

LearningServer Web Services White Paper version 2.0

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LEARNINGSERVER WEB SERVICES OVERVIEW

To access: Click *System / Web Services* in the top navigation bar.

Web Services is an API layer built on top of the LearningServer application that allows external applications to maintain or retrieve data from the LearningServer database by consuming the various methods of the Web Service.

As a user, you will be required to add the necessary logic to your application to consume the Web Service.

The following operations are supported. For a formal definition, please review the Service Description link on the Web Services page.

CreateUser

Create a user account. User will not be assigned to a particular hierarchy level.

ViewStudentList

Generate a student list. Columns returned include: full name, user name, password and e-mail.

ValidateCourseCode

ViewCourseStudentList

Return list of all users registered to a particular course.

StudentCourseList

Display student courselist. Retrieve list of courses registered to a student. Data returned includes: course availability and status.

UpdateUser

Update a user account.

CreateCourseRegistration

Register a user to a course.

DeleteUser

Delete a user account. User account and all associated data will be removed.

ValidateMandatory

ExportData

Return list of data from user specified table.

ExportTable:

Return list of data from user specified table.

ExportTable:

1. Learners (students) – Users table;
2. Curriculum and associated courses – Curriculum, CurriculumCourses;
3. Course and event enrollments (course completion) - UserCourses;
4. Exam submissions (exam grades) - StudentExamSummary;
5. Courses and events - Courses;
6. Course and event categories – Categories, CategoryCourses;
7. Event sessions - CourseSessions

CreateUser

Create new user accounts for learners, supervisors, instructors and site administrators

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
GUID	nvarchar(50)		Active Directory log-on ID
FirstName	nvarchar(50)	Y	
LastName	nvarchar(50)	Y	
Username	nvarchar(50)		
Password	nvarchar(50)		
Email	nvarchar(150)		
ManagerRole	integer	Y	0/1. Site Administrator permission
InstructorRole	Integer	Y	0/1. Instructor permission
LearnerRole	Integer	Y	0/1. Learner permission
SupervisorRole	Integer	Y	0/1. Supervisor permission
HierarchyID	Integer		Hierarchy.HierarchyID. Hierarchy node user is assigned. Applicable only to learners and supervisors
EmployeeID	nvarchar(100)		User-defined user ID
Organization	nvarchar(110)		Users.Organizations
Jobtitle	nvarchar(150)		Users.JobTitle
Department	nvarchar(150)		Users.Department
Hiredate	Smalldatetime		Users.HireDate
Phone	nvarchar(25)		Users.Phone
Fax	nvarchar(25)		Users.Fax
Address	nvarchar(65)		Users.Address
Address2	nvarchar(50)		Users.Address2
City	nvarchar(50)		Users.City
State	nvarchar(30)		Users.State
Zip	nvarchar(12)		Users.Zip
Country	nvarchar(50)		Users.Country
Comments	ntext		Users.Comments
Education	ntext		Users.Education
Experience	ntext		Users.Experience

LanguagePreference	Integer	Y	<ul style="list-style-type: none"> • 1 = English • 2 = Spanish • 3 = Portuguese • 4 = Dutch
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Output Parameters

Field	Description
Status	<ul style="list-style-type: none"> • 0 = transaction successful • -1 = transaction failed due to invalid data • -501 = duplicate username detected

UpdateUser

Create new user accounts for learners, supervisors, instructors and site administrators

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
UserID	Integer	Y	Users.UserID
GUID	nvarchar(50)		Active Directory log-on ID
FirstName	nvarchar(50)	Y	Users.FirstName
LastName	nvarchar(50)	Y	Users.LastName
Username	nvarchar(50)		Users.Username
Password	nvarchar(50)		Users.Password
Email	nvarchar(150)		Users.Email
ManagerRole	integer	Y	0/1. Site Administrator permission
InstructorRole	Integer	Y	0/1. Instructor permission
LearnerRole	Integer	Y	0/1. Learner permission
SupervisorRole	Integer	Y	0/1. Supervisor permission
HierarchyID	Integer		Hierarchy.HierarchyID. Hierarchy node user is assigned. Applicable only to learners and supervisors
EmployeeID	nvarchar(100)		User-defined user ID
Organization	nvarchar(110)		Users.Organizations
Jobtitle	nvarchar(150)		Users.JobTitle
Department	nvarchar(150)		Users.Department

Hiredate	Smalldatetime		Users.HireDate
Phone	nvarchar(25)		Users.Phone
Fax	nvarchar(25)		Users.Fax
Address	nvarchar(65)		Users.Address
Address2	nvarchar(50)		Users.Address2
City	nvarchar(50)		Users.City
State	nvarchar(30)		Users.State
Zip	nvarchar(12)		Users.Zip
Country	nvarchar(50)		Users.Country
Comments	ntext		Users.Comments
Education	ntext		Users.Education
Experience	ntext		Users.Experience
LanguagePreference	Integer	Y	<ul style="list-style-type: none"> • 1 = English • 2 = Spanish • 3 = Portuguese • 4 = Dutch

Output Parameters

Field	Description
Status	<ul style="list-style-type: none"> • 0 = transaction successful • -1 = transaction failed due to invalid data • -501 = userID not found

ViewStudentList

Generate a list of all learners. Columns returned include: full name, user name, password and email.

Input Parameters

none

Output Parameters

Field	Description
UserID	Users.UserID
Identification	Users.EmployeeID
Learner	Users.LastName, Users.Firstname

Email	Users.Email
Department	Users.Department
Job Title	Users.JobTitle
DateAdded	Date user's account was created. See Users.CreateDate
Role0	0/1. Manager role
Role1	0/1. Instructor role
Role2	0/1. Learner role
Role3	0/1. Supervisor role
Active	0/1. Active or Inactive

StudentCourseList

Generate a list of all learners. Columns returned include: full name, user name, password and email.

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
UserID	Integer	Y	Users.UserID

Output Parameters

Field	Description
CourseID	System-generated ID. See Courses.CourseID
CourseCode	Course code. See Courses.CourseCode
Title	Course title. See Courses.Title
FirstAccessDate	Date learner first accessed the course
CompleteDate	Date learner completed the course
LastAccessDate	Date learner last accessed the course

ViewCourseStudentList

Generate a list of all learners registered for a specific course. Columns returned include: learner name, first access date, last access date, complete date and status.

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
CourseID	Integer	Y	Courses.CourseID

Output Parameters

Field	Description
StudentID	Users.UserID
StudentName	Users.LastName, Users.FirstName
CompleteDate	Date learner completed the course
FirstLogonDate	Date learner first accessed the course
LastLogonDate	Date learner last accessed the course
Status	Learner's current course status <ul style="list-style-type: none"> • 0=Not Started • 1=In Progress • 2=Completed • 3=Waitlisted • 4=Dropped • 5=Tested out • 6=Event registration pending • 10=On hold, pending completion of prerequisite

CreateCourseRegistration

Register a learner to 1 or more courses.

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
UserID	Integer	Y	Users.UserID
CourseIDList	Nvarchar(1000)	Y	List of comma separated CourseIDs. See Courses.CourseID

Output Parameters

Field	Description
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Status	<ul style="list-style-type: none"> • 0 = transaction successful • -400 = transaction failed due to invalid data • -512 = 1 or more invalid CourseIDs were detected
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DeleteUser

Delete a user. All account and course-related data will be removed.

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
UserID	Integer	Y	Users.UserID

Output Parameters

Field	Description
Status	<ul style="list-style-type: none"> • 0 = transaction successful • -501 = transaction failed due to invalid data

ExportData

Return all rows from various user, courses and curriculum tables.

Input Parameters

Field	Data type	Required	Description
OrgID	integer	Y	Organizations.OrgID
Table	Integer	Y	<ul style="list-style-type: none"> • 1 = Users • 2 = Curriculums • 3 = Course registrations • 4 = Exam submissions • 5 = Courses • 6 = Categories • 7 = Events
StartDate	Date	Y	Earliest date records in the table were created
EndDate	Date	Y	Latest date records in the table were created

Output Parameters

Table 1 – Users

Field	Description
UserID	Users.UserID
LastName	Users.LastName
FirstName	Users.FirstName
Username	Users.Username
Password	Users.Password
GUID	Users.GUID
EmployeeID	Users.EmployeeID
AlternateID1	Users.AlternateID1
AlternateID2	Users.AlternateID2
AlternateID3	Users.AlternateID3
Email	Users.Email
JobTitle	Users.JobTitle
Department	Users.Department
Workphone	Users.WorkPhone
Address	Users.Address
Address2	Users.Address2
City	Users.City
State	Users.State
Country	Users.Country
PostalCode	Users.PostalCode
Active	Users.Status <ul style="list-style-type: none"> • 0 = Inactive • 1 = Active
ManagerRole	0/1. Site Administrator permission
InstructorRole	0/1. Instructor permission
LearnerRole	0/1. Learner permission
SupervisorRole	0/1. Supervisor permission
Education	Users.Education
WorkExperience	Users.WorkExperience
CreateDate	Date user's account was created. See Users.CreateDate
LastModifiedDate	Date user's account was last modified. See Users.LastModifiedDate

Hierarchy	Hierarchy.Name. Hierarchy node user is assigned. Applicable only to learners and supervisors
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Table 2 – Curriculum

Field	Description
CurriculumID	Curriculum.CurriculumID
Name	Curriculum.Name
Description	Curriculum.Description
Schedule	One-time or Recurring
FrequencyNumber	Recurring frequency specified in days
Status	0/1. Approved
CreateDate	Date curriculum was created
LastModifiedDate	Date curriculum was last modified
CourseCode	Course code of associated course. Occurs n times.
CourseTitle	Course title of associated course. Occurs n times.
Prerequisite	Prerequisite course

Table 3 – Course Registrations

Field	Description
CourseTitle	Courses.Title
Curriculum	Curriculum.Name
LastName	Users.LastName
FirstName	Users.FirstName
StartDate	Starting date in which the course becomes available for learner access
EndDate	Date course is available until for the learner
CreateDate	Date course registration was created
FirstAccessDate	Date learner first accessed the course
LastAccessDate	Date learner last accessed the course
RequiredByDate	Date course is required to be completed by the learner
CompleteDate	Date learner completed the course

Status	Learner's current status in the course <ul style="list-style-type: none"> • 0=Not Started • 1=In Progress • 2=Completed • 3=Waitlisted • 4=Dropped • 5=Tested out • 6=Event registration pending • 10=On hold, pending completion of prerequisite
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Table 4 - Exam Submissions

Field	Description
Course	Courses.Title
Lesson	Lessons.Title
LastName	Users.LastName
FirstName	Users.FirstName
AttemptNum	StudentExamSummary.AttemptNum
ExamScore	StudentExamSummary.ExamScore
ElapsedTime	StudentExamSummary.ElapsedTime
ExamDate	StudentExamSummary.ExamDate

Table 5 - Courses and events

Field	Description
CourseID	Courses.CourseID
CourseCode	Courses.CourseCode
Title	Courses.Title
Description	Courses.Description
Objective	Courses.Objective
CourseType	<ul style="list-style-type: none"> • 0=Assembler • 1=AICC • 6=SCORM • 7=Seminar • 8=Class • 9=Live Online, synchronous • 10=Media • 11=External vendor
CreateDate	Date course was created
LastModifiedDate	Date course was last modified

Table 6 - Course and event categories

Field	Description
CategoryID	Category.CategoryID
Category	Category.Name
Description	Category description
Status	0/1. Approved
CreateDate	Date category was created
LastModifiedDate	Date category was last modified
CourseCode	Course code of associated course. Occurs n times
Course	Course title of associated course. Occurs n times
CreateDate	Date course was associated with category. Occurs n times

Table 7 - Course Event sessions

Field	Description
SessionID	Unique record identifier
Course	Event Title
Location	Locations.LocationID
LocationURL	URL for synchronous events
StartDate	Date the event is scheduled to start
EndDate	Date the event is scheduled to end
StartTime	Time the event is scheduled to start
EndTime	Time the event is scheduled to end
TimeZone	Timezone the event's date/time will occur
MaxSeats	Maximum number of learners
Notes	Miscellaneous instructions