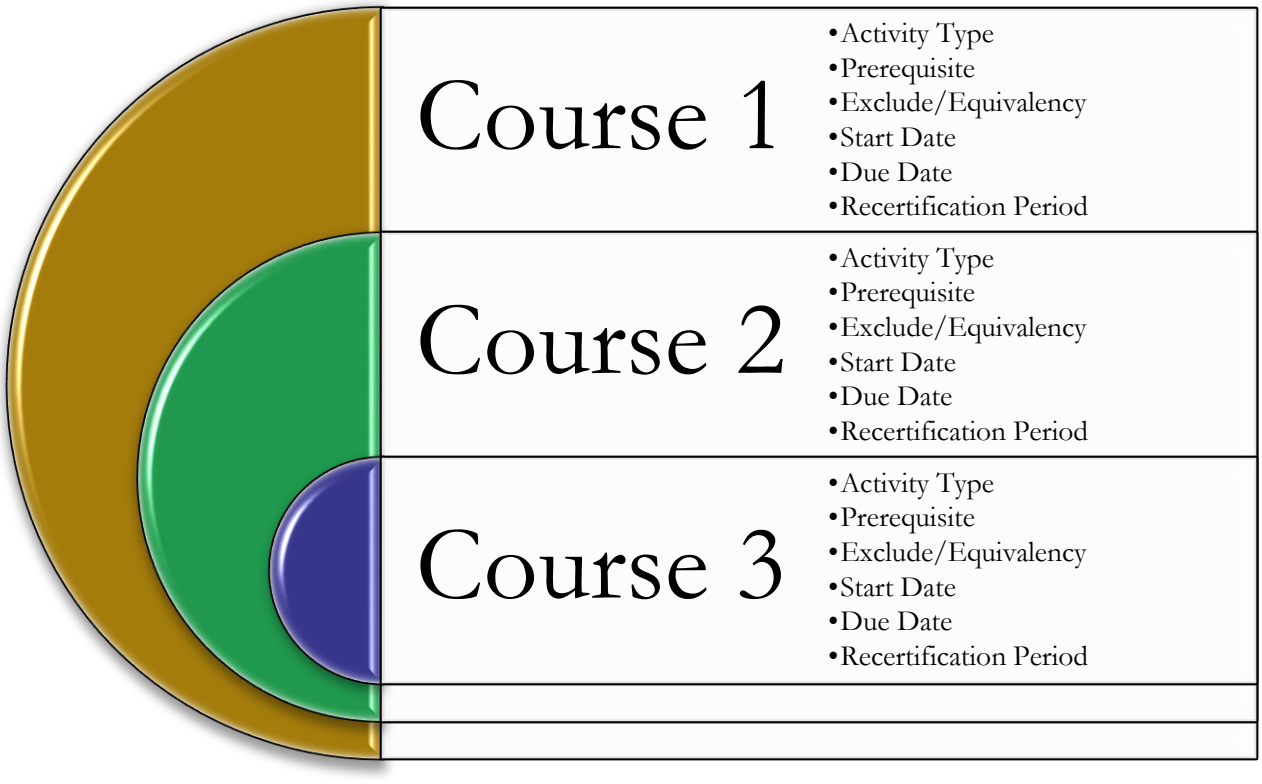
KMx provides the ability for clients to create instructor qualification programs and manage instructor scheduling based on qualifications achieved. In addition to the ability to create the certification program a requirement leading to qualification, the administrator now has the ability to enforce the resource scheduling system to allow only those instructors determined to be qualified to be scheduled. On the Course Record there is an option to "Review Qualified Instructors". This option presents a list box control to add/delete and edit instructor qualifications for the course. Under System Administration, Review Organization Information, there is a new option titled "Use Advanced Resource Scheduling". If this feature is set to "Yes", then only those instructors that are qualified to teach a particular course will be available for scheduling.

4.1.5 Enable Launch from Student History Page/Transcript

This option provides the ability to enable/disable launch of a course following completion for review purposes.

4.1.6 Certification Assignments

A course can be associated with one or more Certification programs. Certification programs are a collection of courses that are grouped together to achieve a performance goal. Each course assigned to a certification can be required or elective, date restricted (start/completion) and can include recertification requirements. For more information on how to leverage this set of features, see the topic titled "Certification Setup".



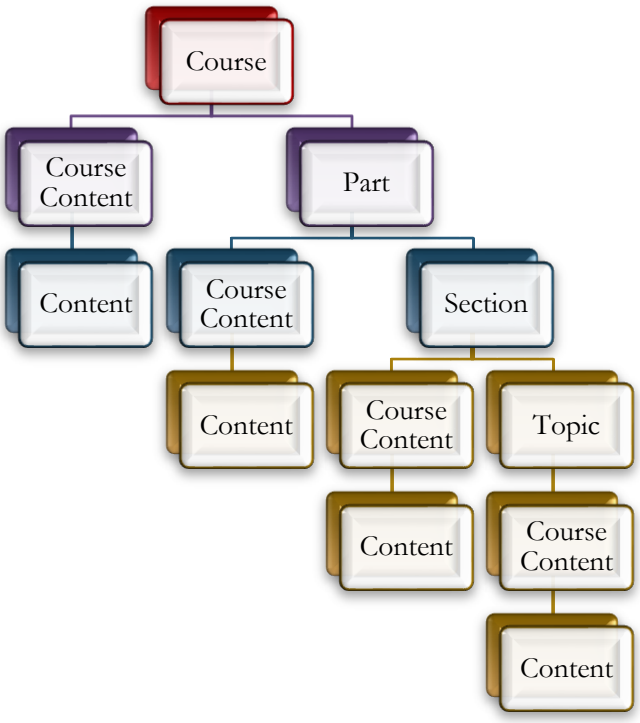
4.1.7 Catalog Assignments

KMx provides two separate methods for the assignment of a course to a catalog. The method that the Organization will use is determined by the "Use Many to Many Course Catalog" setting on the Review Organization Information Form under System Administration. If the use many to many option is set to no, then the Course Catalog Dropdown at the top of the Course

Record is used to determine catalog placement. If the use many to many option is set to yes, then the Review Catalog Assignment popup option is used to provide the ability to assign a course to one or more catalogs.

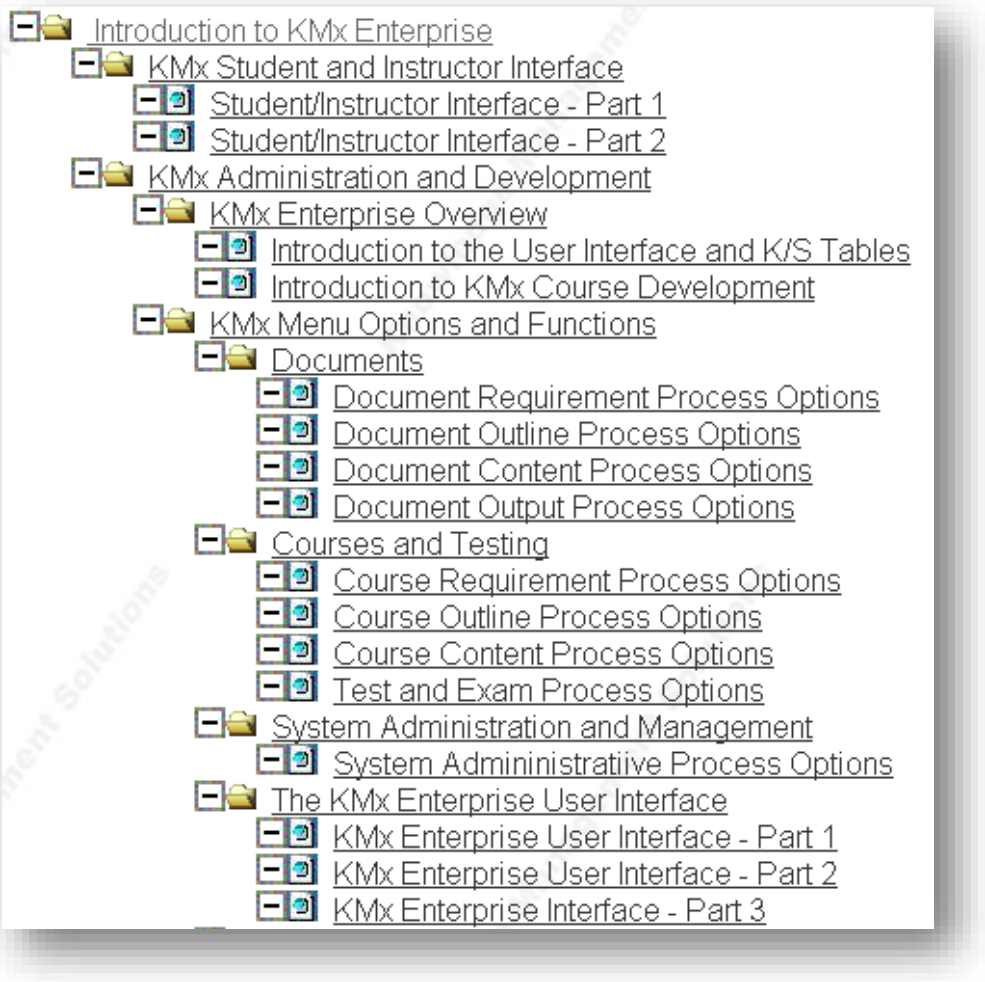
4.2 Course Outlines

Course outlines provide the structure for further course development. Course outlines can be developed by selecting the AutoGen a Course Outline to automatically generate a course outline based on course requirements. Course outlines can also be developed by using the Insert options for a Part, Section or Topic. To modify your course outline, select the Review Course Outline option. Course Objectives document the behavior, condition and standard requirements for a course. Course outlines document the assignment of objectives within a course and provide the structure for further course development.



4.2.1 Create/Review the Course Outline

Course Outlines can have up to five levels: Course, Part, Section, Topic and Course Content. As illustrated below, this course utilizes all five levels.



4.3 Course Content

Course content development is accomplished by forming a relationship between content objects and a course outline (see Organize and Develop Content Objects). Course outlines developed using the AutoGen feature will have placeholders inserted for each required content object. Use the Review Course Outline option to view the course outline and assign content objects where Edit/Upload Content appears in the outline. A content record that is Not Assigned indicates that a course content record has been inserted without selection of a content record relationship.

KMx stores content by using a Content Record accessible through the Organize and Develop Content main menu. Course Content Records are pointers from the Content record to the Course Outline (see above). This approach enables reuse and maintenance of content without duplication. The Course Content Record form (see above) documents this relationship and any other information unique to the use of the content in the current course.

Course content provides the actual instructional materials within your course. Course objectives and requirements provide the goals, course outlines provide the structure and course content delivers the information, testing and remediation to ensure the course requirements are achieved.

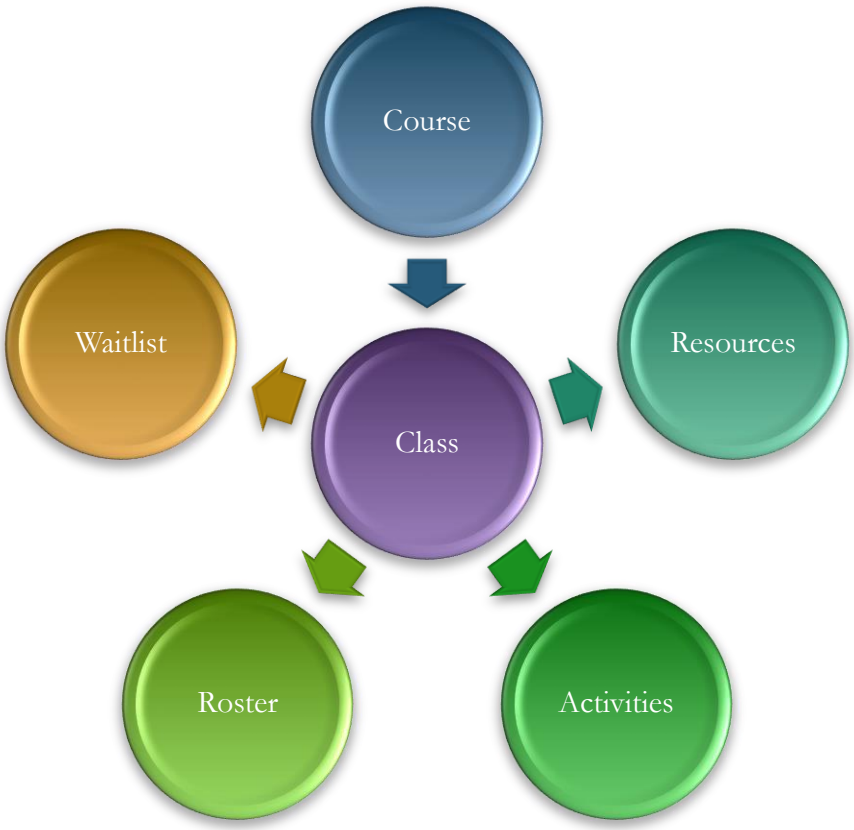
In KMx, course content development is accomplished by forming a relationship between content objects and the course outline. Content objects are files that support the requirements of your K/S Table (subject area) and can originate from numerous applications and file formats, including:

- Microsoft Word
- Microsoft PowerPoint
- Microsoft Excel
- Microsoft Presentation Broadcasts
- Adobe Portable Document Files (PDF)
- Macromedia Flash
- Macromedia Dreamweaver (using the SCORM Packaging option)
- Image file formats (.gif and .jpg)
- Streaming Media files (Microsoft or Real formats)
- External URLs
- SCORM Content Objects

As discussed previously, course outlines developed using the KMx AutoGen feature will have placeholders inserted for content objects required to achieve the course requirements and objectives. KMx provides a expandable course outline editing interface to review and assign content objects to populate the course outline. Visual indicators are provided to assist the developer in completing this process. This is the Course Development Toolbar. It is available from the Courses main menu items. Using the Review a Course Outline process option and selecting a course will open this toolbar. It is used in conjunction with the Course Outline to insert elements into a course. The toolbar has an Insert Content icon to create a link between the course outline and a content object already available in the content management system. It also has icons for the insertion of content both into the course outline and the content management system for MS Word, MS PowerPoint, MS Excel, Adobe (PDF), Video/Audio (Windows Media formats), Flash (SWF), Image (JPG/GIF), Exam and external URLs. Beneath these icons are tools to Expand and Collapse the Course Outline Tree (see example below) and to create course outline subdivisions (Parts, Sections and Topics).

5 Classes

General administration of Class and eLearning enrollment information is provided under the Administer Classes main menu option. Classes are Scheduled implementations of Courses with Activities and Resources. Select Insert a Class Record to create a new class convening. Select Review a Class Record to Assign Instructors, Review Class Rosters, Student Grade Books and scheduled Activities. Select Review eLearning Enrollments to review asynchronous enrollments and student Grade Books.



Classes are scheduled implementations of a course. This means that in order to schedule a class, a course must exist to be scheduled. The first step to creating a class is to "Insert a Class Record". The class must have a unique title to differentiate it from other classes in the catalog. A good approach is to use the course title plus additional information to differentiate the class from other convening's of the same course like location or timeframe (fall, 1st Quarter, October). In order for students to be able to self-register for the class, the start date must be in the future and the course must be available in a catalog that the student has access to. Class start and end dates, maximum class size and waitlist information should also be completed. Use the Master Schedule to review and to edit class records. A class record that has multiple convening's can be copied the copy button at the bottom of the class form. The class calendar will be available for all students enrolled in the class (see Class Activities).

5.1.1 Administrator Class Search

When searching for a course under the course outline or class administration menus, administrators are provided with options to filter their course search. The search can be filtered on a particular catalog or all catalogs or on a particular K/S Table or all

K/S Table. Selecting both options will limit the search to only course found in both the specified K/S Table and the specified catalog. The foreign catalog key may be entered as search criteria to produce a match.

5.1.2 Waitlist / Cancellation / Notification

Waitlist Classes can be enabled with a waitlist, administrators can specify if a waitlist is authorized for a particular offering, and if so, how large it may grow. Each night a batch process runs to see if there are any open seats and notifies the appropriate number of waitlist members that they can come back and register.

5.1.3 Automated Reminders

Classes can specify that reminder messages should be sent to enrollees in advance of the class convening data.

5.1.4 Self-Cancellation

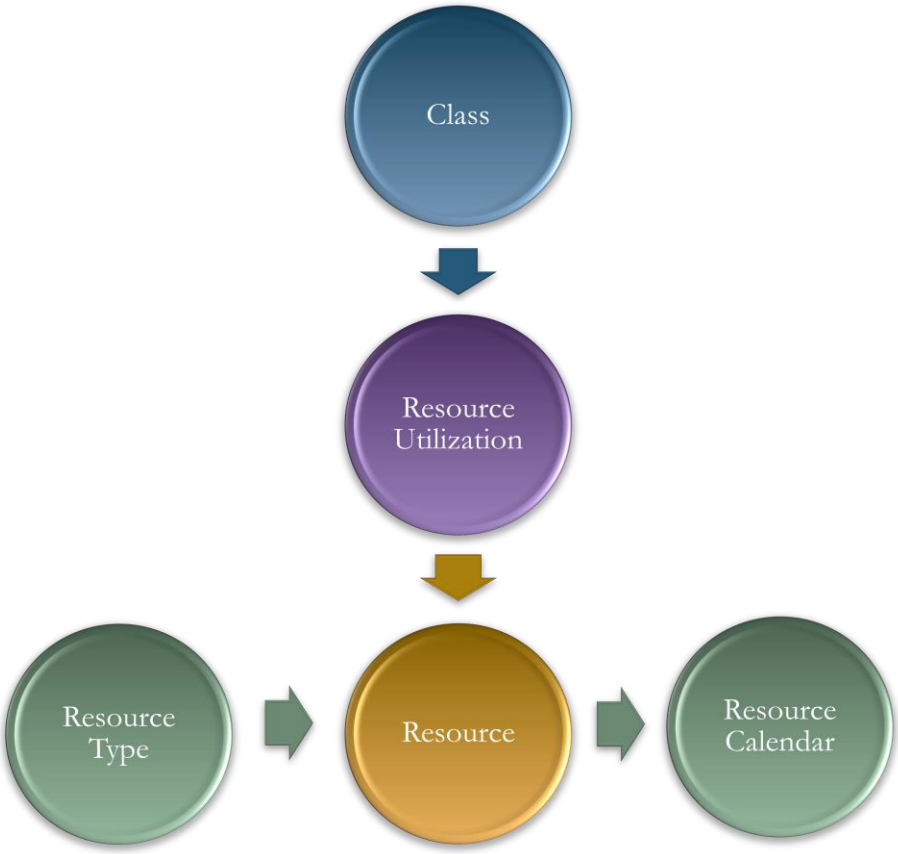
Self cancellation is supported for non-ecommerce courses and classes. Administrators can control if this is supported system wide or as needed for individual offerings. The self-cancellation, waitlist, and the various automated reminders allow training managers who chose to do so, to put more responsibility for training selection, enrollment and attendance on to their learning community without taking on additional administrative work themselves.

5.1.5 Student Messaging

Classes can specify that reminder messages should be sent to enrollees in advance of the class convening data.

5.2 Resources

Resources (classrooms, instructors etc.) are consumed by classes. Before a resource can be scheduled it must first be created in the system. Use the Insert Resource Record option to identify the resource title, type and quantity.



If the resource is an instructor, the instructor's name and qualifications make a good resource title. Make sure to identify which individual is associated with the resource record. If the individual being setup as an instructor is not on the list, use the personnel administrative options to identify the individual as a qualified instructor. In order to schedule a resource, use the insert resource utilization record option. Select the course/class that the resource is scheduled to support and the start and end dates/times of the assignment. Use the Master Schedule to review resource scheduling conflict and to edit resource schedules. Setting up a 3rd party Virtual Classroom requires support from your System Administrator.

5.2.1 Advanced Resource Scheduling Options

KMx includes an "Advanced Resource Scheduling" tool that enables clients to restrict selection of resources (Instructors, Classrooms, etc.) based on availability, configuration (computer lab, number of seats) and instructor qualifications/certification. This option is controlled using the Review Organization Information option under the Setup main menu option.

5.2.2 Instructors

In KMx, Instructors that can be scheduled in connection with a class are also considered Resources. Before an instructor can be scheduled for a class session, a resource record must be created that identifies the Member (must be a qualified Instructor) as a Resource that can be scheduled. This process allows clients to create complex resource utilization comparison reports and also provides the mechanism by which the Instructor calendars are maintained.

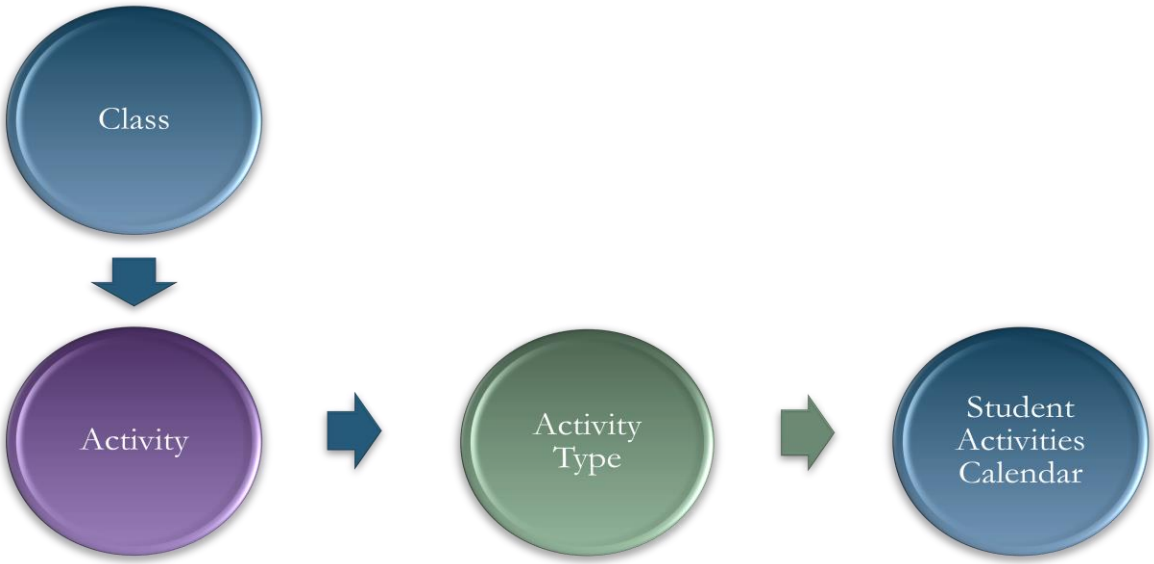
5.2.3 Classrooms

In KMx, Classrooms that can be scheduled in connection with a class are Resources. Before a classroom can be scheduled for a class session, a resource record must be created that identifies the classroom attributes. This process allows clients to create

complex resource utilization comparison reports and also provides the mechanism by which the classroom calendars are maintained.

5.3 Class Activities

Class Activities can be several types, including online course, formal class, read document and review website. These types define how KMx will present the activity to the student. A formal class activity indicates that the start and end date/time are fixed and that the activity will occur during this period. All other activity type date/times are used to indicate when the activity should be completed.



Activities can be simple instructions or URL references that are provided to the class members, or complex presentation broadcasts or virtual classroom events. Use the Master Schedule to review and modify class activities. The event will appear on the class calendar for all students enrolled in the class.

5.3.1 KMxLive Activities

KMxLive activities require the availability and selection of a PowerPoint presentation to be presented during the broadcast. These activities also require a special URL that is provided by your system administrator. Select yes for the "Presentation Broadcast URL" option. Select the K/S Table that contains the PowerPoint presentation, and then select the PowerPoint presentation. Enter the URL provided by your System Administrator. Select the communications type for the students to interact with the presenter as follows:

- HTTP Chat for text based chat in a firewall friendly environment
- Email for large groups where chat may be inappropriate (enter email address as the communications address(
- IRC Chat for organizations that maintain an IRC communications server (enter IRC server address as the communications address and enter the IRC TCP port).

For detailed information about using KMxLive, please see Chapter 13 – Configuring KMxLive.

5.4 Locations

In KMx, locations are normally addresses where classrooms are located. Available under the Setup main menu option, organization locations should be setup prior to the creation of class records.

5.5 Class Batch Enrollment

Select the Batch User Enrollment option from the class record and in the popup window, enter the Directory Services IDs of the users you would like to enroll in the class.

5.6 After Class Notifications

KMx includes an After Class Notification feature that enables a time-based email template to be used for notifications at a specified period of time after class completion to be sent to individuals on the class roster. Clients requested this feature to enable post class surveys, activities and other information to be provided to the class participants.

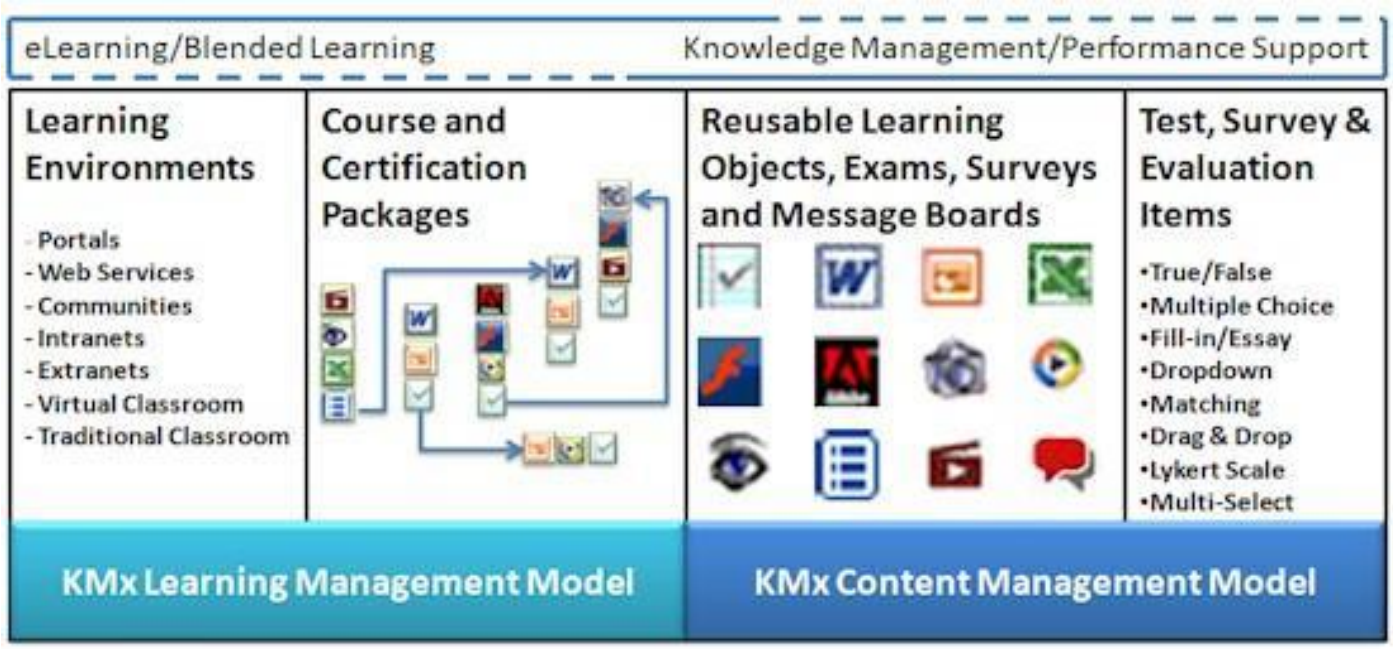
6 Knowledge and Skill Inventory Tables (K/S Tables)

Knowledge and Skill Tables provide a convenient method for classifying information within the KMx architecture. K/S Tables have the following attributes:

- K/S Tables provide a filing method for organizing content within the KMx Content Management System
- K/S Table normally encompass a subject area

7 Content Management

KMx provides an integrated environment for developing, managing, and delivering training, performance support and documentation. KMx also provides performance support and just-in-time training from centralized content management architecture.



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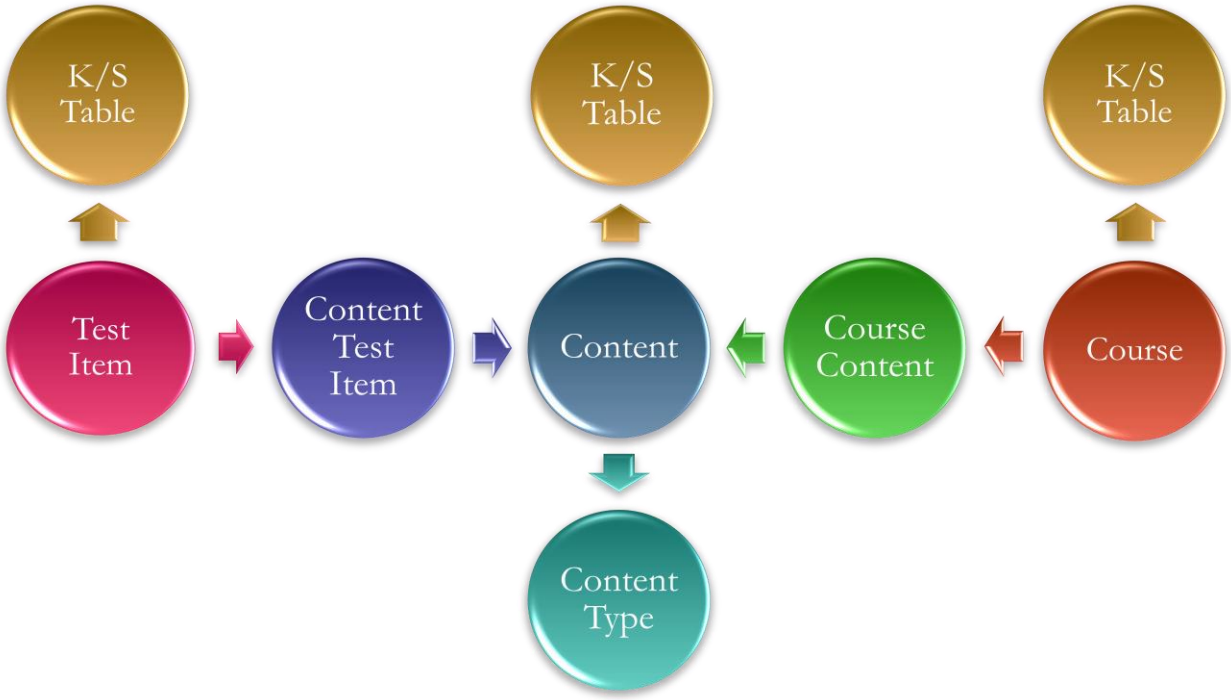
Content developers can use the KMx environment to instantly create new programs that can include presentations, video, audio, animations, images, assessments, surveys, collaborations, and documentation. KMx also supports all third-party SCORM authoring tools. KMx provides a highly granular and reusable content management architecture that implements all SCORM requirements. KMx provides fully automated processing of SCORM Content Packages.

7.1 Content Relationships

The following diagram illustrates the relationships between content and other KMx data elements. Content in the KMx architecture is reusable. This approach enables authors to include a shared element of information or a presentation in multiple courses without the need to maintain multiple copies of the content. This approach also is used by exams and their associated test items.



All content, course and test item data is organized by K/S Table in the KMx content management system. Relationship records, including "Course Content" and "Content Test Item" records, define the use of content or test items. This approach enables the content to have independent characteristics when used in a particular course, for example in one course the content may be elective and not impact a learner's score while in another course the same content may be essential and have a "Weight" that does affect the learner's score and ability to pass the course.

7.2 Content Types, Status and Versioning

Understanding the various content types, setting and reuse features is an important element for site administrators. Each content type and their associated usage settings have numerous common elements, including session and total time tracking by learner, completion status recording and user access timestamps. Some content types (see below) have special settings to enable more advanced learning tracking and use features. It is important to note, that even though KMx does convert MS Office files to HTML/VML for learner use, the original MS Office file is maintained for revision and change management. Content with a file size less than 20MB in file size will upload using the Edit Content/Browse form options. Content files and SCORM packages greater than 20MB in file size should be pre-positioned using your site FTP account and selected from the waiting area dropdown on the Edit Content popup menu.

Content Records provide the administrator with data fields to track internal version numbering, creation date, last update and other change management audit features. Content records can also be identified as requiring periodic review with email notification to a "Content Owner" if desired.

Content records include a Status field that can have one of four possible states:

Draft – The content is available for edit by any administrator of developer with the required permissions.

Final – The content is in a non-editable state as the result of administrator action.

Revised Final – The content is in a non-editable state as the result of administrator action and is a variation of another active content record.

Unavailable – The content is in a non-editable state as the result of being "checked-out" of the content management system for editing or other revision.

7.2.1 Exams, Surveys and Performance Evaluations

KMx uses Test Records to define the options, features and controls associated with an exam, survey or performance evaluation. Test Records provide the following options:

Timed Test – Used to provide a test time limit in minutes.

Proctored Test – Used to require the login by an Instructor to validate the test use for the learner prior to test launch.

Randomized Test – Used to enable the randomization of a number of test items assigned to the test.

Test Item Navigation Bar – Used to enable page-to-page test item navigation or list display (all items at once) of the test.

Type of Test – Used to determine if the test is an exam, survey or performance evaluation.

See the topic titled "Exams, Surveys and Evaluations" for more information.

7.2.2 Adobe Flash

The Adobe Flash content type is provided to enable an SWF file to be used in a course outline or document. KMx will automatically create a SCORM container for the Flash file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.3 Adobe PDF

The Adobe PDF content type is provided to enable a PDF file to be used in a course outline or document. KMx will automatically create a SCORM container for the PDF file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.4 Image (JPG/GIF)

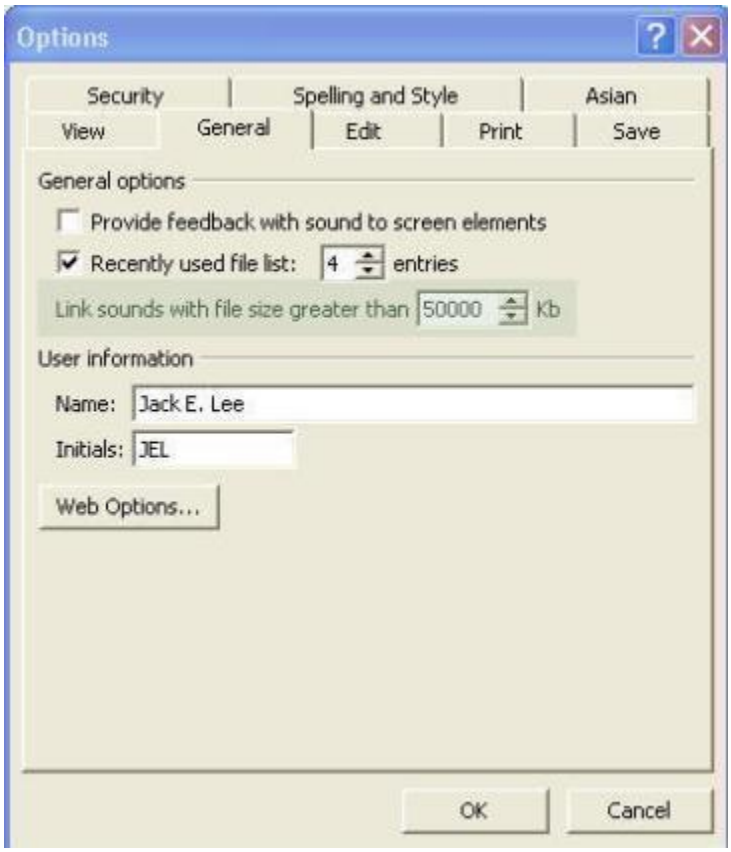
The Image content type is provided to enable a JPG or GIF image file to be used in a course outline or document. KMx will automatically create a SCORM container for the JPG or GIF image file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.5 Microsoft Word

The MS Word content type is provided to enable a .DOC or .DOCX file to be used in a course outline or document. KMx will automatically convert the file to HTML and create a SCORM container for the converted file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.6 Microsoft PowerPoint

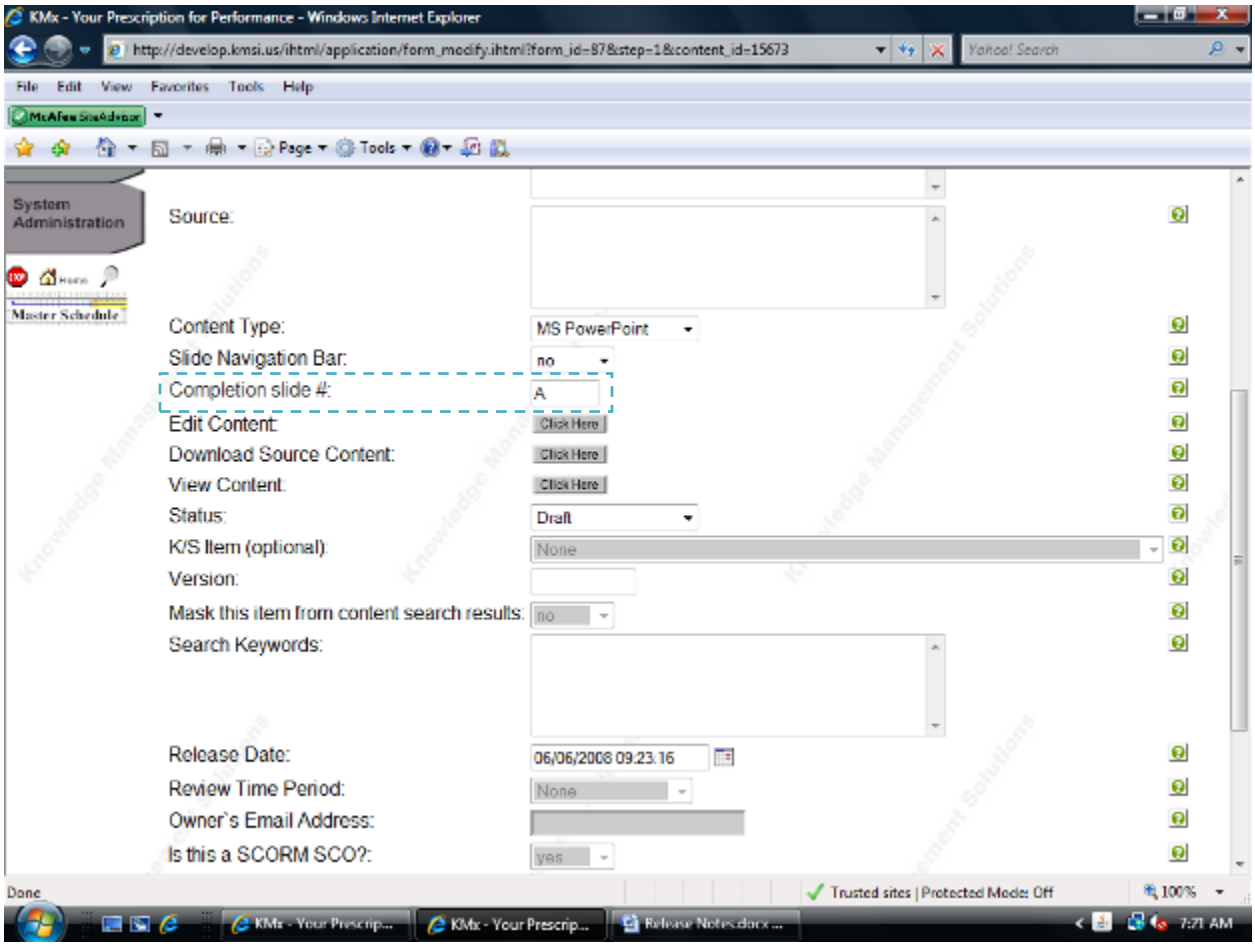
Microsoft PowerPoint Slides - May include voice-over narration, animations, interactivity, branching, indexing and media. If voice-over narrations are used, the settings described below are recommended:



In order to ensure that your narration files are included with the PowerPoint presentation, set the "Link sounds with file size greater than" setting to 50,000 Kb (see image to the left). This option can be found in PowerPoint by selecting "Tools" and then "Options" from the main menu.
Before narrating your slides, make sure that your sound quality settings are at a reasonable bandwidth for distribution over the Internet. Using the "Sound Selection" option for 16,000 KHz, 8 Bit, Mono produces excellent results. This setting panel can be found in PowerPoint by selecting "Slide Show", "Record Narration" and then "Change Quality" from the main menu.

7.2.7 Advanced MS PowerPoint Navigation Option

In KMx, the developer can enter an "A" into the Completion slide# field on the Content Record setup form. Entering an "A" into this field triggers an automatic wizard that will determine the ending slide of a linear presentation and add slide navigation controls to the interface. Unlike the slide navigation bar, these new controls present as directional arrows that automatically render based on the students current location in the presentation. This feature was added to support clients that would like embedded slide to slide navigation for a linear presentation but do not want to enable the slide navigation bar that allows the student to "Jump" to any slide in the presentation. As with all other MS PowerPoint entry options, this new feature automatically tracks student progress, bookmark and time.



7.2.8 PowerPoint for Mobile Devices

- Support for Android, iPhone/iPad/iPod, Blackberry, Kindle, Nook and other Mobile Devices
- Fully SCORM Conformant with Bookmarking, Completion Status Recording and Session-Time Management
- Also Provides Support for Safari, Firefox, Chrome and other Browsers

KMx includes the functionality for imported PowerPoint files to be rendered as HTML5 output files. These output formats universally support all mobile devices, including the Android, iPhone/iPad/iPod, Blackberry, Kindle and Nook devices. Animations, audio and video embedded into a PowerPoint slide are not supported by these devices.

Microsoft Internet Explorer users will enjoy a complete conversion of embedded animations, audio, video, timing sequences and other PowerPoint advanced features comparable to an Adobe Flash presentation, without the need for the Adobe Flash player.

7.2.9 Microsoft Excel

The MS Excel content type is provided to enable an .XLS or .XLSX file to be used in a course outline or document. KMx will automatically convert the file to HTML and create a SCORM container for the converted file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.10 External URLs

There are 3 types of external URLs as follows:

1. External URLs designed to allow an External Website or Intranet/Extranet URL to be used in a course or a document.
2. Imported SCORM Sharable Content Objects (SCOs). KMx will automatically create a SCORM container for the URL to enable session and total time tracking by learner, completion status recording and user access timestamps.
3. Content developed using the KMX V10 WYSISYG Editor (see Chapter 20 for detailed information).
4. Email templates developed using the KMX V10 WYSISYG Editor (see Chapter 21 for detailed information).

7.2.11 SCORM Sharable Content Objects, Resources and Assets

When importing a SCORM package (Organize and Develop Content, Import SCORM Package) the administrator must either select an existing K/S Table to load the package into or create a new K/S Table. We recommend creating a temporary new table if you need to test your package or have any reservations about the package you are importing. SCORM packages less

than 20MB in file size will upload using the Browse/Upload option. Packages over 20MB should be pre-positioned using your site FTP account and selected from the waiting area.

7.2.12 SCORM 1.3 (2004) Information

The process for importing SCORM 1.3 courseware into KMx is the same. Once imported these courses and their associated content objects will be automatically indexed into the content management system and a course outline will be generated. The SCORM specification does not allow mixing of SCORM 1.2 and 1.3x content objects in a single course. For this reason, we recommend that clients using KMx as their authoring environment continue to develop courses to the 1.2 specification. Because of the course content features of the SCORM 1.3x IMSS meta-tagging specification, modifications to your course should be accomplished in the original authoring environment.

7.2.13 Video/Audio Files

The Video/Audio content type is provided to enable WMV, WMA, MPG, MP4, MOV and other video/audio format file to be used in a course outline or document. KMx will automatically create a SCORM container for the video/audio file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.14 Presentation Broadcast Media (KMxLive Recordings)

The Presentation Broadcast Media content type is used to create a recorded version of a KMxLive virtual classroom session (see the topic titled "Using KMxLive") for more information). The content record includes the primary Video/Audio file created by KMxLive and requires the selection of the MS PowerPoint presentation content record used for the session. The Class Activity Record that was used to enable student access to the KMxLive session can also be selected in order to include the chat transcript of the learners during the session. KMx will automatically create a SCORM container for the Presentation Broadcast Media elements to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.2.15 Message Boards

KMx message boards provide the ability to include a fully searchable threaded discussion within a course or a document. Message Boards can also be associated with a Class Record (see Classes, Resources and Activities below). Message boards can also be associated with a personnel category (See Develop Personnel Categories). Creation of a message bard requires that the content record (message board) be provided with a title. Selecting Edit Content on the Content Record will initialize the named message board. All Instructors (see Administer Personnel) are automatically designated as message board moderators and are provided with advanced options to control message board contents. Message boards allow for the attachment of numerous file types (MS Word, Excel, PowerPoint, etc) to provide a mechanism for controlled exchange of files within the message board thread hierarchy.

7.2.16 HTML/ZIP Files

The HTML/ZIP content type is provided to enable any web-server deliverable content to be loaded into the system. The input file must be a valid archive with a .ZIP extension. This content type requires the developer to specify the URL for the root file (the Launch URL) prior to content edit/upload. KMx will automatically create a SCORM container for the video/audio file to enable session and total time tracking by learner, completion status recording and user access timestamps.

7.3 Content Window Framing/Sizing

In order to allow clients to leverage Cascading Style Sheets and the KMx Language Packs effectively, KMx provides a standardized framing system that leverages Web 2.0 technology. The content types affected are:

- Microsoft Word
- Microsoft Excel
- Adobe PDF
- Adobe Flash
- Video/Audio
- Presentation Broadcasts (KMxLive Recordings)
- Message Boards
- Exams/Surveys/Performance Evaluations
- Images

The content types that are not affected (the entire screen is turned over to the content object) are:

- HTML/Zip
- SCORM Content Aggregation Packages
- External URLs (links to Intranet/Extranet/Internet sites/content)

7.4 Advanced Content Record Options

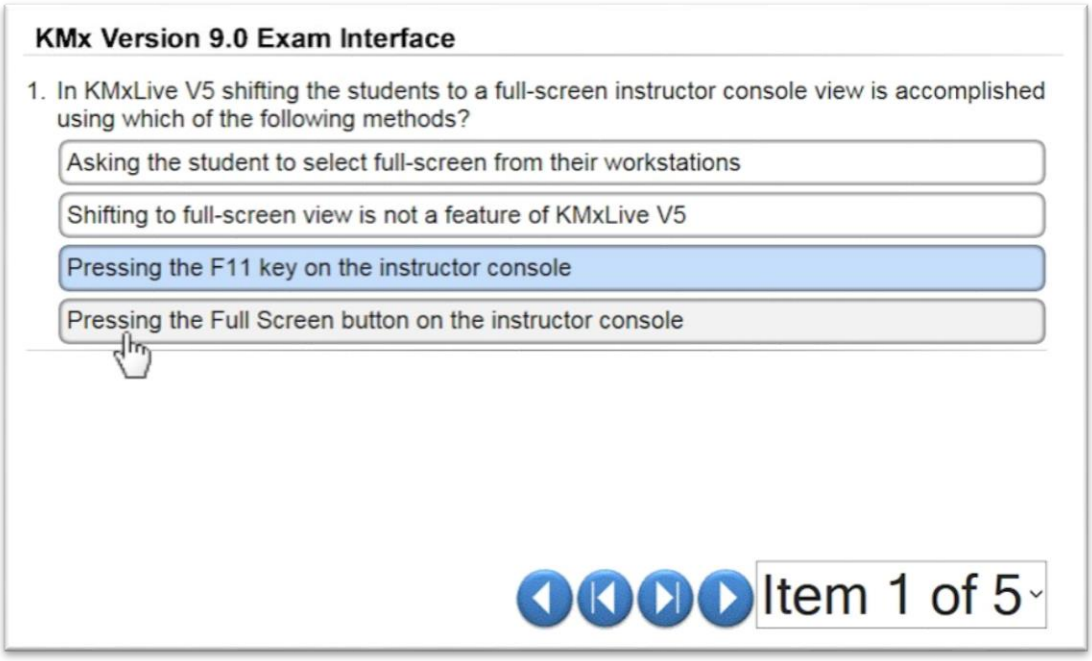
All content types have a number of Advanced Options that provide restricted access (by Company, IP Address, etc) and provide for the control of the SCORM Application Programming Interface (API). Changing the default SCORM options without a thorough understanding of the SCORM standards can result in content inoperability and other errors during content playback

7.4.1 Content That Requires Its' Own Window

Certain authoring tools (like Articulate and Captivate) provide templates that include an exit button that closes the student browser. While this is approach is obviously not conformant with the SCORM standard, we have added the ability for clients to use these authoring templates with a new "Content Requires Own Window" setting on the Content Record. We however still recommend that clients replace this template button with a button that sends the SCORM LMSFinish command and navigates the user to a completion page to conform to the SCORM standard. To use this new option, post content import, clients can set this option to "Yes" on the Content Record to enable the content to run in a Popup window that the content can safely close with an exit button.

8 Exams, Surveys and Performance Evaluations

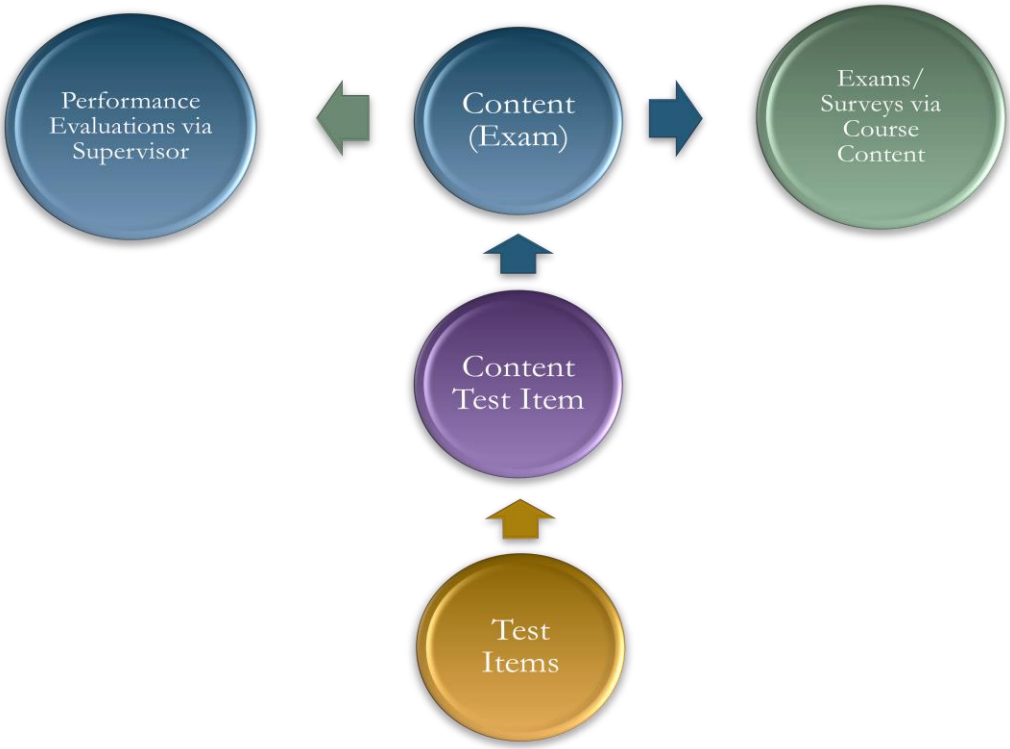
Tests are established to verify the understanding and retention of information. Tests are organized by course and K/S table to allow for measurement reporting of individual achievement through formalized training and informal activity. Organization of tests and test items by K/S table also promotes re-use and ease of maintenance of testing materials.



KMx provides a comprehensive testing and examination system suitable for high-stakes exams:

- Extensive test item types including true/false, multiple choice 3-6 answer, fill-in, scored-scale, matching and drop-down.
- Pool and specification based test item randomization.
- Test item answer randomization.
- Timed testing.
- Proctored testing.
- Scored, un-scored and weighted testing.
- Complete test item and test reuse with fully independent weighting, retake, pre-requisite management and test item response analysis.
- Use of supporting media including audio, video, flash, graphics, supporting documentation and more.
- Enables authors to provide end-users with test item remediation, rationale, references and more.
- Enables behavioral indexing of all test items and their use for organizational analysis, competency and talent management and more.

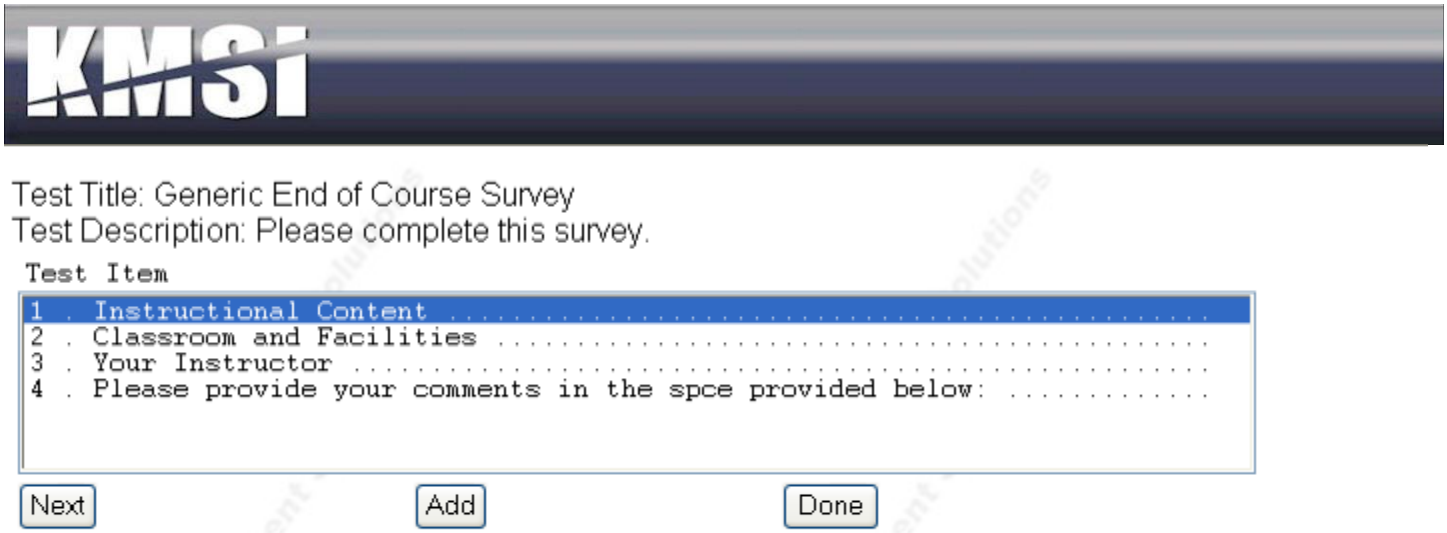
Tests are developed by Inserting a Test Record and Inserting Test Item Records.



Once inserted these elements are related by using the Assign a Test Items to a Test option. You may also Review a Test Record and Test Items from this menu option. Tests are included in a course by using the Assign a Test to a Course option. Once assigned to a course, tests will appear in the course outline as content objects and may be modified using the Review Course Outline option from the Course Content Development menu. Statistical and grade book reports are available from the Reports menu option.

Test are developed using the Content main menu option. Insert a Test Record using the process menu option. Exams and surveys require the selection of test items and the selection of options for the exam or survey delivery. Just like creation of a new content record, an exam requires selection of a K/S Table for future content management. As a minimum, the developer must provide a Title for the exam.

The selection of items is accomplished by using the Edit Content "Click here" button on the Exam Content Record form. Adding test items to an exam or survey results in the creation of a list as depicted in the screen below.



Each entry on the list provides access to a test item assignment record. Questions may be sequenced using this record or randomization can be accomplished using the options on the Exam Content Record form.

In KMx, exams are content objects that are assigned to a course and indexed to a K/S table (subject area) to allow for measurement and reporting of achievement through formalized training and informal activity. Organization of exams and test items by K/S table also promotes re-use and ease of maintenance of exam materials. Exams are developed by assigning test items to the exam. Exams are included in a course by assigning the exam as a content object into the course outline. Once assigned to a course, exams will appear in the course outline as content objects and may be modified from the course outline tree.

8.1 Preparing a Test Item Import Spreadsheet

Test questions can be imported in to KMx in the form of a Microsoft Excel Spreadsheet. **Click here** to download the test item import template. The first row of the spreadsheet is assumed to contain the column headers and will be ignored during the import. Each subsequent row represents one test question and consists of 12 columns as follows:

A. test_item_type_id A number from 1 - 6 indicating the format of the question:
   - 1 - True / False (2 answer)
   - 2 - Multiple Choice (4 answer)
   - 3 - Multiple Choice (5 answer)
   - 4 - Fill In the Blank
   - 5 - Multiple Choice (3 answer)
   - 6 - Multiple Choice (6 answer)

B. test_item_reference Optional. A description or citation indicating an authoritative reference associated with the question. It will be displayed to the student only after the test responses are submitted, and if the test is configured to show the test results. This may be left blank if desired.

C. test_item_rationale Optional. A rationale describing the appropriate response. It will be displayed to the student only after the test responses are submitted, and if the test is configured to show the test results. This may be left blank if desired.

D. checkbox Optional. A value of 1 indicates a test question can have multiple answers.

E. test_item_correct_answer A number from 1 - 6 indicating which of the possible responses is correct. For Fill In the Blank type questions, the value may also be set 0.

F. test_item_question The test question or statement to which the student is responding.

G. test_item_answer_1 The first possible response to a true/false or multiple choice question.

H. test_item_answer_2 The second possible response to a true/false or multiple choice question.

I. test_item_answer_3 The third possible response to a multiple choice question.

J. test_item_answer_4 The fourth possible response to a multiple choice question.

K. test_item_answer_5 The fifth possible response to a multiple choice question.

L. test_item_answer_6 The sixth possible response to a multiple choice question.

8.2 Test Items

Test Items are created using the Test Item Import Spreadsheet. Test items can be True/False, Multiple Choice or Fill-in. As a minimum, the developer must complete the Correct Answer, Question and appropriate Answer Fields. Various options are provided to enhance the test item, including the addition of reference information, rationale, media files and remediation. Once created, test items can be edited from the test or exam that uses the item.

8.2.1 Drop-Down Lists

Many clients have leveraged the ability to provide KMx "fill-in" questions on their surveys and performance evaluations. There is also an option for "fill-in" questions that provide a drop-down list of possible "fill-in" responses. The approach allows for very long lists of possible answers to be presented to the end user and makes it easier for clients to tabulate the response data for reports and further action. In order to use the drop-down feature, create or edit a "fill-in" test item and select the drop-down option from the menu. Below the drop-down selection option a text box will appear that will enable you to create the list of possible responses for the end-user. The list can be words, numbers or phrases delimited with a pipe character (usually shift-backslash on a standard QUERTY keyboard).

8.2.2 Expanded Multiple Choice Options

KMx allows for up to 9 possible answers to a "multiple-choice" type question. This capability was designed to facilitate surveys and performance evaluations, however all "multiple-choice" type questions can have a correct answer and can be scored.

8.2.3 Creating Matching Type Questions

In KMx all test item types, including table view and Scored-Scale items can have a correct or multiple correct answers. This approach also enables clients to "score" surveys and performance evaluations for reporting purposes. This approach also enables clients to develop Matching questions. To create a matching series of questions, select Multiple Choice with the appropriate number of responses for the number of items to be matched. Matching is accomplished by using the Table View option when assigning the test item(s) to the test. For example:

Match the following items with the correct purpose statement:	**Used to slow or stop the vehicle**	**Used to smooth bumps in the road**	**Transfers Power from the Engine to the wheels**	**Enables the vehicle to be pointed**
1. Brakes	**X**	o	o	o
2. Suspension	o	**X**	o	o
3. Drive Train	o	o	**X**	o
4. Steering	o	o	o	**X**

8.2.4 Fill-in-the-blank questions

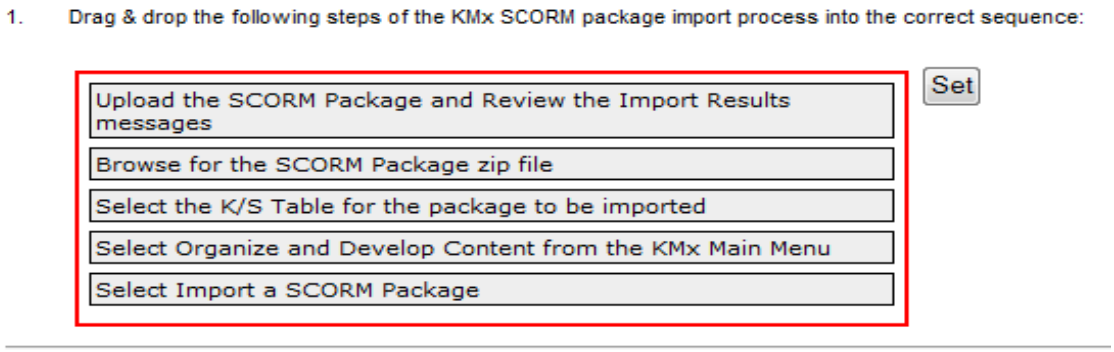
KMx includes fill in the blank style question types for use in quizzes and surveys. Automatic grading of these questions in not supported. A report to show all answers to all questions by all individuals who take a course or class is also included to support grading of the fill-in-the-blank style questions as well as statistical analysis of the responses. A test question may contain up to 768 characters. A fill-in response may contain up to 255 characters. Adding this assessment format type meets the needs of many customers to collect free form feedback on course offerings as well as a desire by others to expand the format of quizzes and exams.

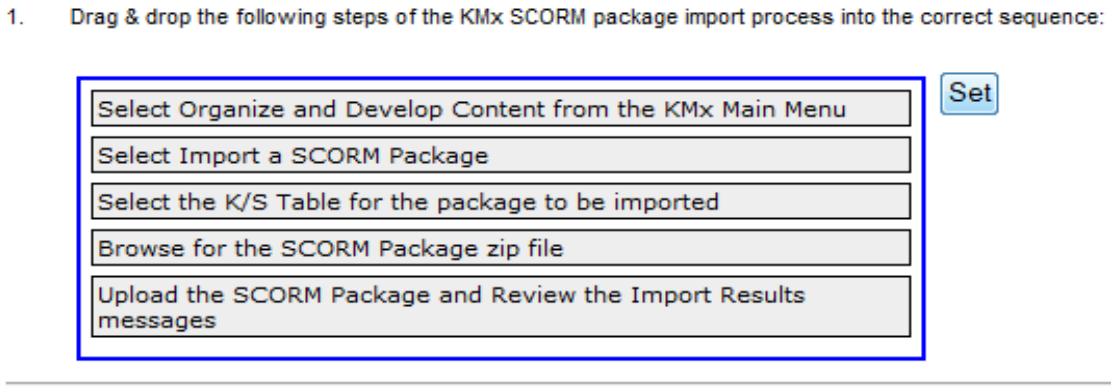
8.2.5 Drag & Drop Test Items

Drag & Drop test items enable the user to demonstrate the ability to put a series of items into the correct order using the Drag & Drop controls. The creation of a Drag & Drop item is the same as other test item types with the additional step of selecting "Yes" on the option labeled "Use Drag & Drop Sequencing" and entering the correct sequence into the "Correct Answer" field. Items are scored on a correct/incorrect basis (i.e. any wrong selection by the user will result in the item being scored as incorrect).

Example Drag and Drop Test Item

When viewed by the user in a test or exam, the items to be sequenced will have a red outline with a button that is labeled "Set". Once the user has put the items into the correct sequence, selecting the "Set" button will lock in the user response and change the outline color to blue. Should the user move an item in the sequence after selecting Set, the outline will turn red to indicate that a change has been made without the Set button being pressed to lock in the change. Selecting Set will once again lock in the sequence and turn the outline to blue.





8.3 Tests and Exams

In KMx, tests and exams are scored based on the equal weighting of questions (i.e. 1/N where N equals the total number of questions delivered). The ability to randomize both questions delivered and the answers of the questions can provide an extremely secure method for high stakes exam delivery. Tests and exams do not have a passing score. The test/exam produces a score; however the determination of if the score achieved is a passing score is determined by the course and the course content linking record that employs the exam. For many clients, courses will have a single "Final Exam" that has an applied weight of 100% (it essentially is the learner final grade) in the course that uses the exam. For other clients, courses can consist of any number of progress checks and exams with various weights applied.

8.4 Surveys

Surveys are essentially exams that are not scored. KMx provides the fill-in question type as a non-scored element specifically for surveys and performance evaluations. KMx provides the ability to display a multiple choice question set in a grid to enable the client to create surveys that ask a number of questions against a ratings scale (i.e. poor to excellent). The ability of KMx to capture and collate the student response data into statistical information is the primary reason so many clients use the KMx survey response tools (see the topic titled "Reporting").

8.5 Performance Evaluations

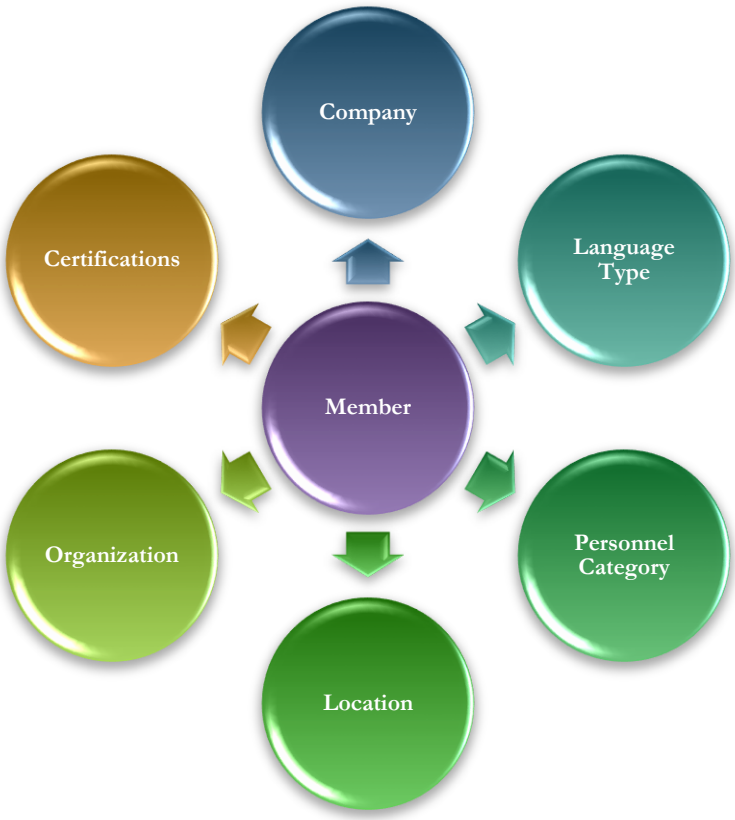
KMx includes capabilities to automate the process of administering a large-scale organizational review program. These features include dynamic group reporting, subordinate summary and results management, and automated assignment and tracking. The Supervisor, Personnel Administration and Generate Reports Menus have options for reporting and management of Personnel Evaluations, including Statistical and Group Average information. See the topic titled "Supervisor Options" for more information.

8.5.1 Supervisor Options

The Supervisor Menu on the Student/Instructor/Supervisor interface provides exception reporting associated with personnel and peer evaluations based on due dates assigned. If due dates are not assigned for an evaluation, the reports will only show the evaluations that have been completed.

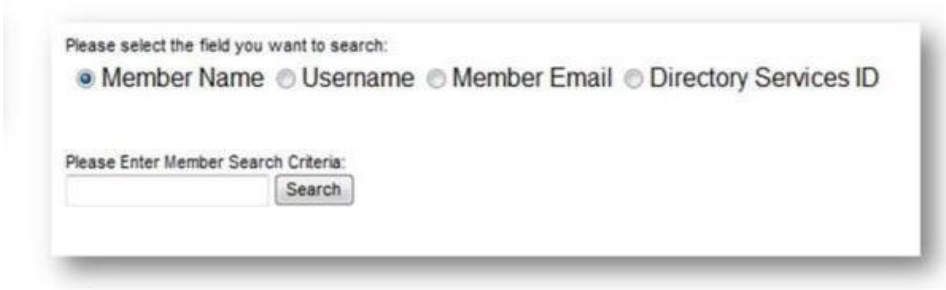
9 People and Companies

General administration of Member and User information is provided by this option. Select Modify Member Information to review and update member records. Personnel information can be maintained within KMx or synchronized with an external system. It is recommended that use of the Administer Personnel options be minimal if an external source is utilized. From the process option menu, new individuals can be inserted into the system and member profile information can be reviewed and updated.



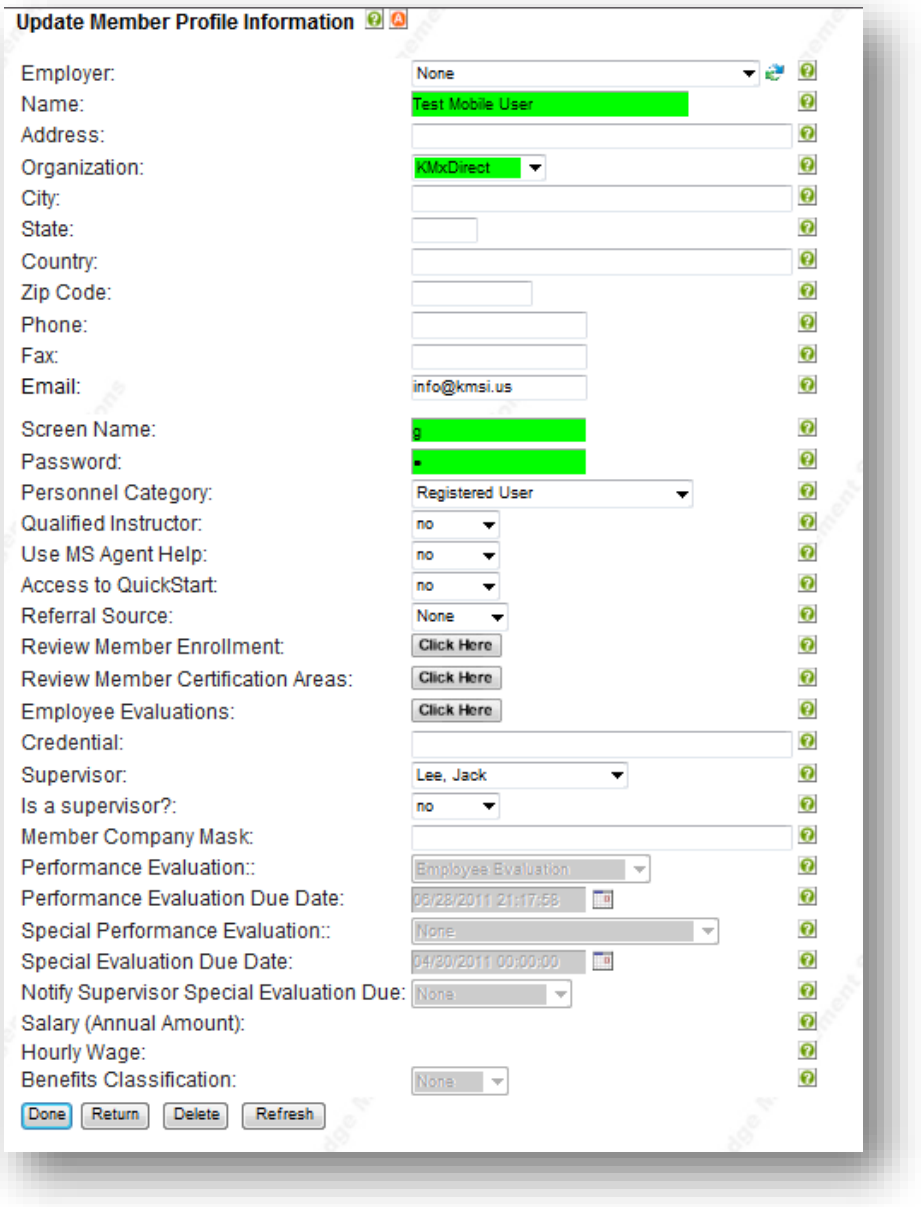
9.1 Review a Member Record and Member Search Features

Under the Administer Personnel main menu option, the administrator has the option to Review a Member Record or to Search for a Member. For clients with more than 1,000 users, the Search for a Member option is usually an easier method for finding and opening a member record.



To accomplish a search, select the appropriate type of search (name, email address, etc.) and then enter in the search string. The search response times will be significantly faster than the prior method which searched all names, email addresses, usernames and directory services identifiers for every search. The results should also be significantly more accurate by specifying the information to be searched for with the user supplied search string.

The Member record has numerous options that provide details regarding a member, including the Company assignment, the status as a Supervisor or Instructor and other demographic information. From the Member Record, the administrator can also review member enrollments, certification assignments, individual grade books, test results and response information and personnel evaluation history.



9.2 Company Assignment

From the Administer Personnel process menu, an administrator can also insert and review organization subdivisions, called Companies. See the Site Hierarchy topic above for additional information.

9.2.1 Ad Hoc Email to Company

Under the menu area to review a company record, it is possible to send an email to all members of the company.

9.3 Dynamic Calcuation of Organizational Personnel Hierarchy

KMx includes an optional setting on the Organization Setup Form (under System Administration) to recalculated the entire organization reporting hierarchy as an automated background process. This process populated a data field in the Members data system named Member Company Mask. Member Company Mask is an alpha-numeric representation of the position of each individual in an organizational hierarchy. This new feature allows Dynamic Reports to select personnel based on their relationship to the position of the individual requesting the report. In previous releases, a supervisor could generate reports that dynamically selected their direct subordinates, but not subordinates further down their organizational hierarchy. The Supervisor Menu options automatically adjust the default personnel evaluation and other default reports based upon the value of this new option.

9.4 Personnel Categories

A personnel category provides the ability to classify or group individuals within an organization.

9.4.1 Personnel Category Assignment

For most organizations, the assignment of members to Personnel Categories provides the primary mechanism for classification. Personnel Categories are normally assigned via the batch user import or from the client Human Resources Information System using a daily feed process.

9.5 Supervisor Options

Supervisor IDs enable KMx to provide managers with access to subordinate personnel profiles. The Manager/Supervisor is provided with a new option on the Student/Instructor Interface labeled Supervisor Access. Supervisor assignments are normally accomplished via the batch user import process or from the client Human Resources Information System using a daily feed process.

9.6 Instructor Options

The Member Record enables the designation of a member as an Instructor. Instructors can be provided with administrative options via the Student/Instructor/Supervisor Interface. Designation as an Instructor also provides the authority to use the KMxLive Instructor Console (see the topic titled KMxLive), provides the member with the authorization to proctor an exam (see the topic titled "Exams, Surveys and Performance Evaluations) and allows the member to moderate a message board (see the Message Board topic under Content Types above).

9.7 Enrollments

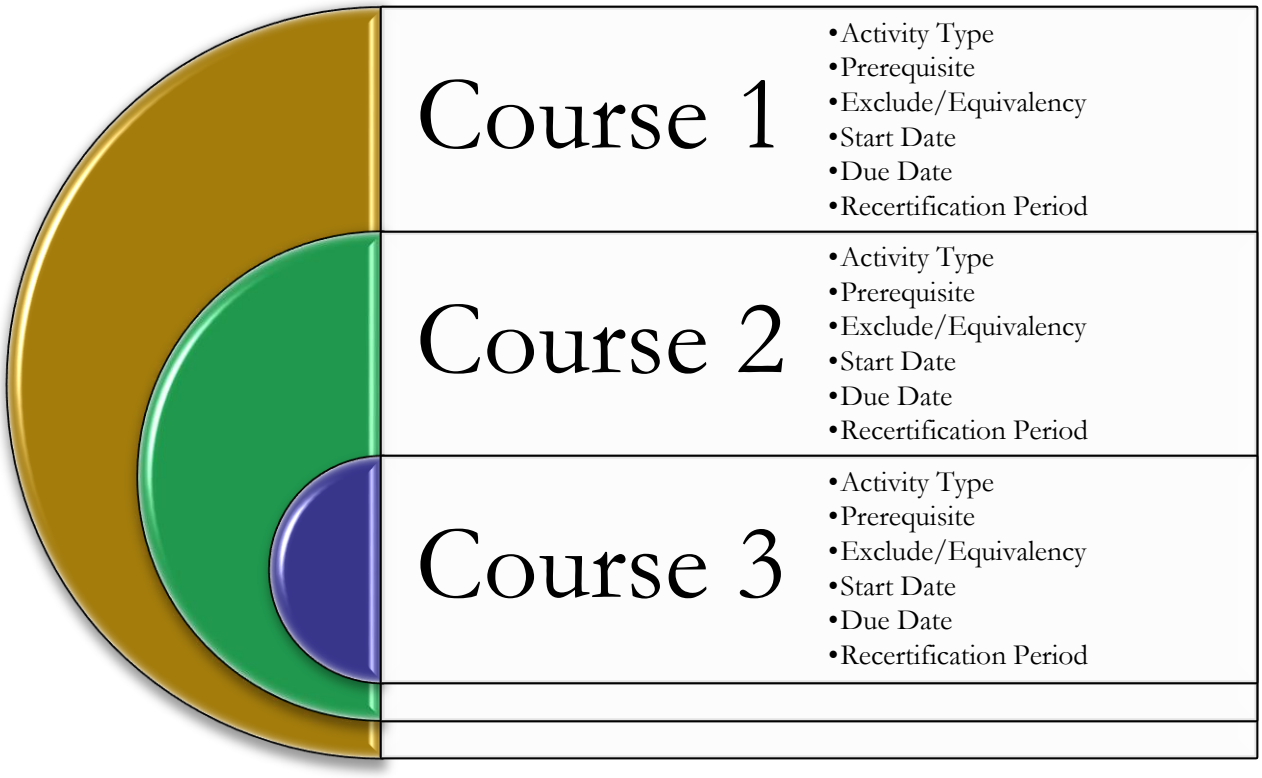
From the Member Record, an administrator can review the enrollments and transcripts of a member. The administrator may also change virtually any enrollment result information, including the completion of a course, the grade achieved and individual grades on exams contained within a course. Review of a member grade book also provides the ability to determine the individual responses for a member that has completed an exam or a survey. Administrators are not permitted to change student response information or change the SCORM system records for an enrollment.

10 Certifications

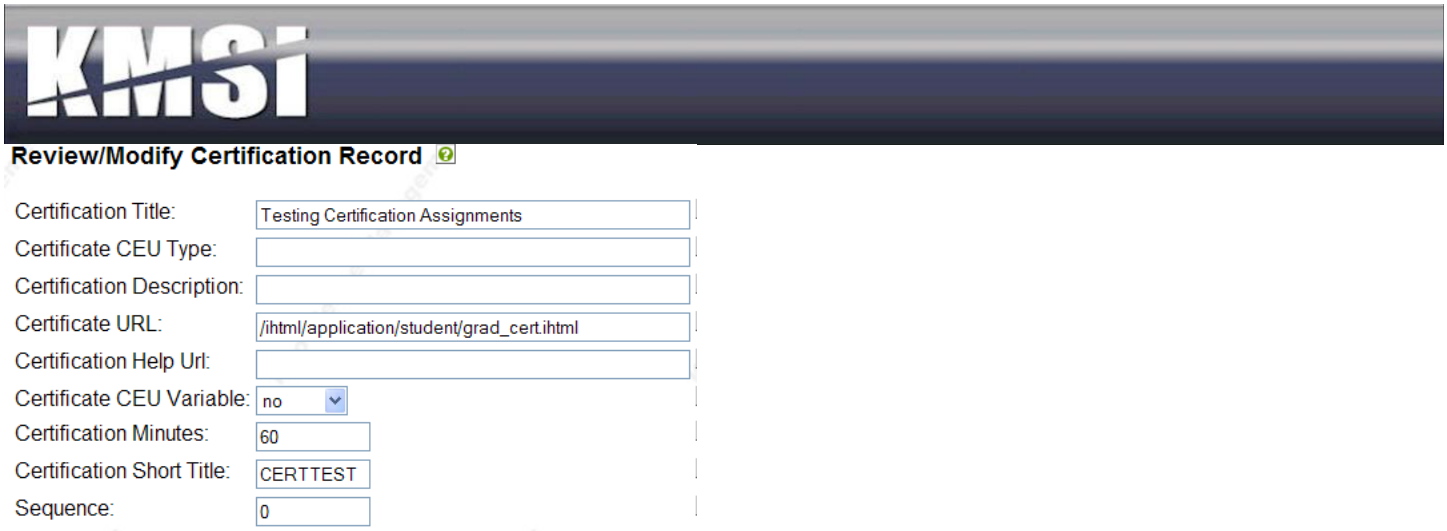
The Member Record provides an interface to review the assignment of Certifications. The option provides the list of currently assigned Certifications as well as the ability to add, review or delete a Certification assignment.

10.1 Certification Setup

Certifications are very similar to Personnel Category Assignments. The main difference is that a Member can be in an unlimited number of Certification continuums. A member can only be in one Personnel Category at a time. This approach allows certifications to be created for personnel independent of their Personnel Category or Company affiliation.



Certification Records are created under the Setup Main menu option. Like Personnel Category Assignments, Certification Assignments appear on the Student Category Profile Page. Certification Assignments can have prerequisites, initial and recertification periods and other control elements.



10.1.1 Summary and Detailed Dynamic Reporting Options

KMx Dynamic Reports provides report types for summary and detailed reporting of Certification completion information. The primary difference is that the summary report type is designed to limit the detail of the data reported to overall individual progress in a certification program, vice course by course accomplishment level detail.

10.1.2 Cascading and Prerequisite Certifications

KMx provides the ability to establish certification hierarchies that include prerequisite certifications and the ability to cascade this hierarchy to create branching certification paths from common or foundation certification entry programs. These options are available on the Certification Record setup form.

10.1.3 Ad Hoc Email to Certification

Under the menu area to review a certification record, it is now possible to send all members an ad-hoc email. This provides administrators an easy way to communicate changes to the certification path to members assigned to that certification.

10.1.4 Member Certification Notification

A new notification is available that will notify a member when he is assigned to a certification. The template and contents of the notice can be edited under email templates. The certification record includes a flag indicating if such notices should be sent. By default this flag is set to no. To send these notices, first review the template and make any changes to the notification language. Then review the certificate record and set the flag to "yes" indicating that the notices should be sent for all new members assigned to this notification. Members assigned to the certification prior to implementation of this feature will receive this notification.

10.1.5 Pre-Calculate Certification Percent Complete

The ability of KMx to track a learner's progress through a certification, and to report that progress a percent complete is a key function that many customers depend on. This value has traditionally been calculated at the time the report was run, giving administrators and managers real time information but consuming significant resources preparing large reports. To speed up the reports, this value will now be calculated once each night and made available to the dynamic reporting system. The real time calculation will also still be available to allow customers opportunity to update their reports, but customers are encouraged to take advantage of the pre-calculated value in any reports where up to the minute information isn't absolutely essential.

The pre-calculated value of percent complete is available under dynamic reporting system in the table: member_certification, field name: "Member Certification Percent Complete (revised daily)"

10.1.6 Maintenance of Courses in a Certification

An administrator can either open the course record to change its properties as related to a certification or review/update all course/certification properties from the Review a Certification Record option under System Administration.

10.1.6.1 Language Specific Assignments

Courses within a certification profile can be designated as required for a specific language. This feature is useful when certification programs are created that have courses designated for users that speak a certain language (English, French, Russian, etc.). Language specific course certification assignments are made on the Course Certification Record. The preferred method is to create language specific certifications, however certain clients have multi-lingual workforces at a single location where provision of language independent certifications are more useful for reporting and management.

10.1.6.2 Persistent Email Reminders

When assigning a course to a certification, administrators may specify a frequency for recurring reminders to the learner until the assignment is complete. The recurring reminder will use the Assignment Reminder Notice and can be set to regularly email the user until the assignment is complete. The reminder frequency must be set to cause recurring notices to be sent.

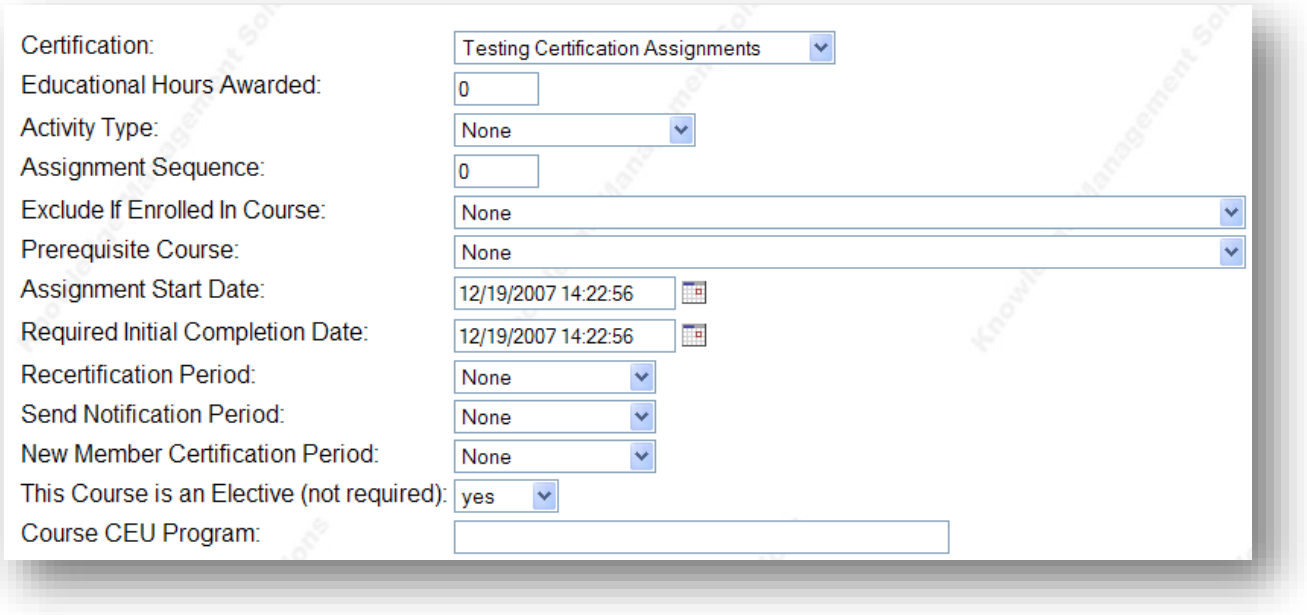
10.1.6.3 Automatic Course Enrollment

When an administrator assigns courses to a certification, there is an option to Auto Enroll in the course. The default value for this is "no", and no action will be taken by KMx. When set to yes, members assigned to the certification will be automatically enrolled in the assigned course if all of the following conditions are met:

- Must enroll in class = "no"
- All pre-requisites for the course are met OR there are no pre-requisites assigned for the course.
- The enrollment would not violate any duplicate enrollment rules
- If the enrollment is a permitted duplicate, the learner will only be enrolled in support of a recurring training assignment within the notification window prior to the next due date.

Automatic enrollments are processed only once per day.

The Course/Certification Assignment Record


Certification:
Testing Certification Assignments
Educational Hours Awarded:
0
Activity Type:
None
Assignment Sequence:
0
Exclude If Enrolled In Course:
None
Prerequisite Course:
None
Assignment Start Date:
12/19/2007 14:22:56
Required Initial Completion Date:
12/19/2007 14:22:56
Recertification Period:
None
Send Notification Period:
None
New Member Certification Period:
None
This Course is an Elective (not required):
yes
Course CEU Program:

The Student Category Profile with Certifications Assigned

Mike Binnix (SCORM) - Category Title: sample category for assigning people
Description:

Category Profile: sample category for assigning people

Subject Area: something new

Assignment Type	Assignment Title	Current Status	CEUs
Online Course	demonstration course	Not Completed	0

Certification/Certificate Assignments

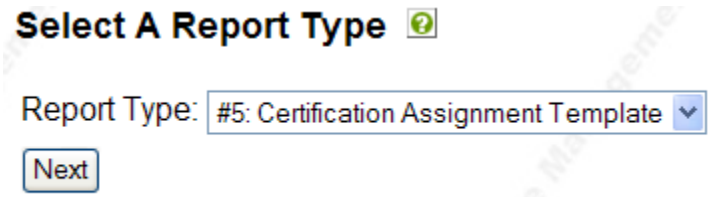
Testing Certification Assignments

Assignment Type	Assignment Title	Current Status	CEUs
Online Course	aa supervisor approval required to take this course	Not Enrolled Enroll	3
Online Course	AHA Survey Example	Completed Satisfactorily	25

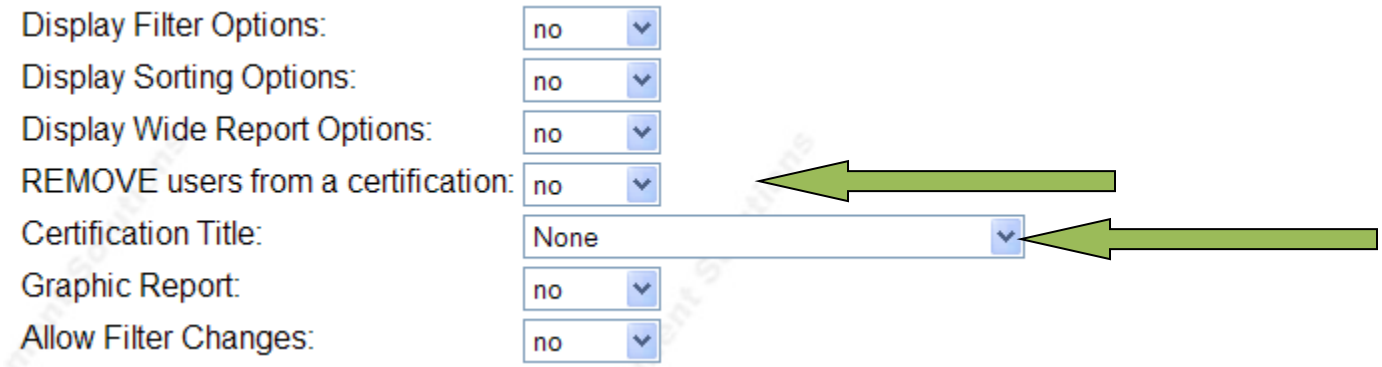
10.1.7 Dynamic Certifications

With KMx, clients can create an unlimited array of training continuums and certification profiles that are dynamically assigned to individuals based on any user demographic information or organizational relationship. This new feature will enable clients to create an unlimited array of requirements, assignment and continuums to meet both internal and external business drivers.

By using the Dynamic Reporting tool to create the Certification Group, administrators can easily verify which users are selected or removed.



Certification groups can be established using any demographic information in the Members table.



11 Reports

KMx provides two major reporting systems, Standard Reports and Dynamic Reports/Graphs. This section will review the use and capabilities of both systems.

11.1 Standard Reports

The reports menu is organized to make it easy to find reports. All reports are now available from the reports menu which organizes the options by:

- Members and Labor Categories Reports
- Enrollment, Results and Access Reports
- Class & Resource Schedule Reports
- Course & Content Inventory Reports
- eCommerce Reports Menu
- Company & Supervisor Reports
- KMx Dynamic Reports
- Legacy and Misc Reports

An example of each of the standard reports is available in the KMx Reports Index. The index can be downloaded at http://www.kmsi.com/support.htm#references.

11.2 KMx Dynamic Reports

KMx Dynamic Reporting allows administrators to select from virtually any combination of user enrollment, accomplishment and requirement information to produce real-time reports. KMx Dynamic Reports can enable the administrator to filter report results "on-the-fly" at report runtime. This capability allows clients to not only create reports that will automatically filter the results based on any logical filter condition, but also allow reports to automatically adjust to the "authority" of the person generating these reports. The process options to insert and modify a Dynamic Report are available under the Reports main menu option.

11.2.1 General Dynamic Report Types

KMx Dynamic Reports has numerous templates designed for both general reporting advanced report development. The general report types are as follows:

- Certification Assignment Template – Used to assign personnel to a certification based on Member Data and/or Enrollment history information.
- Enrollment Data – Used to generate reports for specific courses, classes or other enrollment centered events.
- Member Data – Used to generate reports based primarily on member demographics information or other member based attributes.
- Personnel Category Data - Used to generate requirement and assignment completion detail reports based on personnel classifications.
- SCORM Data - Used to generate reports containing the actual SCORM Run-Time Environment Variable values generated by the execution of an eLearning program of instruction.

11.2.2 Advanced Report Types

The KMx Dynamic Report Advanced Report types provide an experienced KMx Administrator with the ability to access and query virtually any data resident in the KMx Data System.

Report Type	Description
Certification Completion Data - Detail	This report type replaced the previously available Certification report type and included additional fields to produce more detailed certification based reports.
Resource Utilization	This report type provides the ability to produce instructor and classroom schedule reports based on assignments.
Course Inventory	This report type provides the ability to create custom course inventory reports, including catalog availability.
Content Inventory	This report type enables the creation of detailed content inventory and utilization reports.
Test Item Inventory	This report type enables the creation of detailed test item inventory and utilization reports.
Company	This report type provides the ability to produce organizational reports including hierarchy and location information.
Certification Completion Data - Summary	This report type provides the ability to produce summary level certification completion reports that do not include individual course completion level detail.
Email History	This report type provides the ability to query the email history queue and produce reports on system email transactions.
Course Audit	This report type provides the ability to query the course audit system to produce reports detailing changes to the class records, including dates and person responsible for the update.
Class Audit	This report type provides the ability to query the class audit system to produce reports detailing changes to the course records, including dates and person responsible for the update.
Content Audit	This report type provides the ability to query the content management audit system to produce reports detailing changes to the content records, including dates and person responsible for the update.
Test Event Data	This report type provides the ability to produce detailed reports containing test event data, including the number of test attempts, score and dates of a test/exam.
Enrollment Archive Data	This report type provides the ability to produce reports concerning inactive or deleted users.
Course Access Template (Black List / White List)	This report type provides the ability to produce reports that document the ability for individuals to access courses using the course access template.
Catalog Inventory	This report type provides the ability to create reports that detail the structure and contents of catalogs available, including restrictions and access settings.

11.2.3 Dynamic Report Help Information

Since there are more than 50,000 possible report table/field combinations available under dynamic reports, KMx provides a Help Information link on the Dynamic Report setup form. This link generates a popup that provides an index of the available table/field combinations for the selected report type (Enrollment Data, Certification Detail, SCORM Data, etc.). The help information also provides a brief description for each field.

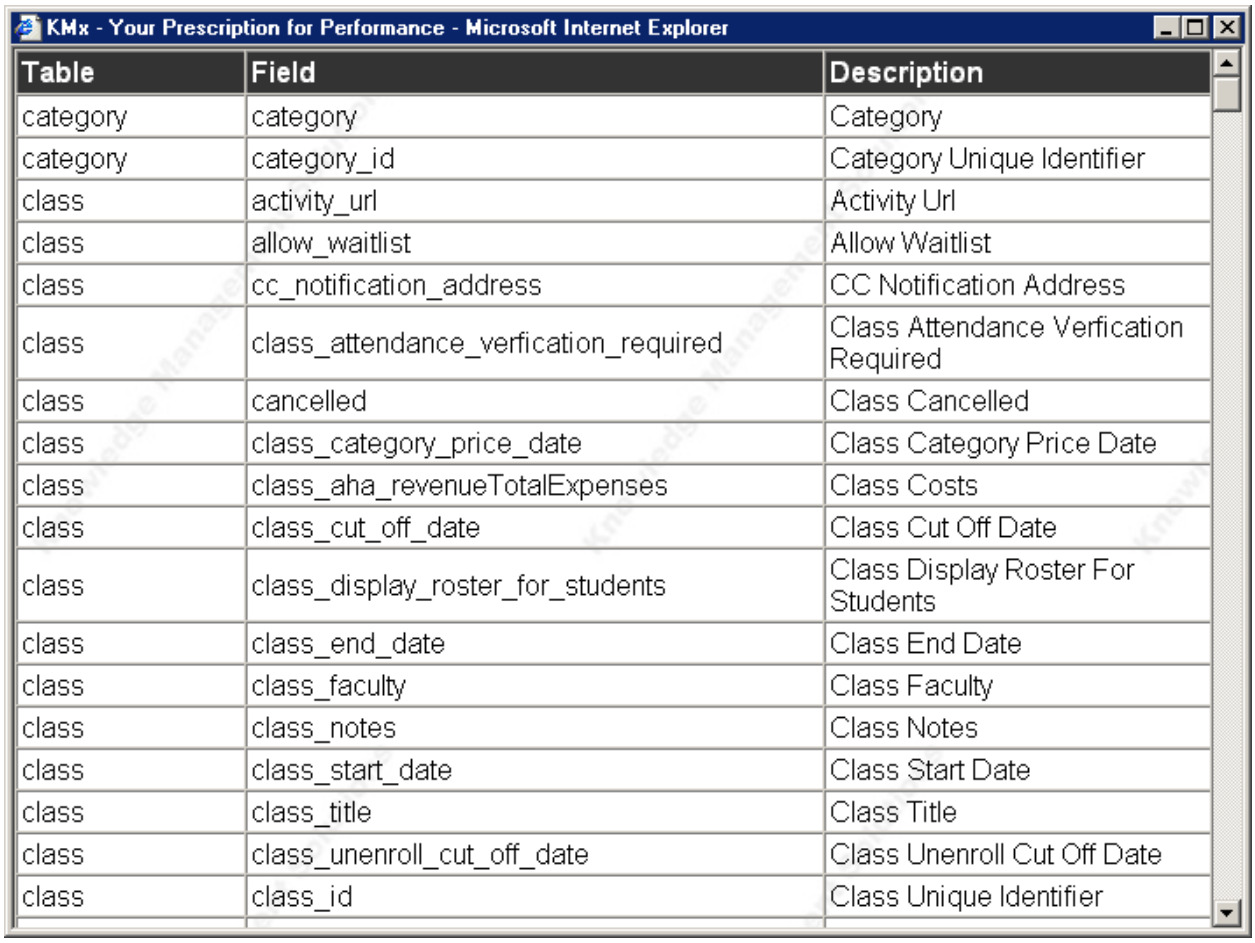


Table	Field	Description
category	category	Category
category	category_id	Category Unique Identifier
class	activity_url	Activity Url
class	allow_waitlist	Allow Waitlist
class	cc_notification_address	CC Notification Address
class	class_attendance_verfication_required	Class Attendance Verfication Required
class	cancelled	Class Cancelled
class	class_category_price_date	Class Category Price Date
class	class_aha_revenueTotalExpenses	Class Costs
class	class_cut_off_date	Class Cut Off Date
class	class_display_roster_for_students	Class Display Roster For Students
class	class_end_date	Class End Date
class	class_faculty	Class Faculty
class	class_notes	Class Notes
class	class_start_date	Class Start Date
class	class_title	Class Title
class	class_unenroll_cut_off_date	Class Unenroll Cut Off Date
class	class_id	Class Unique Identifier

11.3 KMx Dynamic Graphs

KMx Dynamic Graphs provides administrators with the ability to dynamically generate graphs from virtually any combination of user enrollment, accomplishment and requirement information. This feature will enable creation of highly colorful visual outputs of data elements, including:

- User and group demographics, requirements and accomplishments
- Course/class enrollments goals and statistics
- Performance of test items and exams
- Personnel classification requirements, completions and delinquencies
- Organizational unit requirements and accomplishments

11.3.1 Standard HTML Graph Types

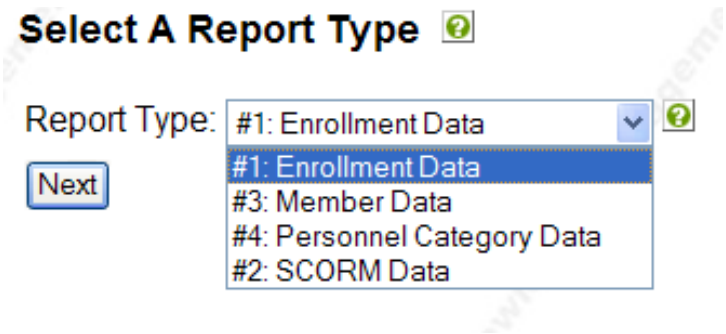
- Bar Chart
- Stacked Bar Chart

11.3.2 HTML5 Graph Types

- Pie Charts (with animated hover-over slices)
- Donut Charts (with animated hover-over slices)
- Bar Charts (with animated bar rendering)
- Line Charts (with animated line rendering)
- Polar Radius Charts
- Waterfall Charts

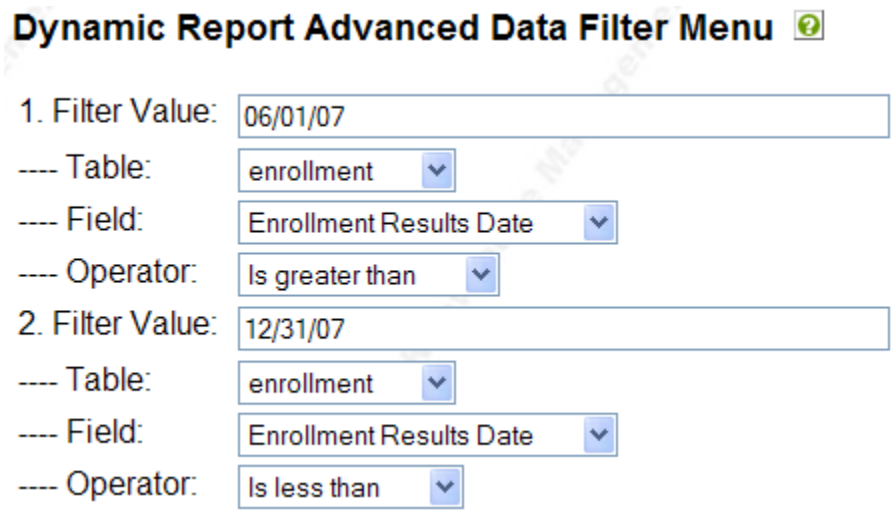
11.4 Building a Report

From the KMx Main Menu, select System Administration, Insert a Dynamic Report. Select a report type based on the primary data that your report will draw from the KMx data system.

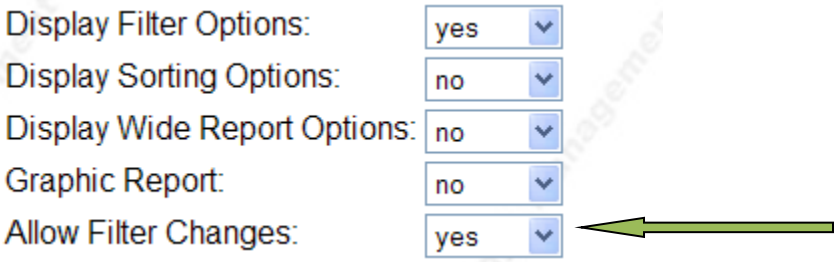


Use the Dynamic Report specification form to define columns, data tables and fields, sort and filter criteria, and to preview your report. Once save, the report will be available from the Reports Main menu option. Dynamic Reports can have up to 20 tabular columns when the "Wide Report" option is enabled.

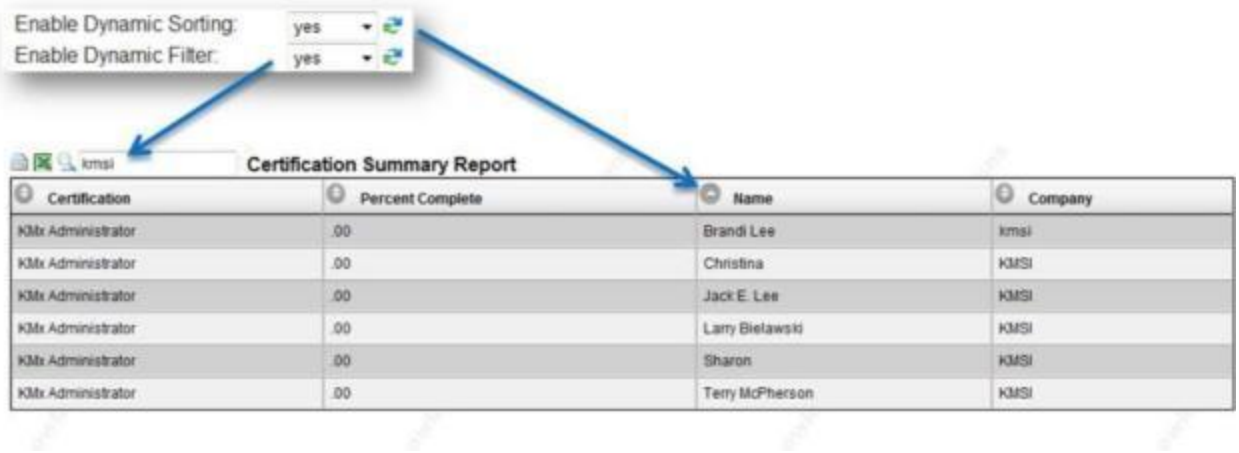
KMx has the ability to dynamically filter report results "on-the-fly" at report runtime. This new capability allows clients to not only create reports that will automatically filter the results based on any logical filter condition, but also allow reports to automatically adjust to the "authority" of the person generating these reports.



Review/Modify a Custom Report Definition



11.4.1 Dynamic Reports - Dynamic Sorting and Filter Controls



- Header & Alternating Row Styling
- Clickable Sorting Controls for Each Column
- Query/Filtering Tools

KMx Dynamic Reports provides the ability for administrators to designate new sorting and filtering options. The Dynamic Sorting option provides a stylized report template that includes a special header row that enables by column sorting of the report output. The sorting is accomplished by the user's browser and does not require the report to be regenerated. Dynamic Sorting should not be enabled for reports that produce more than 2,000 rows as this may generate warnings that a process is taking a long time to complete when conducting a sort.

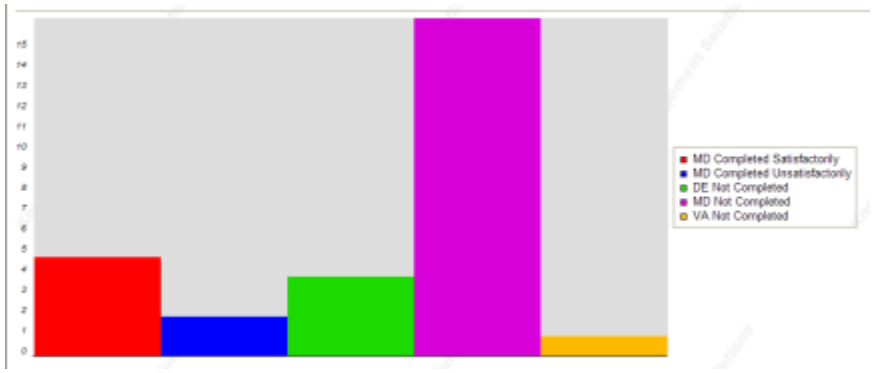
The Enable Dynamic Filtering option is dependent on the Dynamic Sorting option being set to "Yes". Enabling Dynamic Filtering provides a search box at the top of the report that will enable a user to enter a word or phrase to be searched for within the output of the report. The report will remove rows that are not applicable to the word/phrase entered. Sorting of the report can be accomplished on the filtered results.

Used together, these features can enable a user to run a report that has been setup by an administrator and further tune the output prior to printing. The feature also provides an easy way for users to query the KMx data system based on parameters established in the report setup and enhanced by the sort/filter options.

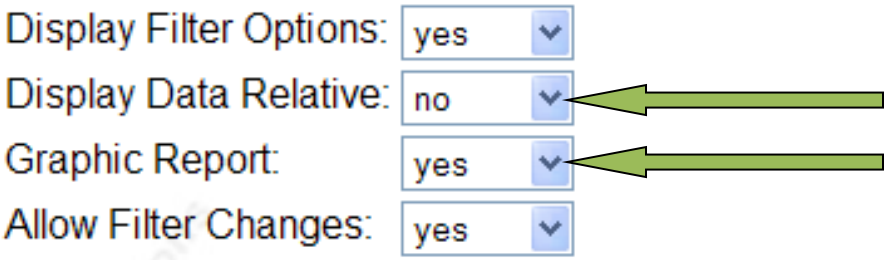
The help files associated with each Dynamic Report Type have been updated to include extended field descriptions and use the dynamic sorting and filtering capabilities.

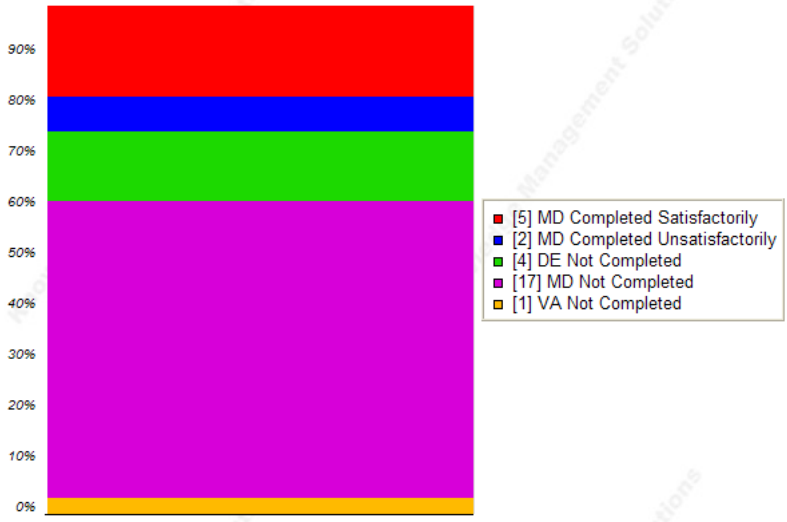
11.5 Building a Graph

KMx has the capability to dynamically generate graphs from virtually any combination of user enrollment, accomplishment and requirement information.



Using Relative Data = “Yes” provides a convenient alternative to Pie Charts



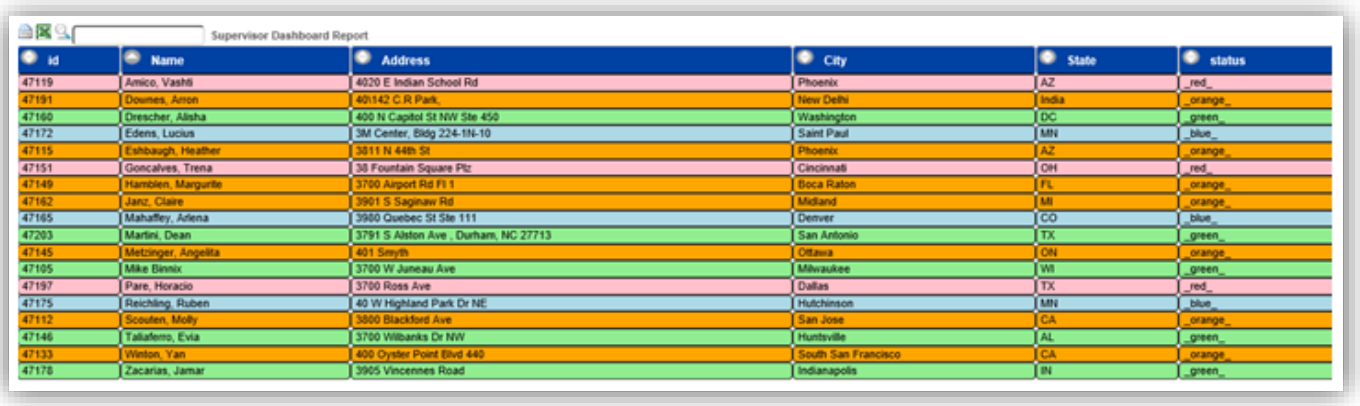


11.6 Row link URLs:

In KMx Version 9.0, the ability to link a row of data contained in a KMx Dynamic Report was added. The only requirement for using Row Link URLs is to set "Enable Dynamic Sorting" to "Yes" on the report definition form and to enter the URL into the entry labeled "Row Link URL" on the "Advanced Run-Time Filter Options" form for the report. If you want the link to pass identification information to the URL/page, the report must have a column titled "id" that contains the dynamic information (Member ID, Company ID, Course ID, etc.). For example, the URL below would enable a click within a report to forward to the User Record (Form 267) and pass the ID (user_id) of the user of interest:

/ihtml/application/form_modify.ihtml?form_id=267&step=1&no_head=1&update_return=%2Fihtml%2Fapplication%2Fdynamic_reports.ihtml%3Freport_id=231&user_id=

In the report, the User ID field would need to exist as a report column with the title "id".



Supervisor Dashboard Report

id	Name	Address	City	State	status
47119	Amico, Vashti	4020 E Indian School Rd	Phoenix	AZ	_red_
47191	Downes, Arron	40\142 C.R Park,	New Delhi	India	_orange_
47160	Drescher, Alisha	400 N Capitol St NW Ste 450	Washington	DC	_green_
47172	Edens, Lucius	3M Center, Bldg 224-1N-10	Saint Paul	MN	_blue_
47115	Eshbaugh, Heather	3811 N 44th St	Phoenix	AZ	_orange_
47151	Goncalves, Trena	38 Fountain Square Plz	Cincinnati	OH	_red_
47149	Hamblen, Marguritte	3700 Airport Rd Fl 1	Boca Raton	FL	_orange_
47162	Janz, Claire	3901 S Saginaw Rd	Midland	MI	_orange_
47165	Mahaffey, Arlena	3980 Quebec St Ste 111	Denver	CO	_blue_
47203	Martini, Dean	3791 S Alston Ave , Durham, NC 27713	San Antonio	TX	_green_
47145	Metzinger, Angelita	401 Smyth	Ottawa	ON	_orange_
47105	Mike Binnix	3700 W Juneau Ave	Milwaukee	WI	_green_
47197	Pare, Horacio	3700 Ross Ave	Dallas	TX	_red_
47175	Reichling, Ruben	40 W Highland Park Dr NE	Hutchinson	MN	_blue_
47112	Scouten, Molly	3800 Blackford Ave	San Jose	CA	_orange_
47146	Taliaferro, Evia	3700 Wilbanks Dr NW	Huntsville	AL	_green_
47133	Winton, Yan	400 Oyster Point Blvd 440	South San Francisco	CA	_orange_
47178	Zacarias, Jamar	3905 Vincennes Road	Indianapolis	IN	_green_

The example Row Link URL above will work with any KMx Form, simply replace the FORM_ID (267) with the desired form to link to. The NO_HEAD=1 entry is used to prevent KMx from rendering the administrative interface header (very useful when linking to forms on the user interface or forms that are displayed in a popup window).

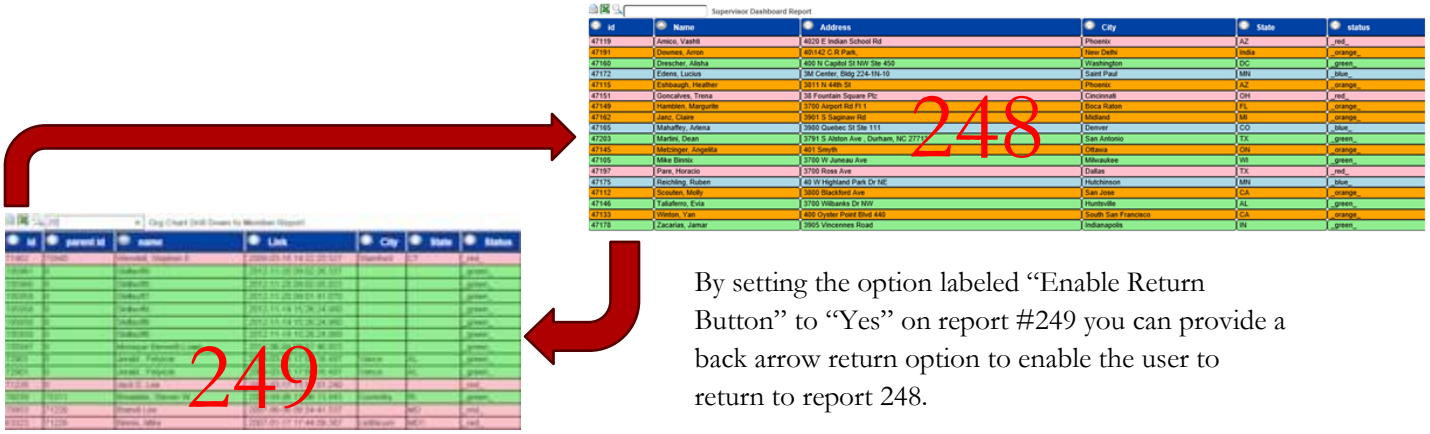
11.7 Drill-Down Reports

Reports can also link to other reports. If you want the link to pass identification information to filter values in the linked report, the calling report must have a column titled "id" that contains the dynamic information (Member ID, Company ID, Course ID, etc.). For example, the URL below would enable a click within a report to forward to report_id #249 and pass the id as VAR1 (with :VAR1 entered as the report filter 1 value) the URL would be as follows:

/ihtml/application/dynamic_reports.ihtml?report_id=249&var1=

On report #249 (the report that provides the expanded detail in the drill-down sequence) you can set the option labeled "Enable Return Button" to "Yes" to provide a back arrow return option at the top of the report.

Report #248 below is designed to allow the user to click on a row to drill-down for additional detail in report #249 and report #249 should only display the information associated with the ID information passed.



By setting the option labeled "Enable Return Button" to "Yes" on report #249 you can provide a back arrow return option to enable the user to return to report 248.

The example Row Link URL above will work with any KMx Form, report replace the REPORT_ID (249) with the desired report to link to.

11.8 New Color Coding Functions by Report Type:

Individual report row entries can have unique colors based on a calculated function (i.e. Member Certification Due Color Code) or based on values stored in a custom field (member custom 1-20, company custom 1-10, etc.). The output colors available are as follows:

1. _green_
2. _orange_
3. _red_

These colors are intended to draw visual contrast with the default Color Schemes (see below) and to highlight conditions (good, neutral, bad) to enhance the report. Numerous functions have been added to Dynamic Reports to provide color coded status. All of the new functions are included in the report table titled "DOO" for the report types as follows:

11.8.1.1 Enrollment Data - Course Enrollment One Member/Course

- Green - Completed
- Orange - Not Completed, Not Overdue

- Red – Not Completed, Overdue or Failed

11.8.1.2 Member Data – Course Enrollment One Member/Course

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue or Failed

11.8.1.3 Member Data - Personnel Category & Certification Assignments Aggregate Single Member

- Green – All Completed
- Orange – All or Some Not Completed, None Overdue
- Red – All or Some Not Completed, One or More Overdue

11.8.1.4 Performance Evaluation Data - Scheduled Member Evaluation Standard/by Supervisor ID

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue

11.8.1.5 Performance Evaluation Data - Scheduled Member Evaluation Special/by Supervisor ID

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue

11.8.1.6 Personnel Category Data – Aggregate Assignment/Member

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue

11.8.1.7 Certification Completion Data Summary - Single Certification/Member

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue

11.8.1.8 Certification Completion Data Detail - Single Assignment/Member

- Green - Completed
- Orange - Not Completed, Not Overdue
- Red – Not Completed, Overdue

11.8.1.9 Company - Personnel Category/Certification Assignments Aggregate/Company

- Green – All Completed
- Orange – All or Some Not Completed, None Overdue
- Red – All or Some Not Completed, One or More Overdue

12 KMx Dynamic Charts

In KMx Version 9.0, Dynamic Reports was integrated with an organizational chart development tool to create KMx Dynamic Charts. While primarily designed to display highly visual organizational charts, this new feature is also capable of rendering other parent/child relationships. Items including course catalogs, K/S Table hierarchies, company hierarchies and other structures can be created using these new tools.

KMx Dynamic Charts are created using the same menu options and forms that are used to create Dynamic Reports. The charts do have required elements to enable the technology to properly construct the desired hierarchy. The required elements include three specific columns:

id – The ID of the item to be depicted (Member ID, Catalog ID, etc.). This must be the first column contained in the dynamic report and must be titled "id".

parent id – The ID of the items parent (Supervisor Member ID, Parent Catalog ID, etc.). This must be the second column in the KMx Dynamic Report and must be titled "parent id".

Title/Name – The third column contained in the Dynamic Report will become the title for the item in the hierarchy representation (Member Name, Catalog Title, etc.). This column will also become the element that is linked if you decide to link your chart items using Row Link URLs (see below). This column title can be whatever best represents the content of the column.

12.1 Optional columns:

image – If a column titled "image" is included in the Dynamic Report, the Dynamic Chart will display the image for the chart row with the hierarchy element when rendered. For example, if the Member Image URL field is used by your site to store images of your members, adding a column titled "image" and selecting the Member Image URL field would enable the chart to display the picture of the user in the organizational chart.

Color Codes – Individual chart entries can have unique colors based on a calculated function (i.e. Member Certification Due Color Code) or based on values stored in a custom field (member custom 1-20, company custom 1-10, etc.). The output colors available are as follows:

4. _green_
5. _orange_
6. _red_
7. _blue_

These colors are intended to draw visual contrast with the default Color Schemes (see below) and to highlight conditions (good, neutral, bad) within an organizational structure.

The Advanced Run-Time Filter Options page (a popup on the KMx Dynamic Report Edit Form) has all of the options associated with the creation of a Dynamic Chart.

12.1.1 KMX Dynamic Chart Formatting Options

Color Schemes:

- darkred
- pink
- darkorange
- orange
- lightgreen
- green
- lightteal
- teal
- lightblue
- blue
- darkpurple
- purple
- mediumdarkblue
- darkblue
- cordovan
- darkcordovan
- neutralgrey
- black

Chart Orientation:

- getOrgChart.RO_TOP
- getOrgChart.RO_BOTTOM
- getOrgChart.RO_RIGHT
- getOrgChart.RO_LEFT
- getOrgChart.RO_TOP_PARENT_LEFT
- getOrgChart.RO_BOTTOM_PARENT_LEFT
- getOrgChart.RO_RIGHT_PARENT_TOP
- getOrgChart.RO_LEFT_PARENT_TOP

Chart Themes:

- annabel
- belinda
- cassandra
- deborah
- lena
- monica
- eve
- vivian
- helen

For examples of the color schemes, chart themes and chart orientation options, please see:

http://www.getorgchart.com/Demos

13 Google Maps ™ Integration Tools

In KMx Version 9.0 we included tools to enable administrators to output data directly to Google Maps ™. The minimum requirement for Google Maps to display a location pin or icon is a title for the item and an address for the item. Addresses should be at least a city with a state (if in the U.S.) or country (if outside the U.S.). The ability to display popup images (individual profile images, location images, etc.) is included in the integration as well as the ability to hot-link the item to other forms, reports and site pages. As with KMx Dynamic Charts, the Advanced Run-Time Filter Options page (a popup on the KMx Dynamic Report Edit Form) has all of the options associated with the KMx integration with Google Maps ™. Row Link URLS can be used in conjunction with a maps to enable hot-linking from a map to other reports and/or forms.

13.1 Maps based on Tabular Information

A good example of a tabular report that would be suitable for export to Google Maps ™ would be a roster of personnel by address or location. Like KMx Dynamic Reports and Charts, successful hot-linking to other reports or forms normally required the inclusion of a column labeled "id" that contains the unique identifier for the row (or subsequent map point).

13.1.1 Setting the "Map display string" value

Before setting the option labeled "Report is a Map Type" on the Advanced Run-Time Filter Options page, test your report as a report to ensure it is working as desired. This step will also populate the entry labeled "SQL Query" at the bottom of the Advanced Run-Time Filter Options page. This entry can be used as a reference to ensure that the "Map Display String" value is entered correctly.

Example "SQL Query" Entry:

"SELECT members.user_id , members.member_name , members.member_address , members.member_city , members.member_state , members.member_image_url , members.member_custom20 FROM members with (NOLOCK) WHERE members.organization_id=27 and members.member_company_mask like '%47105-%' order by members.organization_id asc , members.member_company_mask asc"

Example "Map Display String" Entry:

[:qt:3 :4: :5:qt, :qt
:2:qt,:qt:7:qt],

Using the two examples above, the "Map Display String" will produce a Google Map ™ with the following characteristics:

[:qt = Begin Google Maps Display String

:3 = from the members table use the member.address

:4 = from the members table use the member.city

:5 = from the members table use the member.state

:qt, = End Address/Location Information for Map Display Point

:qt = Begin Map Point Hover/Click Display

 = Make the Map Display Point a hot-linked entry to the row_link_url

 = Display the individuals image using the member_image_url field in the members table

 = After the image, put a link break into the display

:2 = Display the individuals name using the member_name field in the members table

 = End hot-link

:qt, = End Map Point Hover/Click Display

:qt = Begin Map Marker Display

:7 = Use the color code (_green_, _red_, _orange_ etc.) contained in the member_custom20 field in the members table to produce the map marker

:qt], = End Google Maps ™ Display String

There are an unlimited number of possible entries that can be used to produce the map, hover/click entries and map markers. The example above includes most of the popular entries and methods. Please contact KMSI support for assistance with creating display strings.

13.2 Maps Based on Group/Location Statistical Data

While somewhat more complex than using a simple tabular report to generate a map display, the combination of KMx Dynamic Graph outputs with Google Maps ™ can produce visualizations that combine statistical data with location data. Before setting the Advanced Run-Time Filter Options for the map display, create a Dynamic Graph that produces the location (address, city, state, etc.) information with the associated statistical information (enrollments, delinquent student, schedule classes, etc.) as a Bar Chart. This will ensure that as you setup the Advanced Run-Time Filter Options, you are only focusing on output of the location/statistical information to Google Maps as you build the Map Display String Entry.

Example "Map Display String" Entry for a Map Based on Group/Location Statistical Data:

[:qt:1 :2 :qt, :qt Count of :3 at :1 :2:qt,:qt:pink:qt],

[:qt = Begin Google Maps Display String

:1 = from the members table use the member.city

:2 = from the members table use the member.state

:qt, = End Address/Location Information for Map Display Point

:qt = Begin Map Point Hover/Click Display

Count of :3 at = Short message ("Count of") and the NUMERIC value followed by the word "at"

:1 = from the members table use the member.city

:2 = from the members table use the member.state

:qt, = End Map Point Hover/Click Display

:qt: = Begin Map Marker Display

Pink = Use Pink for the map markers

:qt], = End Google Maps ™ Display String

There are an unlimited number of possible entries that can be used to produce the map, hover/click entries and map markers. The example above includes most of the popular entries and methods. Please contact KMSI support for assistance with creating display strings.

Note: Use of Google Maps™ requires acceptance of the Google Terms & Conditions. Restrictions and additional fees may apply. Contact KMSI support for additional information.

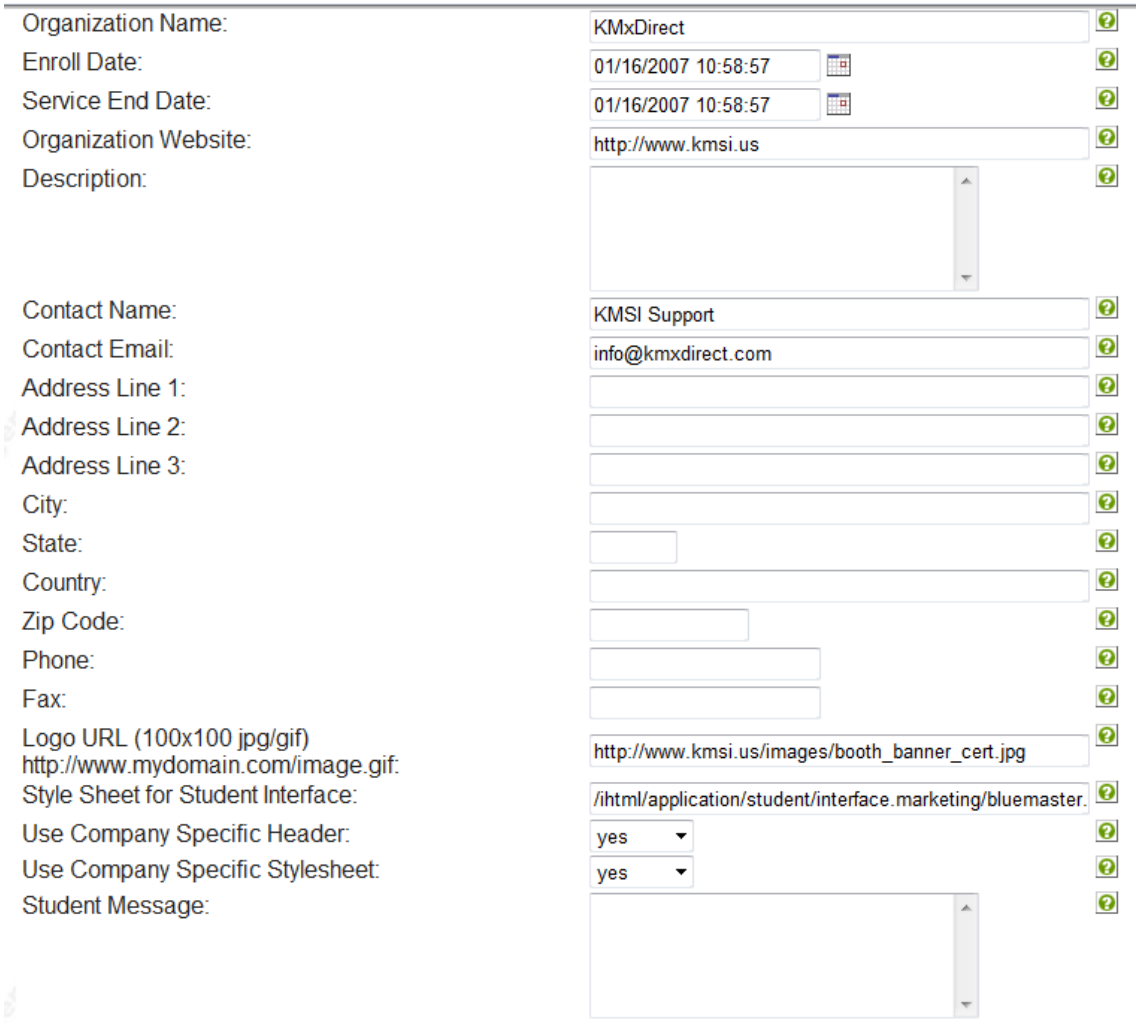
14 Setup and System Administration

The most frequently used System Administrative Features are discussed in this topic. KMSI offers an Advanced Systems Administrator course twice each year to provide administrators that have completed our KMx Developer/Administrator Training Program with the ability to leverage certain advanced features of the system. For a complete schedule of KMSI training programs, please visit www.KMxDirect.com.

14.1 Organization Configuration

Configuration of the primary and default features of the organization is accomplished using the Review Organization Information option under the Setup main menu option. The Organization Information Form is segmented into logical groups of options.

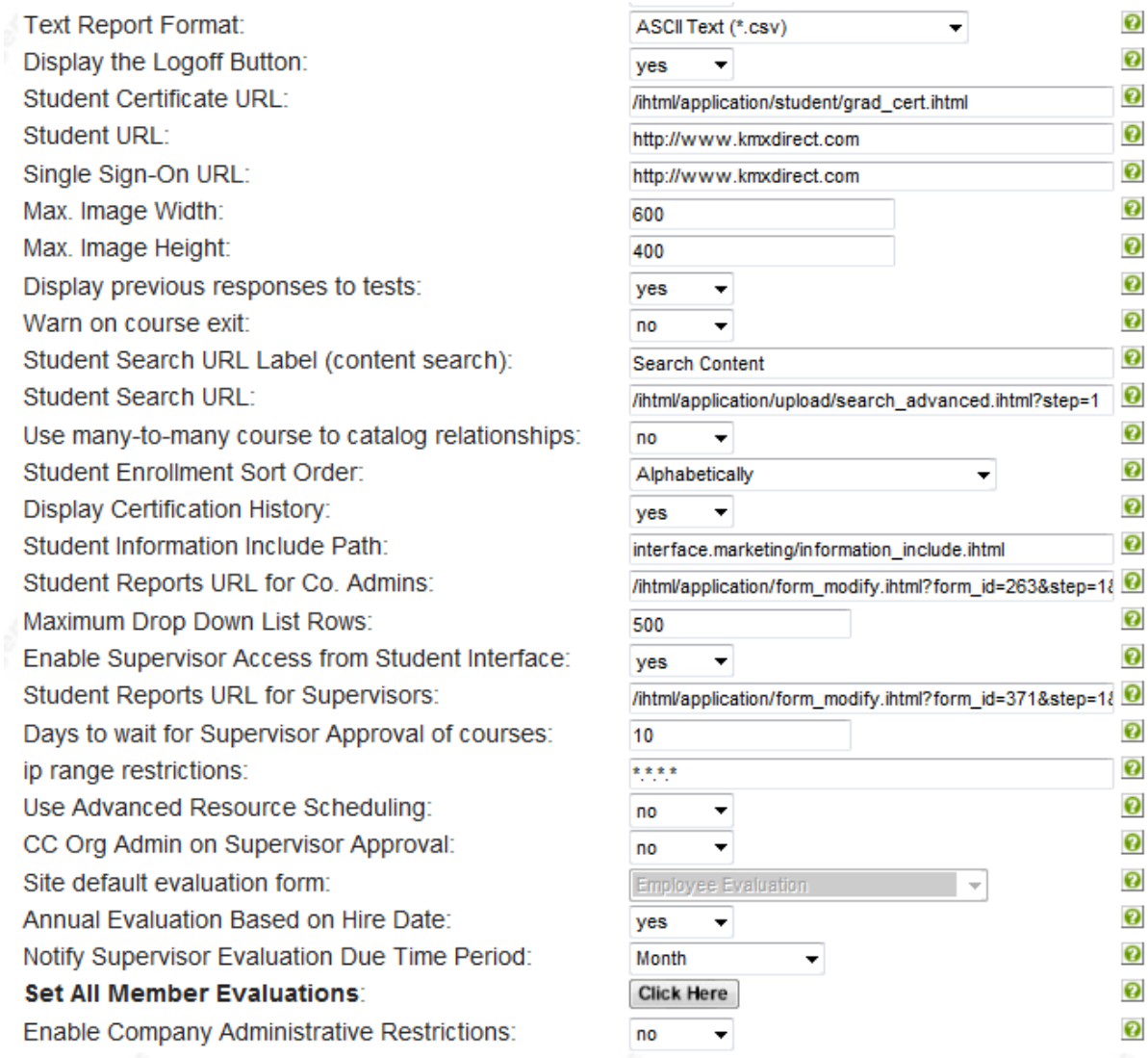
Overall Organization Information



Student Interface Options

Display Student Catalog:	no
Display Instructor Calendar:	yes
Display Student User Info:	yes
Display Student Search:	yes
Display Student eCommerce:	no
Display Student Category:	yes
Display Student Records:	yes
Display Student Custom Link:	yes
Display Student My Activities Header:	yes
Display Student Merged Catalog:	yes
Disable Root Catalog:	no
Display Student Activity Calendar:	yes
Display Student Enrollments Pending Sup. Approval:	no
Display Shopping Cart Link:	no
URL For Custom Link:	/ihtml/application/student/interface.marketing/class_calen
Display Student Advanced Search:	yes
Advanced Search Label:	News & Info
Advanced Search URL:	http://www.kmsi.com/media_nohead.htm
Label for Custom Link:	Classes & Webinars
Use a Custom Header Page:	yes
Student Custom Header URL:	/ihtml/application/student/interface.marketing/student_hea
Custom Navigation Bar URL:	/ihtml/application/member_history_new_mobile.ihtml
Custom Student Information Form:	/ihtml/application/form_modify.ihtml?form_id=197&step=1
Display Course Download Column:	yes
Display the Message Board Column:	no
Display the Calendar Column:	no
Display the Launch Course Column:	yes
Display the Student History Launch Course Column:	no
Display the Student History Grades Column:	no
Display the Student History Download Course Column:	no
Display the Information and Grades Column:	no
Display Student Delete Enrollment:	yes
Display CEU Credits on Student Profile:	yes

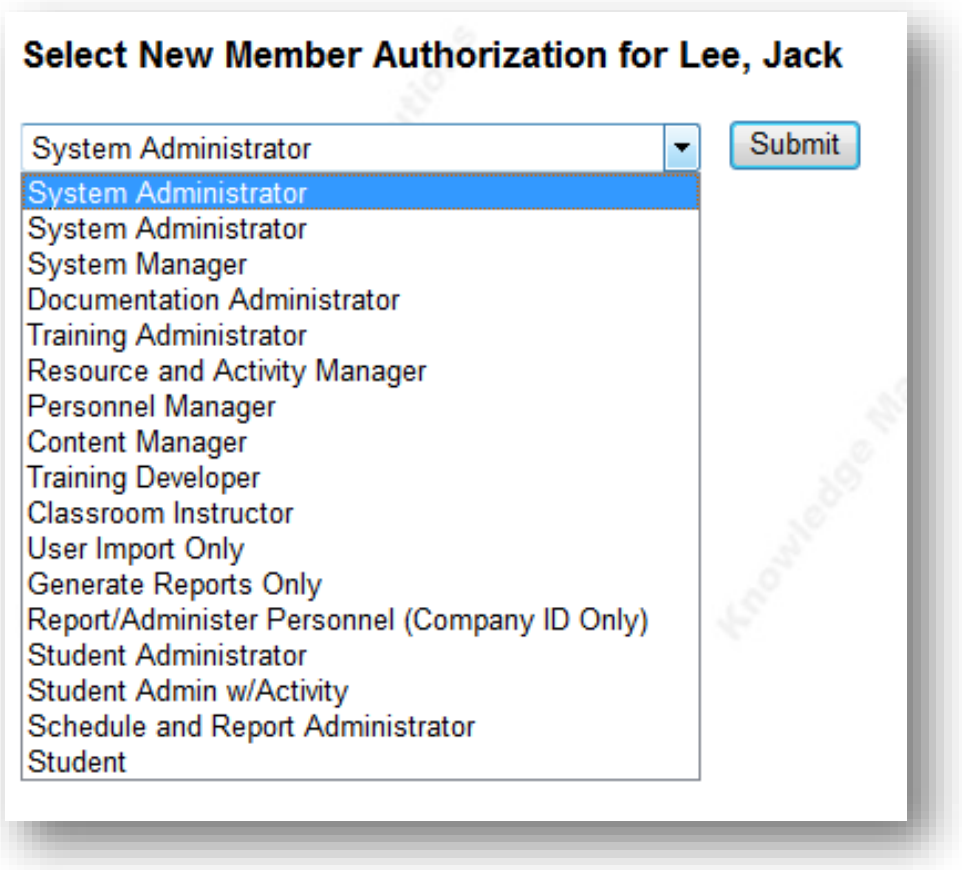
Advanced Options



Each option is supported by extensive help information to assist the administrator with the selections most appropriate for their organization.

14.2 Member Authorization Levels

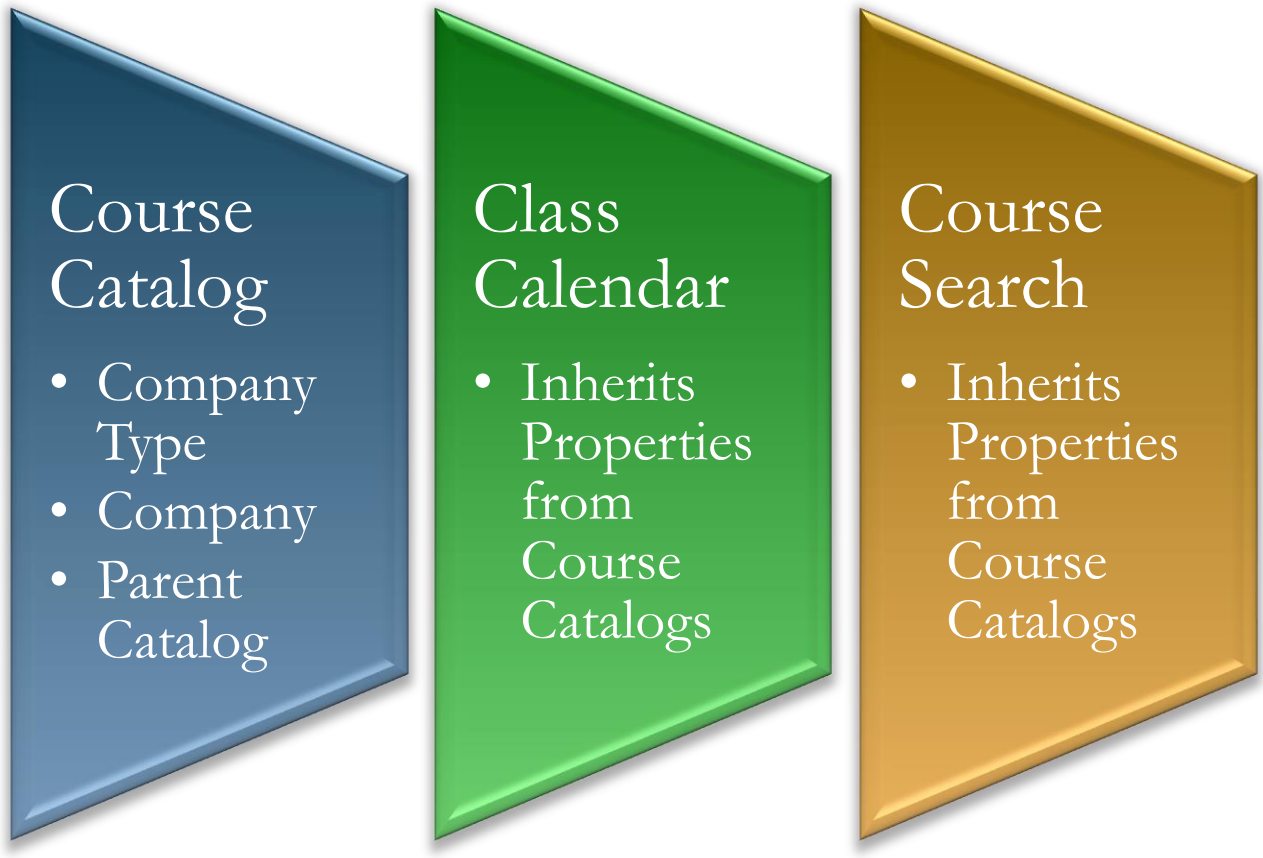
Access to the options available on the KMx Developer/Administrator Interface is regulated by 15 Member Authorization Levels. The levels provide access relevant to roles within an organization and can be customized to support unique client requirements:



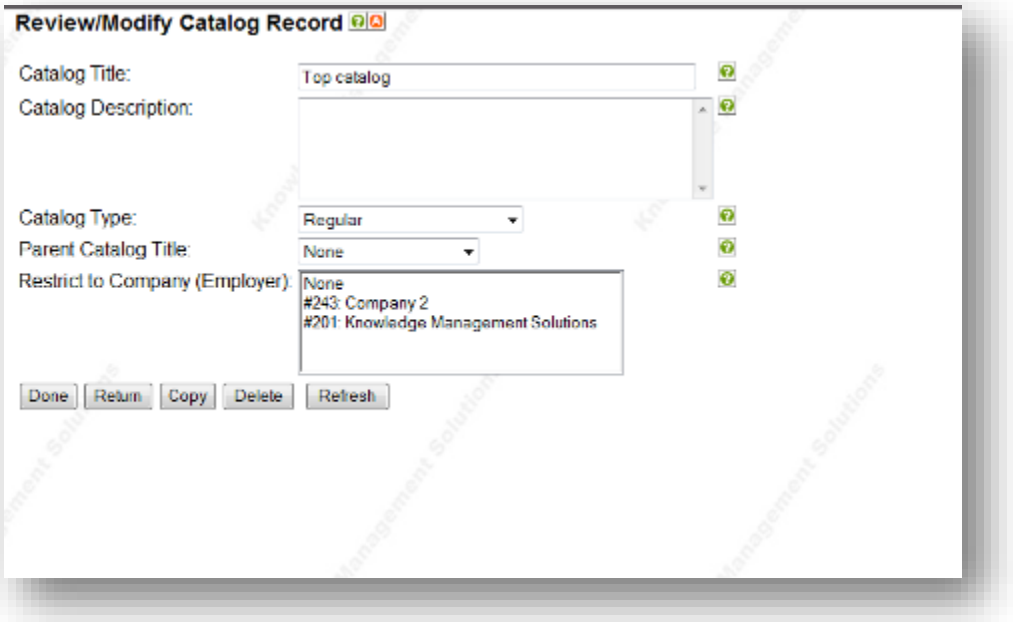
To review/change a users Member Authorization Level, select System Administration, Review Member Authorization Level form the KMx Main Menu.

14.3 Catalog Setup

Within KMx, catalogs provide both a method of access for learner enrollment into courses and a security scheme to ensure courses are accessible to designated learner populations. Catalogs can be infinitely nested. Child catalogs (sub-catalogs) assume the security restrictions of their parent catalog and each of its parents. The Insert Catalog Record and the Review Catalog Record options are available under the Setup main menu option. Catalogs can be "Regular" or "Restricted". A Regular catalog is access using the Course Catalog option from the Student/Instructor/Supervisor interface. A restricted catalog is access using the Category Profile option from the Student/Instructor/Supervisor interface.

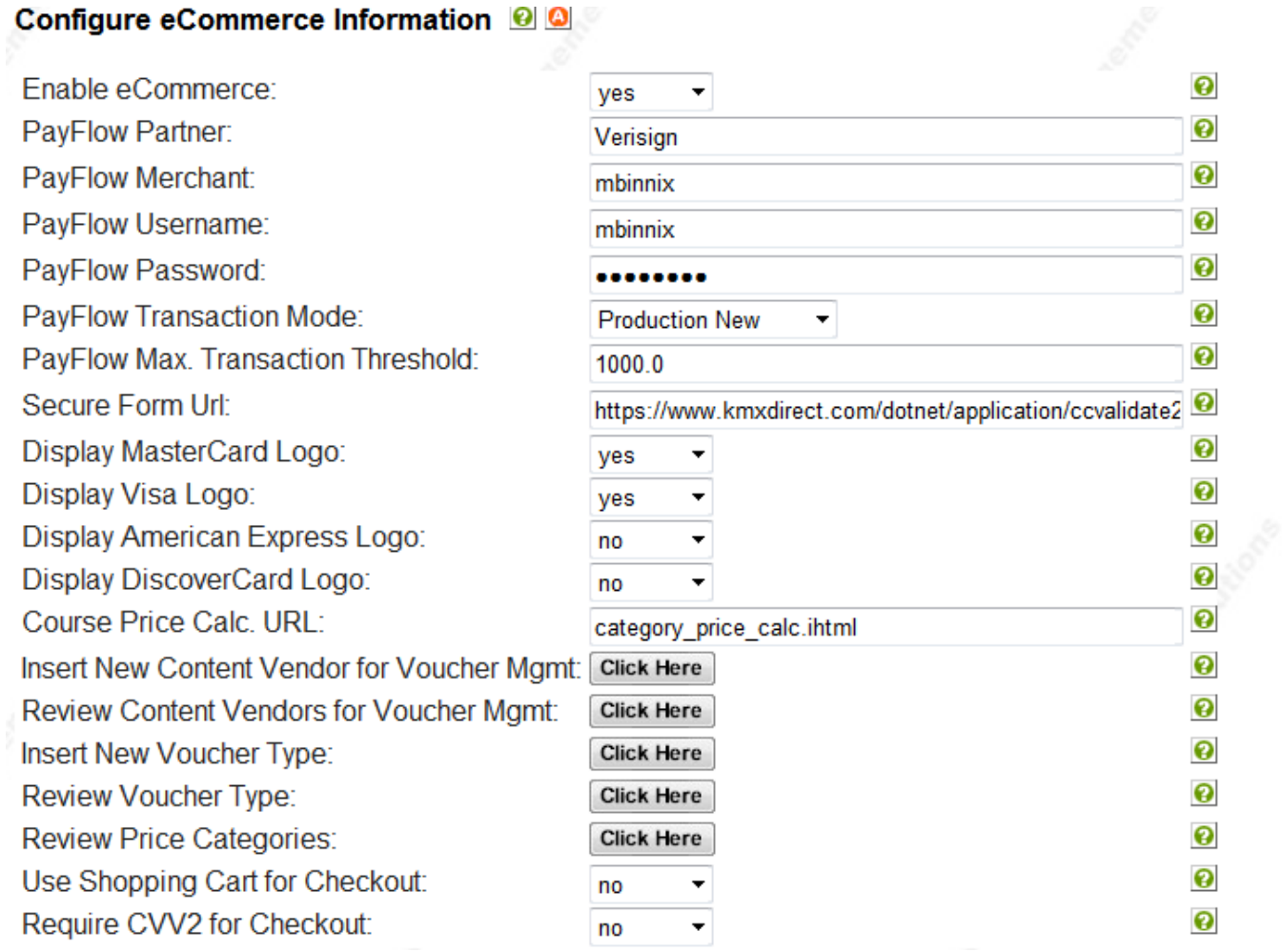


The default Class Calendar and Advanced Course Search options have respect the multiple company assignment/restriction capabilities. This feature also includes a "Multi-Select Dropdown" form control element (see below). In order to select an item using the Multi-Select Dropdown control element, simply click on the desired item. To include multiple selections, use the CTRL key in conjunction with clicking on the additional elements.


Review/Modify Catalog Record
Catalog Title:
Top catalog
Catalog Description:
Catalog Type:
Regular
Parent Catalog Title:
None
Restrict to Company (Employer):
None
#243: Company 2
#201: Knowledge Management Solutions
Done
Return
Copy
Delete
Refresh

14.4 eCommerce Options

KMSI is responsible for the initial setup of the client's eCommerce options. This is normally accomplished during site startup. Once configured, clients have the ability to configure and provide a number of additional eCommerce features:



Each of these advanced eCommerce features are covered in the KMx Advanced Systems Administration Course. For our complete class schedule, please visit www.KMxDirect.com.

14.4.1 Shopping Cart

KMx includes an option for clients to provide the ability for users to combine multiple eCommerce purchases with nearly unlimited discounting rules and payment options directly from their shopping cart.

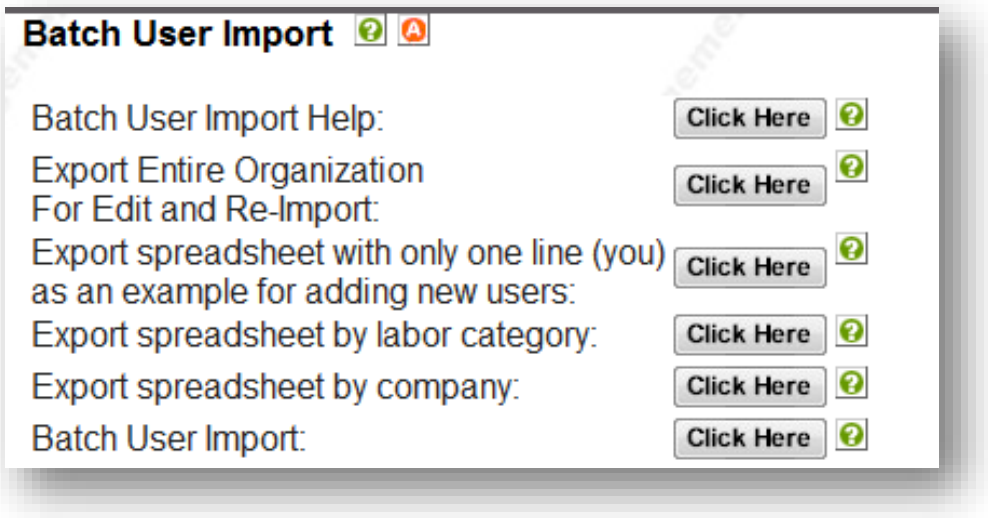
Shopping Cart

Course / Class Title	Schedule	Price	Delete Enrollment
Course/Enrollment AutoComplete Test	-	$100.0	
Dummy eCommerce Course	01/21/2008 - 11/21/2009	$100.0	
Total		$200.0	Buy Now

The shopping cart approach makes it easy for users to enroll in multiple course/class offerings with a single ecommerce transaction. The shopping cart is an optional element. A Yes/No option is available on the Configure eCommerce Information screen under the Setup main menu option. If set to Yes, then all eCommerce transactions will be completed using the cart.

14.5 Advanced User Management and Batch Import

To facilitate large-scale personnel changes and member record updates, KMx provides a comprehensive Batch User Import utility provided under the Setup main menu option. The batch utilities are supported by a comprehensive help system that is tailored to the individual organization configuration. Please refer to the Batch User Import Help option prior to using this utility.



The batch user import utility leverages standard Microsoft Excel Spreadsheets (XLS format) to provide the export and import capabilities.

14.6 Email Templates

Email templates are available for review and modification under Setup, Review Email Templates. KMx includes the following Email Templates:

14.6.1 Supervisor Approval Request – Email Template

The email to supervisors indicating that an employee has requested permission to take a course is now derived from a template. Previously it was derived from the language pack. This change will let customers more easily maintain the language in the email template.

14.6.2 Send Notification to Instructors when Assigned to Class

Sent to instructors when an administrator has assigned them to instruct a class.

14.6.3 Enrollment by Supervisor with Class

Sent to end-user when their supervisor has enrolled them in an instructor-led class.

14.6.4 Enrollment by Supervisor

Sent to end-user when their supervisor has enrolled them in an eLearning course.

15 KMxLive (KMx Enterprise Clients Only)

KMxLive eliminates the barriers associated with delivery of live training using the Internet. KMxLive Features and Capabilities:

- Live Streaming Video & Audio
- Interactive Presentation Materials
- Student Chat Interface
- Live/Replay Quizzes, Exams and Surveys
- Graphic Audience Response System
- Polling and Hand Raise Features
- Up To 10,000 Simultaneous Students
- Extremely Low Bandwidth (56Kbps)
- Content "Push" to Students from KMx Learning Content Management System
- Replays are Instantly Available for use as Reusable Learning Objects
- Fully SCORM Conformant (Live and Replay)

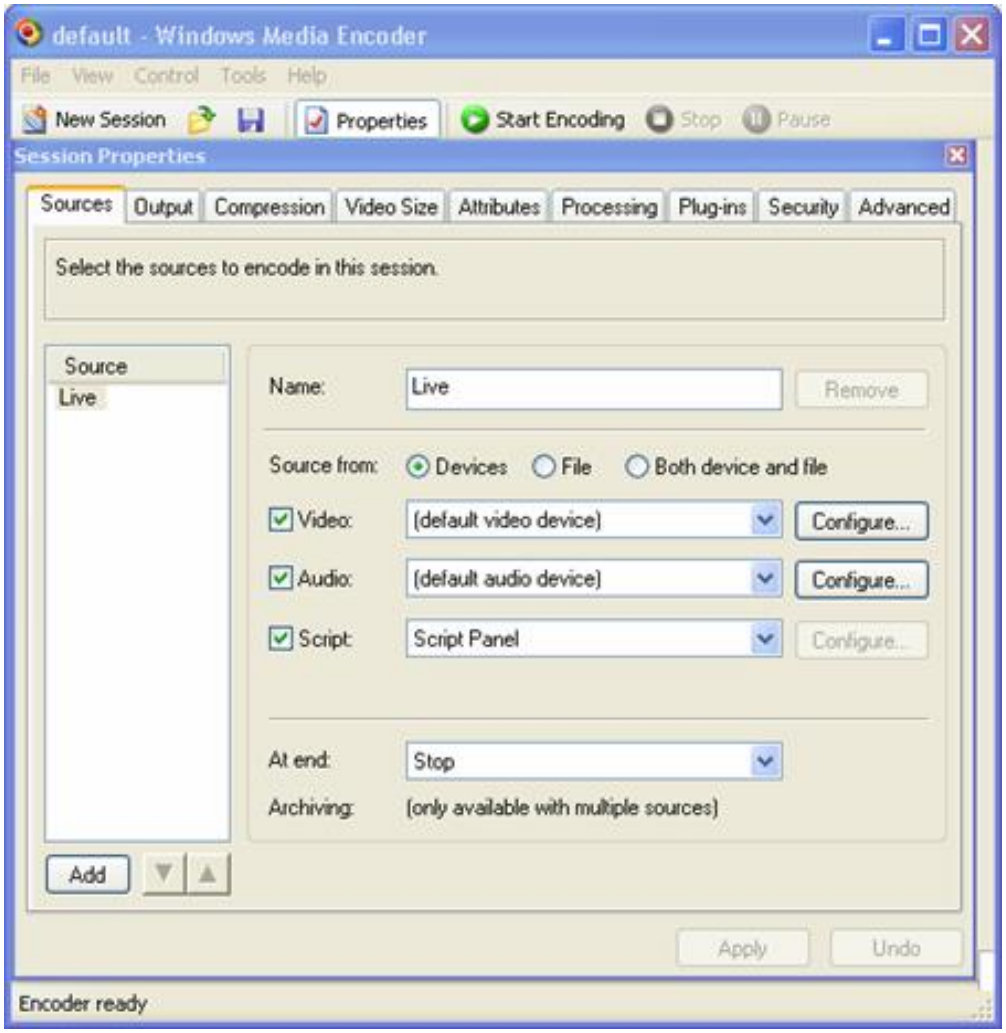
15.1 Configuring the KMx Live Broadcast Workstation

To use a desktop computer or laptop as a workstation for originating a KMx Live Broadcast you must start with the following minimum system requirements:

- A Pentium class computer with the minimum CPU and Memory required for Microsoft Windows Media Encoder 9 or higher.
- Microsoft Windows 2000 or higher operating system installed.
- Microsoft Windows Media Encoder 9 or higher installed.
- A digital camera with the appropriate device driver installed (if you desire to produce audio only broadcasts then a camera is not required).
- A microphone installed.
- The workstation must be connected to the Internet.

Once these items are verified you must ensure that the broadcast settings for your presentation are configured to your workstation and loaded into KMx. To define these settings:

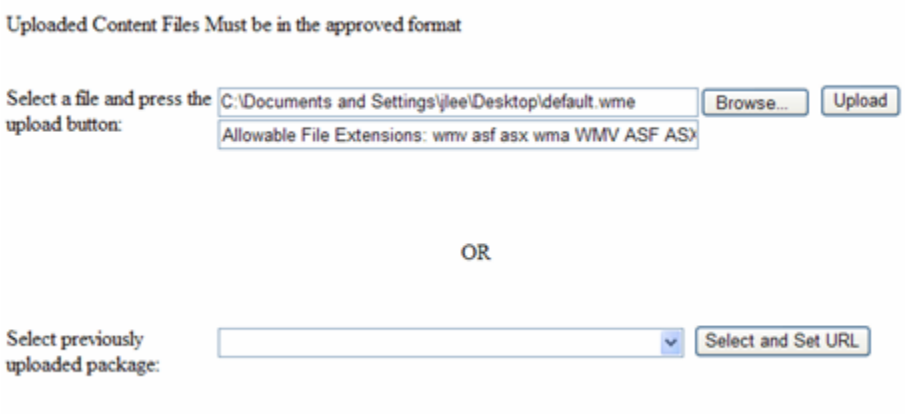
1. Open the file named default.wme that was provided to your system administrator.
2. Opening this file will launch Microsoft Media Encoder. When prompted to enter your user name and password, input the account information provided by your system administrator. Before pressing enter, make sure that you check the box to save the user name and password.
3. Press the Start Encoding button to verify your camera, microphone and Internet connection are ready for use with KMx Live. Media Encoder will provide an error dialog if any settings are incorrect for your workstation.
4. There are numerous tabs on the properties dialog to allow you to change items like: Audio and Video Sources, Bandwidth, Compression, and Output. Please do not change the output settings as these items have been preset for your KMx Live account.
5. You can now save the WME file using the File, Save options from the main menu.
6. Close Windows Media Encoder.



15.2 Upload the WME file to KMx

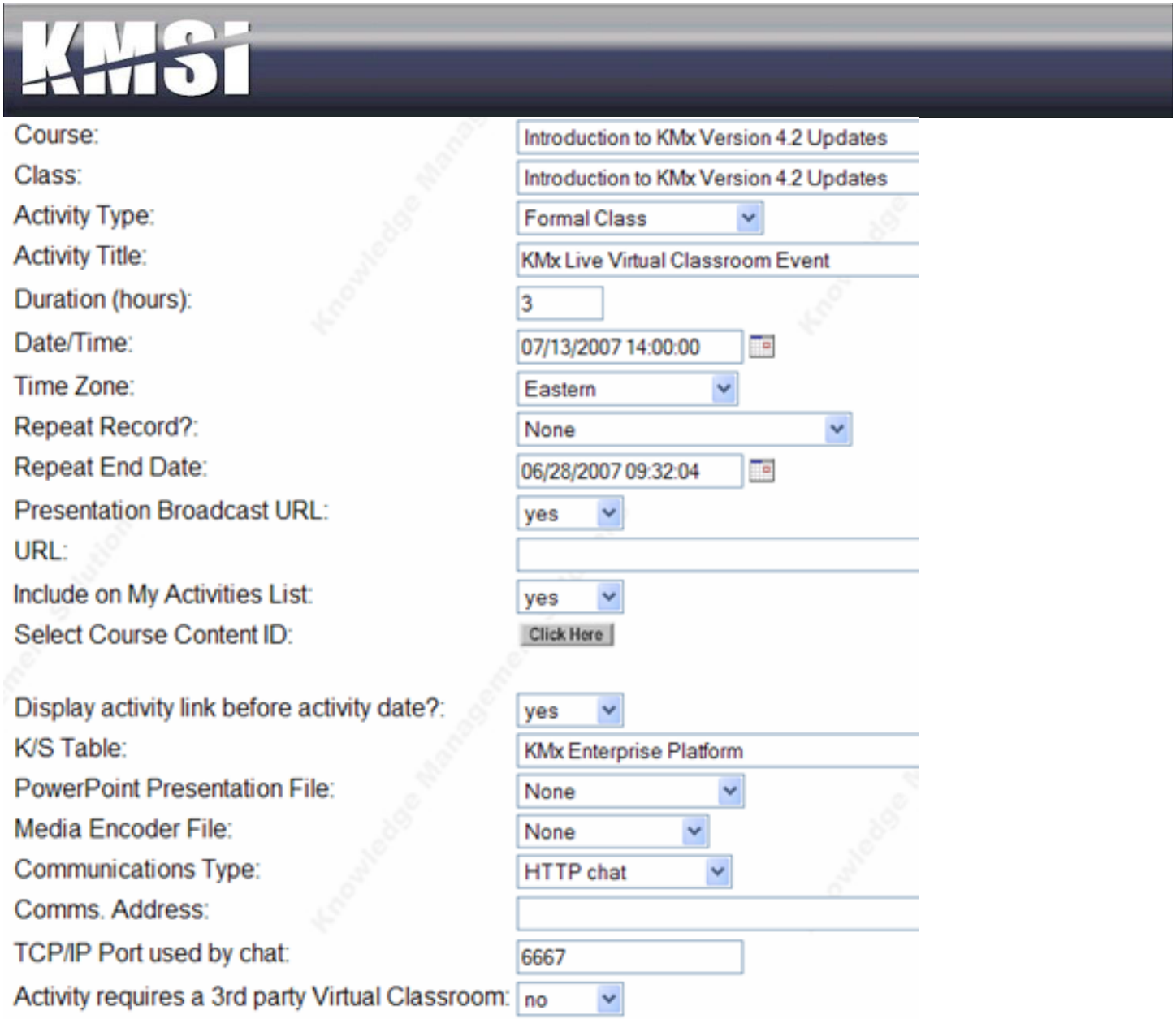
Once you have verified the ability of your workstation to broadcast using the default.wme file in the procedure above, you must upload this file to your KMx content management system. We recommend that you use the Organize and Develop Content main menu option and then Insert a Content Record, select a K/S Table and then select the content type Video/Audio. Enter a content title for your WME file that will associate it with the workstation you have configured it for.

Using the Edit Content button, Browse and Upload the default.wme file to KMx. Remember the K/S Table and content title that you entered so that you quickly find the file when setting up your class activity records.



15.3 Setup the Class Activity in KMx

You will need to upload your slides as a content object in KMx prior to the event, then you will need to define a Class Activity and provide the URL of your broadcast publishing point (see your System Administrator) and select the slides and the WME files that you have uploaded. Consult the KMx User's Guide or contact KMSI customer service for assistance with setting up a class activity if you are not familiar with the process.



15.4 Test your Activity and Encoder Settings

Once your activity is setup, you should conduct a test of the activity and encoder settings to ensure your end-users are able to connect to your session. From the KMx Student Instructor Interface, select the Class Calendar for the Class which contains the Class Activity for your broadcast.

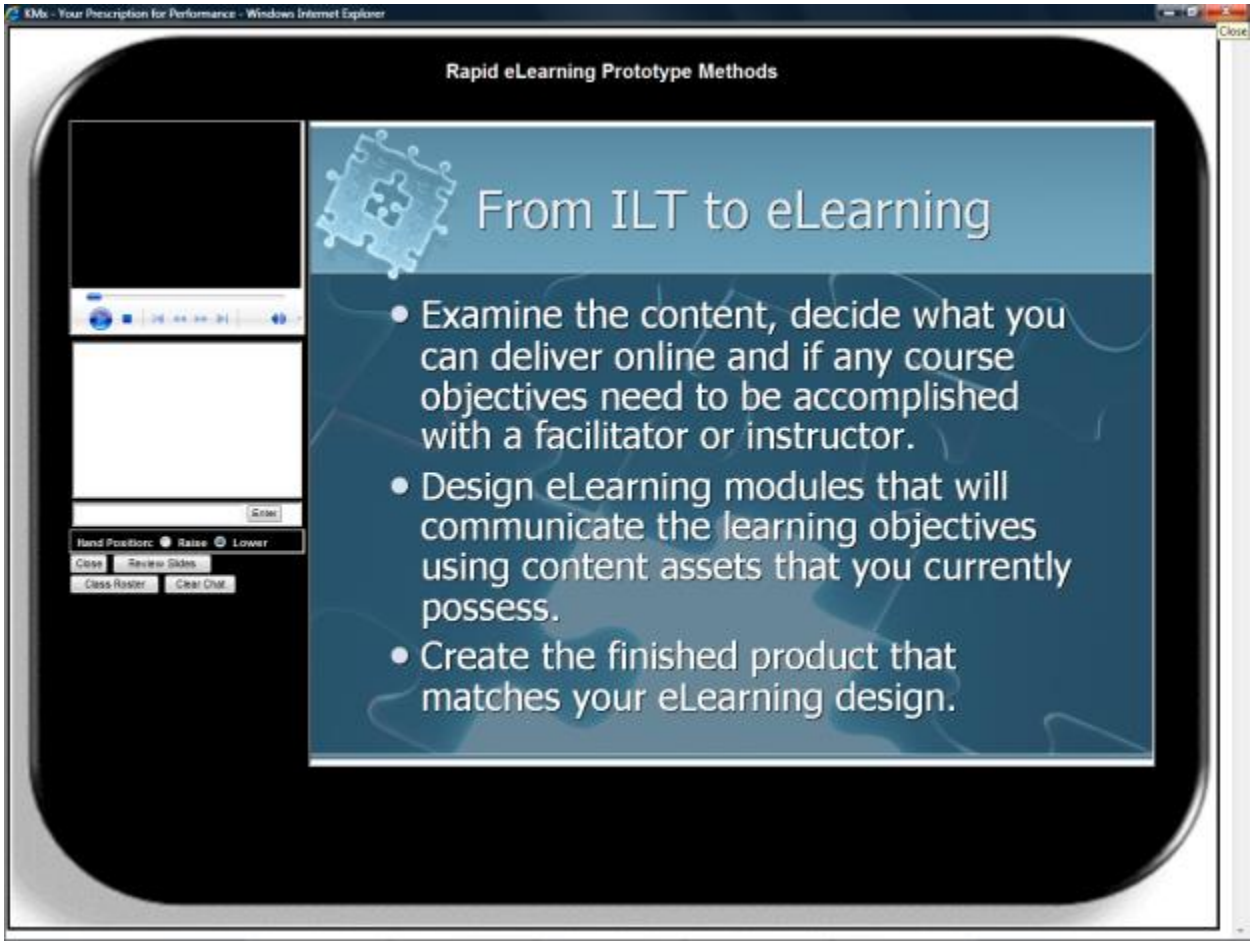
You must be enrolled in the class and be an Instructor (Administer Personnel) to launch a KMx Live session. On the calendar, find and click on the activity setup for the session. Select KMx Live Instructor Start to open the KMx Live Instructor console. When you are ready, select Start to commence your broadcast. Once the console message displays "Encoder started – begin broadcast" you are transmitting over the Internet. Use the slide navigation controls to control the display of slides, exams, surveys and media.

When you are finished with your presentation, select the Stop button and wait for the message "Encoder Stopped. Session Ended".

15.5 After the Broadcast

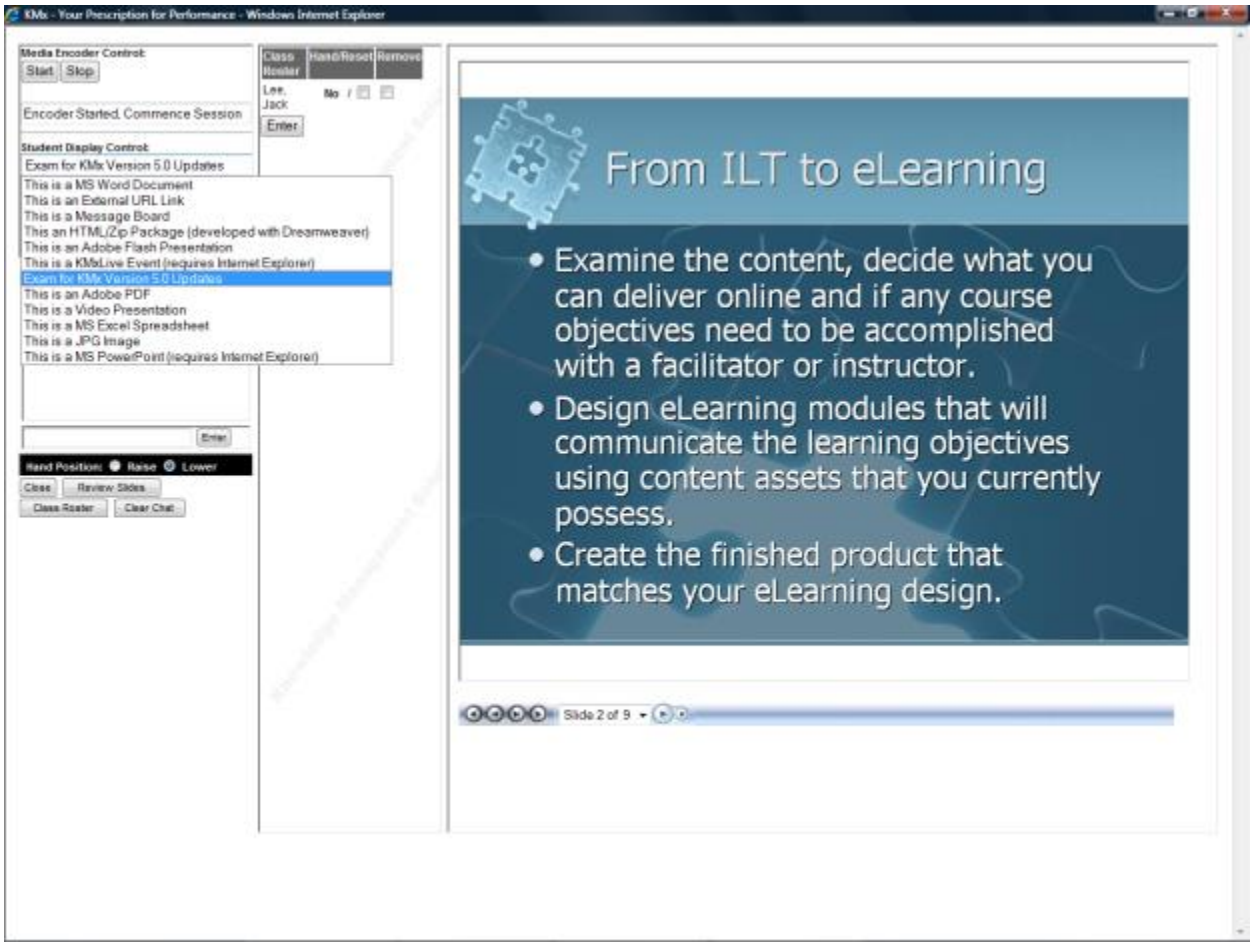
After completing a broadcast, you can upload the video file to KMx to create a play back content item. From the "Organize and Develop Content" menu, select Insert a new content object. Select the same K/S table where the PowerPoint slides are located that you used during the live presentation, then select "Presentation Broadcast Media" as the media type. When you are loading the titles, descriptions and other meta data about the media file, you will see one of the drop down lists request you to identify the associated PowerPoint deck by object. The video will be located on the "Select previously uploaded package:" list on the Edit Content popup. Once loaded, the Presentation Broadcast Object can now be selected for inclusion in a course outline.

Student Presentation Interface



The KMxLive student console provides client configurable brand elements including the background image, fonts, control styles, etc.

The KMxLive Instructor Console



15.5.1 Use of Content, Exams and Surveys during Presentation

KMx provides the instructor with the ability to deliver any content elements to students during a KMxLive presentation. The instructor can select any element present in the course outline for "Push" to the students. See Content" Push" Controls below for more information.

15.5.2 Full Screen Video Controls

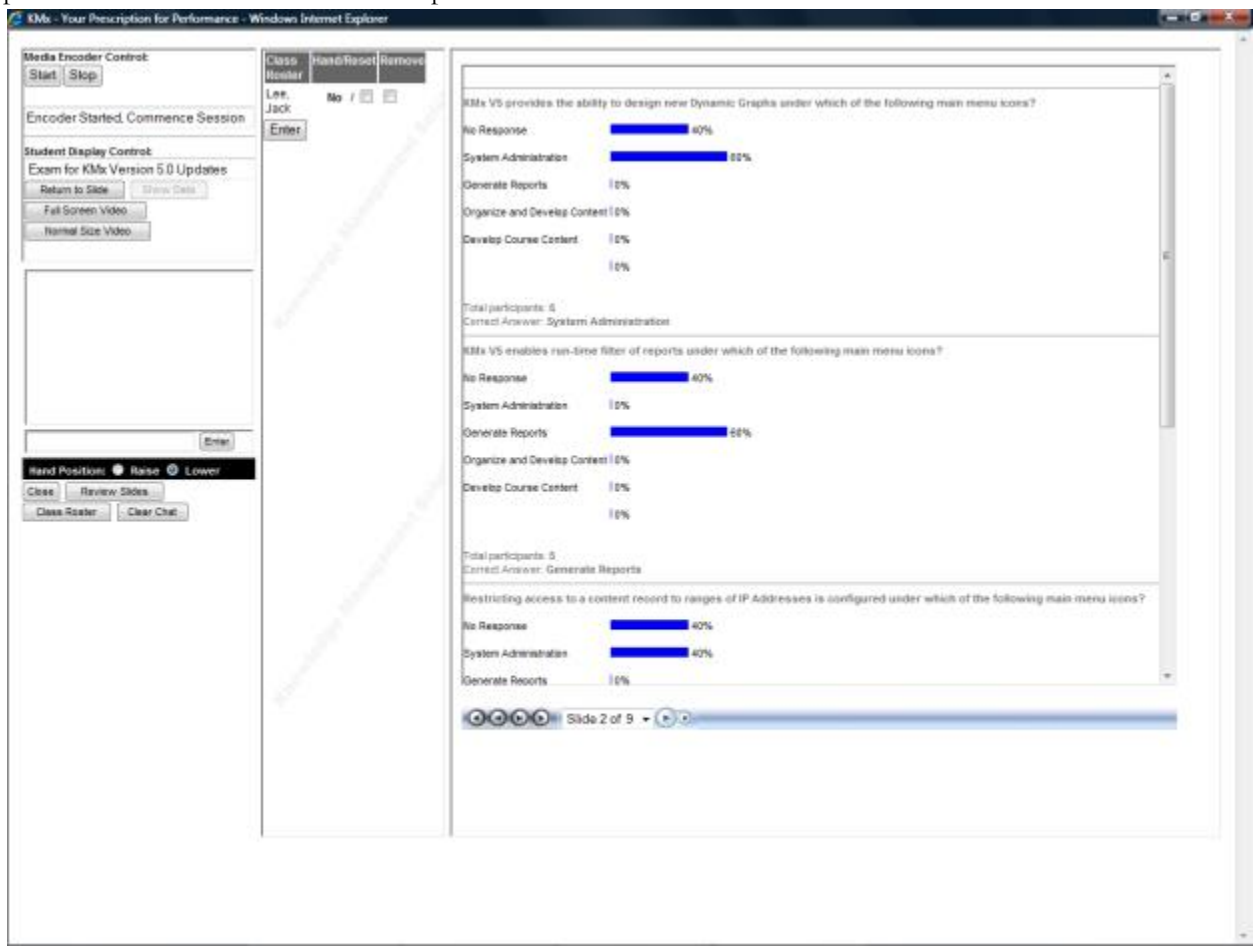
Provides the instructor with the ability to change the student's video from ¼ screen to full-screen and back with the press of a button.

15.5.3 Content "Push" Controls

Provides the instructor with the ability to "Push" any KMx content object to the student display window by selecting the available content object in the course outline and then selecting the push control.

15.5.4 Survey/Exam Results Sharing Controls

Provides the instructor with the ability to share both exam and survey statistical results with the student with the press of a button. The button is enabled for any content that enables collection of student response data (scored or un-scored) and presents a bar chart of the student responses.



16 KMxMobile

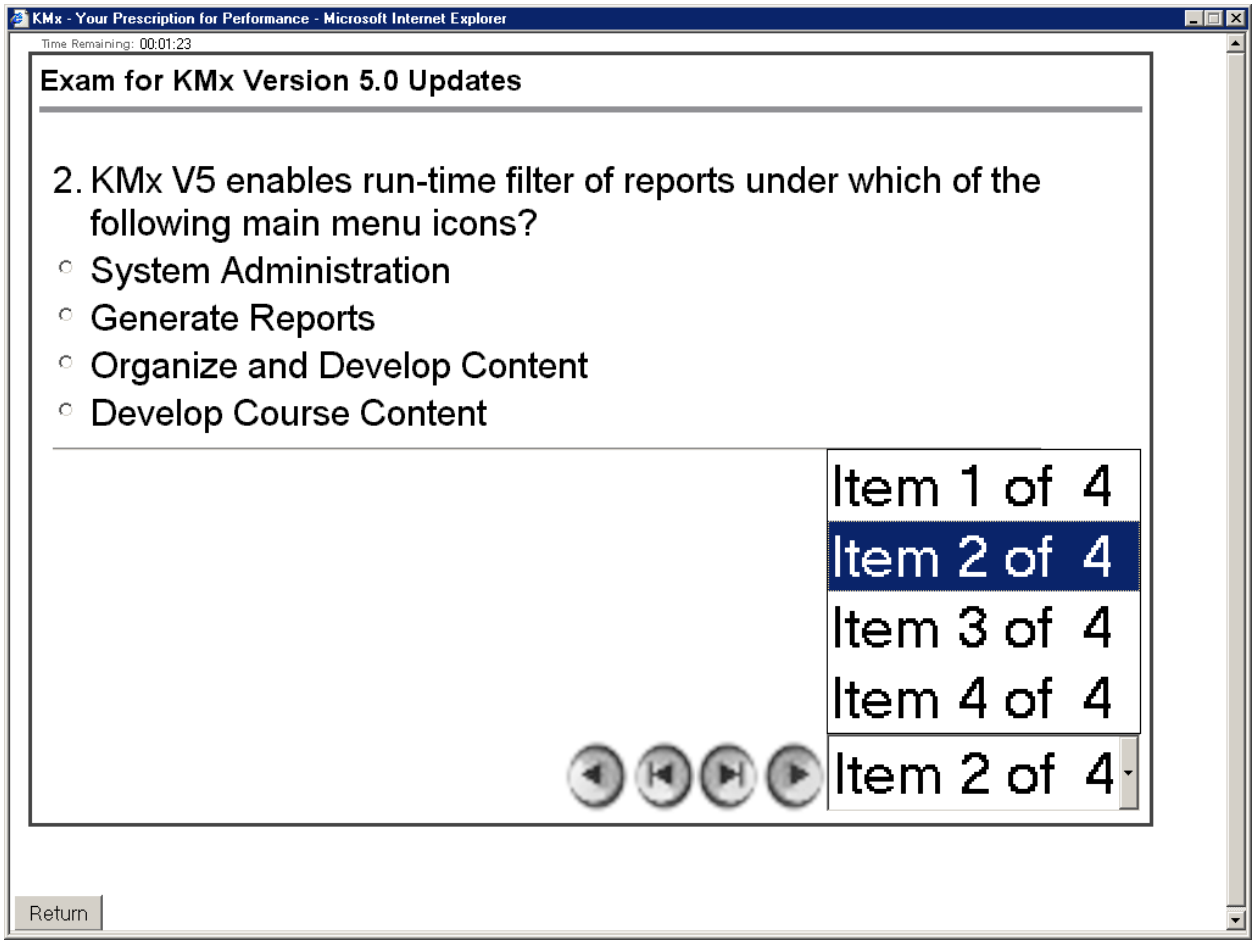
With KMxMobile, end- users can access courses, learning objects, exams and surveys using their iPhone, Android, Blackberry OS6, Nook Color, Amazon Kindle or Windows handheld device with full SCORM learning management capabilities, including:

- Time tracking (when, by whom and for how long was the learning object accessed)
- Bookmarking (allowing the user to save their progress and return at a later time)
- Assessment Scoring and Remediation (recording each student response and tracking retakes)
- Survey and Performance Appraisal Delivery
- Pass/Fail and Completion Status Recording
- Real-time tracking with no post-lesson upload of progress information

KMSI has also included a full mobile collaboration suite with the KMxMobile release. Collaboration features include mobile chat rooms, threaded discussion boards, surveys, performance evaluations, a searchable knowledge management system, a performance management system and talent management tools.

16.1 Test/Survey Navigation

In order to enable the delivery of exams, surveys and performance evaluations to mobile devices, KMx includes a test delivery interface than enables the end-user to select from multiple-choice responses without having to use a radio button or a checkbox as the primary interface. All multiple choice test item options are "hot" spots with a color change to make mobile selection easier and readily visible. In addition to the "hot" spot changes, the KMx Test Item Navigation Bar is configurable in the KMx language packs. This enables clients to create their own item to item interface controls using simple HTML and images. See the example below:



16.2 Course Navigation

KMx includes a Navigation Bar designed for mobile device use. This Navigation Bar has been tested on most major mobile devices, including the iPhone, iPod Touch, Blackberry and Windows Mobile platforms. While, the Mobile Navigation Bar is less capable than the standard browser Navigation Bar, it does provide a convenient mechanism for deployment of sequenced content to a mobile audience.

16.3 Device Specific Video Content Behavior

With the advent of the Apple iPhone and 3G networks, video based mobile content is more popular than ever. KMx supports the ASF, WMV streaming media formats and MP4, 3GP, FLV and MOV video. In order to ensure that the video plays correctly on the selected device, the video behavior is tuned based on the user's device and browser. This may cause some minor display differences between devices as resolutions vary greatly, but the overall experience for the end-user will be the best possible based on the device used.

16.4 SCORM Run-Time Environment

KMx provides the industry's only fully conformant Sharable Content Reference Model (SCORM) Run-Time Environment (RTE) compatible with all popular handheld and mobile devices. The only requirement for the device is that it accepts session cookies (to maintain good security during the session) and that it have JavaScript enabled. Many of our clients are very surprised to see their content (even content developed or provided by third-parties) working perfectly on their Android, Blackberry or Windows Mobile device. This presents a significant advantage for our clients that would like to leverage their investment in mobile technologies for performance support, training and talent management activities.

17 Web Services

KMx is supported by a number of web-services that have been created to enable customers to provide integration with third-party technologies and craft their own user experience by leveraging XML, XSL and SOAP technologies. The web-services are advanced tools that are covered in our KMx Advanced Systems Administrator Course. For our complete class schedule, please visit www.KMxDirect.com.

17.1 Catalog web service

This read only service provides customers a means to query the KMx course catalog for course titles, descriptions, access restriction information and ecommerce details such as pricing and discounts. This service also includes classes and schedules. This can be useful for customers who wish to market training offerings on other web sites. KMx can serve as the master record of all training offerings, while allowing other sites to advertise the offering details.

Some customers may also find it useful for integration with HR systems, allowing the KMx platform to serve as a master record of training offerings while keeping the HR system up to date with course numbers, titles and descriptions.

17.2 Company web service

This service allows customers to retrieve and maintain a list of companies (subordinate organizations) in KMx for their organization. This service is intended for large organizations that operate many divisions, or have large groups of dealers, resellers, or customers operating as independent entities within their KMx implementation.

17.3 Course Finder web service

This service provides methods to search for course and class offerings by topic, date and location. Location based searches can by state or by zip code + radius. It will complement the Catalog Service by allowing customers to provide search

functions from within their own portal or intranet web interfaces before redirecting interested users to the KMx interface for registration.

17.4 Enrollment Web Service

This is a read only service with a variety of methods allowing users to query the enrollment status of an individual in a course, a list of courses, or a list of individuals in a course. The result sets returned can be used in a wide assortment of applications including:

- Custom Reporting
- Data-warehousing to merge to correlate with other corporate performance, or personnel data
- To implement access rules to applications or systems that has training pre-requisites.

18 Integration and Session Security Management

18.1 Single Encrypted Session Variable

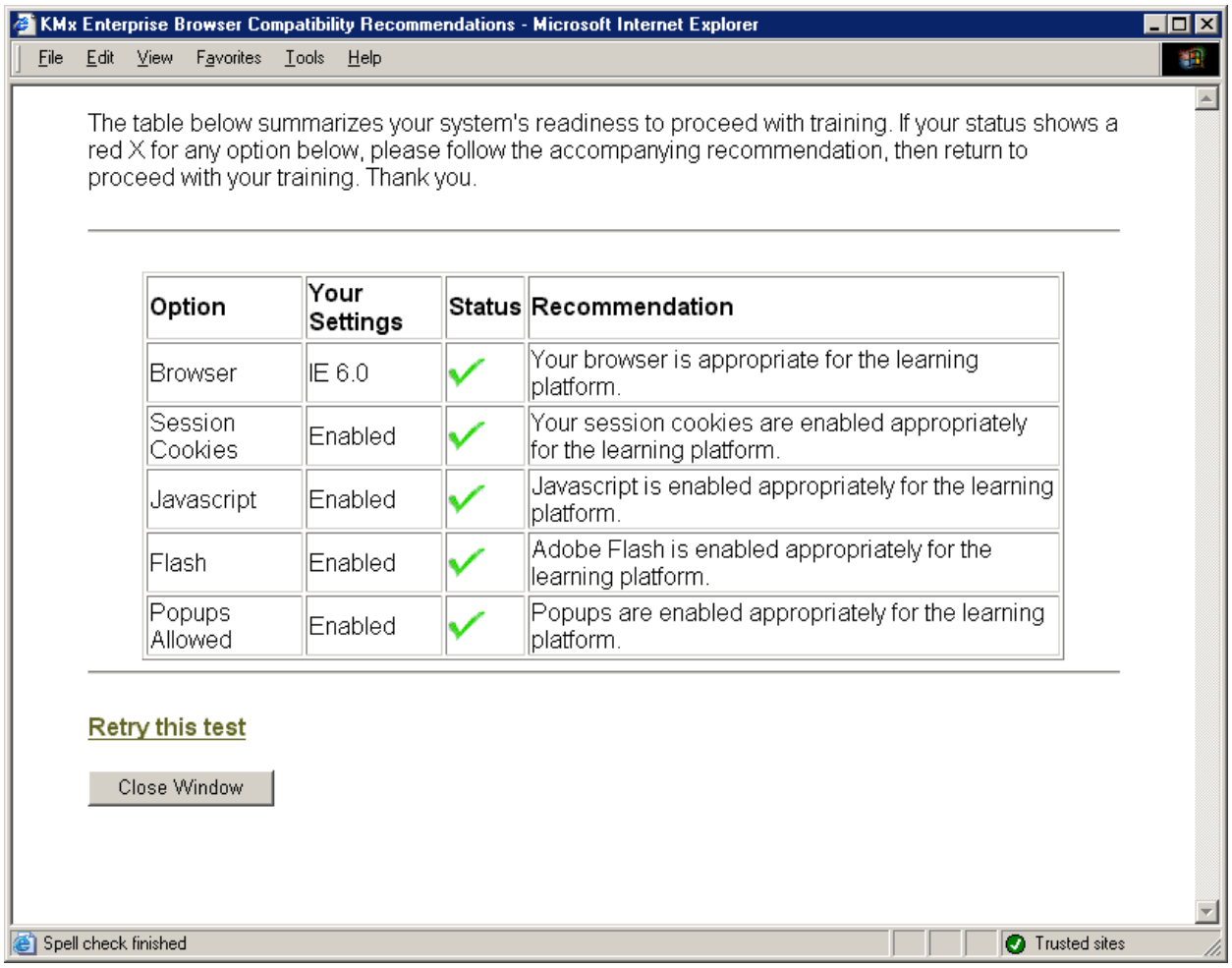
Early releases of KMx relied on multiple encrypted session variables (also known as soft cookies) to maintain session identification and security information. This approach is commonly used by banks and other secure sites to identify user permissions and attributes during navigation of a website. We have preserved this approach which has been extremely successful with our clients. Clients that completed their KMx startup after January 2011 use a new approach that consolidates the multiple variables into an encrypted data string. This new option will allow clients that require space in the session variable header to have soft cookies to support their portals, site monitoring services and other content that require access to the session header.

18.2 Single Sign-on

Single sign-on facilitates direct access to specific administrative functions. Customers can direct supervisors and company administrators to specific functions by specifying the form_id and other parameters as part of their integrated access path from intranets, portals or other websites set up as KMx access points.

19 Student Workstation Testing

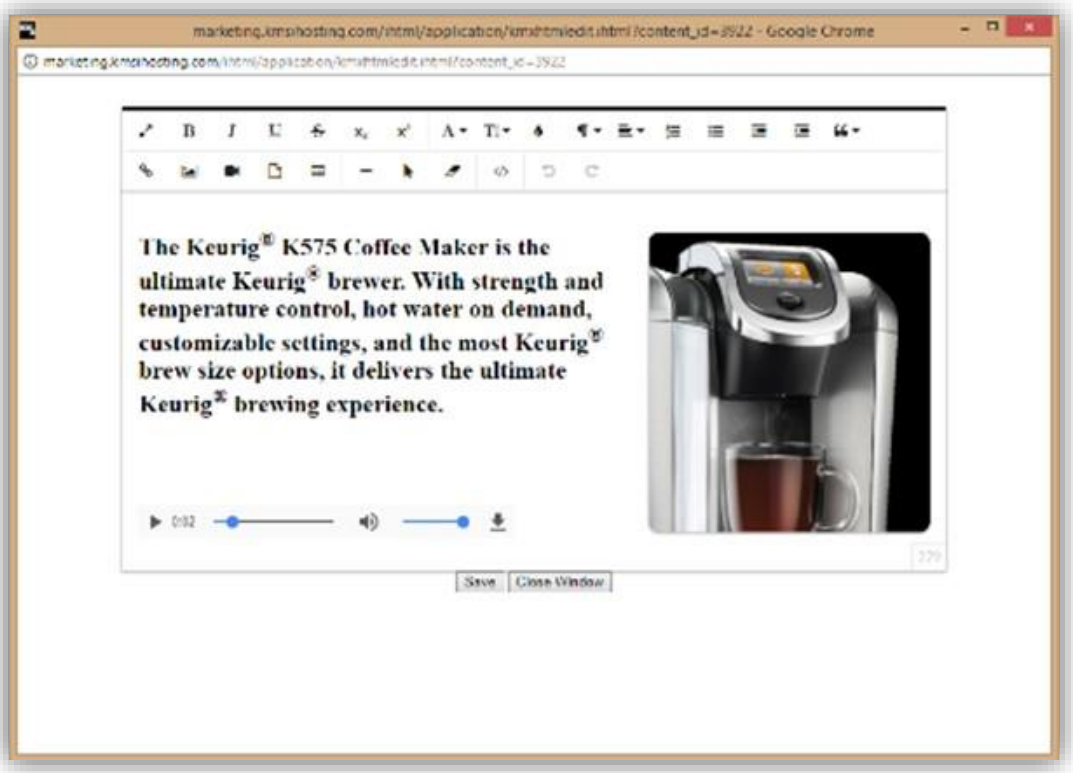
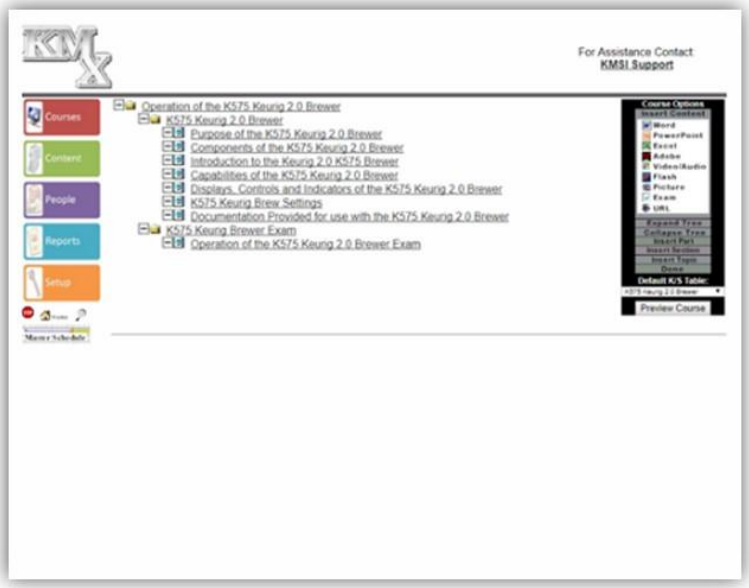
KMSI hosted clients have access to our student workstation testing system. This third-party software is capable of determining the end-users browser and workstation configuration to quickly isolate issues. For example, many clients use Adobe Flash presentations in their training programs. Using the software will enable the client to provide the end-users with a browser test link to determine if they have Adobe Flash installed before the student runs into an error. The system provides the user with the remediation links to resolve and detected issue(s). This testing system is configurable to client specifications regarding browsers, plug-in requirements, Java versions and much more.



20 Using the KMx V10 WYSWYG HTML Editing Tools to Create Course Content

In the KMx V10 release, we have added the functionality of the Froala Editor. This suite of tools enables developers to leverage the Site Student Interface CSS Style Sheet to provide courseware that maintains the look and feel of the client site with minimal effort. The editor enables the developer to include text, image, audio, video, tables, and PDFs with links using drag & drop controls with a myriad of features to stylize each element. The resultant output is fully SCORM conformant and provides all user access, time monitoring and completion status recording.

KMx V10 WYSWYG HTML Editing Interface



This new feature is fully integrated with the KMx Course Outliner. Select "URL" from the Course Options menu and follow the prompts to create a new Content item automatically added to your course outline. Editing the content record is accomplished by selecting the item from the course outline and pressing Edit Content. HTML content can also be inserted into the content management system and edited from the Content main menu.