Database Schema Overview

&

Data Dictionary

ABOUT THIS DOCUMENT

PURPOSE

This Document describes Microsoft Community Training (MCT) Database schema.

SCOPE

This document describes the schema used in the MCT MSLCatalog in Azure SQL databases. The schema includes relationships between tables, table descriptions, and definitions of the table columns.

This document does not describe the specific location and general use of these tables at the MCT platform on how to manipulate them to obtain information. Nor does it provide the formats for external file representations of the tables

AUDIENCE

This Document is intended for users (Content Administrators, Data Management teams, BI Developers) and anyone who needs to interact with the databases or to have general understanding of data at MCT MSLCatalog.

RELATED INFORMATION

Refer the instructions provided to access this data base from Azure SQL Databases.

Symbol	Description
🔑	Primary Key

LAST UPDATE DATE

This document was last updated in March 2023.

TABLE SCHEMA: MSLCatalog

TABLE 1

MLXUser

This Table stores information at user level and their profile information.

Field	Storage Type	IS_Nullable	Description
🔑 UserID	*int*	NO	Unique User ID, Primary Key
SignInName	*nvarchar*	YES	Not maintained
CreateDatetime	*datetime*	NO	Datetime when the user first logged in (or was added from admin portal)
ChangeDatetime	*datetime*	NO	Datetime when the user last updated their profile
CreatedBy	*int*	NO	User Id of admin that added this user (-1 if the user first logged in)
UpdatedBy	*int*	NO	Not maintained, default value -1
UserToken	*nvarchar*	YES	Unique object identifier
EmailAddress	*nvarchar*	NO	Unique user identifier used as per deployment's identity type (email, phone number etc.)
FirstName	*nvarchar*	YES	User's first name
LastName	*nvarchar*	YES	User's last name
ObjectID	*nvarchar*	YES	Unique object identifier
College	*nvarchar*	YES	Not maintained
IsActive	*bit*	NO	Determine if the user is active, default value 1
OrganizationID	*int*	NO	ID of Organization to which User belongs
RoleTypeBitMaskList	*bigint*	NO	Bit value corresponding to the role of the user
Points	*int*	NO	Not maintained, default value 0
AccessToken	*nvarchar*	YES	Not maintained
IsReferrer	*bit*	NO	Not maintained, default value FALSE
Phone	*nvarchar*	YES	Not maintained
StateName	*nvarchar*	YES	Not maintained
CityName	*nvarchar*	YES	Not maintained
CustomProfileFields	*nvarchar*	YES	JSON containing users' values for each of the custom profile fields (denoted here by their mapping id's)
CollegeId	*nvarchar*	YES	Not maintained
ProfilePicUrl	*nvarchar*	YES	Encrypted storage URL for profile picture
IsComplete	*bit*	YES	Check if all the mandatory profile fields are completed
ObjectType	*smallint*	NO	0 if user, 1 if service
TenantID	*Nvarchar*	YES	TenantId of the logged in user (for AAD deployment)

TABLE 2

TABLE_NAME: Course

This Table stores Course related information (content URL, Created by Course ID etc).

Field	Storage Type	IS_Nullable	Description
🔑 CourseID	int	NO	Unique Course ID (Primary Key)
CreateDatetime	datetime	NO	Course create datetime
ChangeDatetime	datetime	NO	Last updated datetime of a Course
CreatedBy	int	NO	User ID of admin who created this course
UpdatedBy	int	NO	User ID of admin who last updated this course
CourseStatusID	smallint	YES	Not maintained
CourseIconFileURL	nvarchar	YES	Relative Storage URL for Course Thumbnail
MasterCourseID	int	YES	Not maintained
Description	nvarchar	YES	Description given to a Course
CourseStartDate	datetime	YES	Not maintained
CourseEndDate	datetime	YES	Not maintained
CourseName	nvarchar	YES	The course names
RegCode	nvarchar	YES	Not maintained
CourseRegistrationFlow	tinyint	NO	auto-enrolled (1), self-enrolled (2), or admin-enrolled (3)
CertificateStatus	tinyint	NO	Values indicating whether there is no certificate (0), standard certificate (1), or an exam quiz certificate (3) offered in the courses
LearningFlowType	tinyint	NO	Restricted display order (1) or in any order (0)
CertificateTemplateId	int	NO	The configured certificate template id (referred from CertificateTemplate table) configured for issuing learner certificates on this course
ContentLanguage	int	NO	The standard language code for this course
ParentCourseId	int	NO	The original/parent course with default language of this course
OrgId	int	NO	The organization id (referring to Organization table) this course belongs to
IsPublished	bit	NO	Flag whether the course is published (1) or not (0)
NumPublishedLessons	smallint	NO	Count of published lessons in that course
NumPublishedKCs	smallint	NO	Count of Assessments published in a Course
NumCourseEnrollments	int	NO	Number of users enrolled in this course (Updated every 6 hours in UTC)
NumCourseCompletions	int	NO	Number of users who have completed this course (Updated every 6 hours in UTC)
RowVersion	timestamp	NO	Versioning column to detect changes made to a row
FeedbackFormURL	nvarchar	YES	URL of feedback form created for a course
ImportContentType	int	NO	content provider details from Content Marketplace (1- MSLearn, 2- Digital content, 3- upload by file)
ImportContentURL	nvarchar	YES	URL of imported content from Content Marketplace
Uuid	uniqueidentifier	YES	Universal Unique Identifier (ID to link Offline tables) – Not Maintained
OfflineSync	bit	NO	Flag to indicate Offline content sync status

TABLE 3

TABLE_NAME: Lesson

This Table stores Lesson related information and its file type details and storage.

Field	Storage Type	IS_Nullable	Description
🔑 LessonId	int	NO	The Lesson Id (Primary Key)
AuthorId	int	NO	User ID of Admin who created this lesson
Title	nvarchar	NO	Name of the Lesson
Description	nvarchar	NO	Not maintained
Url	nvarchar	NO	Streaming URL for media lessons and relative Storage URL for others
DownloadUrl	nvarchar	YES	Relative Storage URL for Lesson file
ThumbnailUrl	nvarchar	YES	Relative Storage URL for media lesson thumbnails
TotalDuration	int	YES	Not maintained
Tags	nvarchar	YES	Tags specified while creating the lesson
VideoAsset	nvarchar	YES	Assets created by AMS for media lessons
AlternativeMediaId	uniqueidentifier	YES	Streaming locator for Media service
IsProtected	bit	NO	Not maintained
RowVersion	timestamp	NO	Versioning column to detect changes made to a row
FileType	nvarchar	YES	Lesson's File type (Video, ppt, doc, xls, PDF, html, ExternalLink etc.)
CourseItemId	int	NO	ID assigned to Items (Lessons and Assessments) in Course
Uuid	uniqueidentifier	YES	Universal Unique Identifier (ID to link Offline tables) – Not Maintained
VideoTextTracks	nvarchar	YES	Metadata for subtitles/closed-captions for media lessons
LessonType	int	NO	type of lesson, correct version of filetype
FileExtension	nvarchar	YES	actual file extension of the lesson file
Metadata	nvarchar	YES	scorm lesson details

TABLE 4

TABLE_NAME: Question

This Table stores Questions, its answer options, and correct answers across Courses.

Field	Storage Type	IS_Nullable	Description
🔑 QuestionId	*int*	NO	Primary Key
AuthorId	*int*	NO	User Id of Admin who created this question
QuestionTypeId	*int*	NO	Type of question
IsActive	*bit*	NO	Not maintained
IsPrivate	*bit*	NO	Not maintained
CategoryId	*int*	YES	Not maintained
CreateDatetime	*datetime*	NO	Datetime of when this question is created
QuestionContent	*ntext*	NO	Question
Answer	*ntext*	NO	Correct answer in JSON format
AnswerOptions	*ntext*	NO	Options for that question JSON format
AnswerComments	*ntext*	NO	Not maintained
ErrorReported	*bit*	YES	Not maintained
ErrorReportExplanation	*ntext*	YES	Not maintained
UsageCount	*int*	NO	Number of quizzes that this question is a part of
IsShuffleAnswers	bit	NO	If answer option shuffle enabled
Weightage	float	NO	Weightage for question
Uuid	*uniqueidentifier*	YES	Universal Unique Identfier (ID to link Offline tables) – Not Maintained
AdditionalInfo	*nvarchar*	YES	Stores match criterion and other blank related information for each blank for a fill blank type of question

TABLE 5

TABLE_NAME: KC

This Table stores Quiz and score related information.

Field	Storage Type	IS_Null able	Description
🔑 KCId	*int*	NO	Unique Assessment ID, Primary Key
AuthorId	*int*	NO	ID of Admin who created this Assessment
TotalScore	*int*	NO	Total score that can achieved in this Assessment
TotalQuestions	*int*	NO	Count of total questions in assessment
CreateDatetime	*datetime*	NO	Datetime of when this assessment is created
StartDatetime	*datetime*	NO	Not maintained/ set to current date value – 7 days
EndDatetime	*datetime*	NO	Not maintained/ set to current date value + 7 days
Title	*nvarchar*	NO	Name given to assessment
Description	*nvarchar*	YES	Not maintained
IsExamMode	*bit*	YES	Flag to know if assessment is final exam
IsShuffleQuestions	*bit*	NO	Flag to know if shuffle questions enabled
MaxQuestionsOnShuffle	*int*	YES	Not maintained
IsCertificationKc	*bit*	NO	Not maintained
IsAnswerCorrectnessHidden	*bit*	NO	Not maintained
MessageOnQuizEnd	*nvarchar*	YES	Not maintained
ReminderBeforeDays	*int*	YES	Not maintained
IsSurvey	*bit*	NO	Not maintained
CourseItemId	*int*	NO	Id given to all the items (lessons and assessments) in a course
QuizType	*tinyint*	NO	Specifies whether practice quiz OR exam
PassingPercent	*tinyint*	NO	Min Percentage to Pass the assessment
NumOfAttempts	*int*	NO	No. of attempts
Uuid	uniqueidentifier	YES	Universal Unique Identifier (ID to link Offline tables) – Not Maintained

TABLE 6

TABLE_NAME: LearnerCourseActivity

This Table stores User's Course activity, certificate information.

Field	Storage Type	IS_Nullable	Description
🔑 LearnerCourseActivityID	*bigint*	NO	Primary Key
UserID	*int*	NO	User Id, can be joined to MLXUser table
CompletionStatus	*tinyint*	NO	Flag to note if Learner completed the course
CourseStartDatetime	*datetime*	YES	Not maintained
CourseEndDatetime	*datetime*	YES	Time when learner completed course
CreateDatetime	*datetime*	NO	Time when LCA entry was first created
ChangeDatetime	*datetime*	NO	Time when LCA entry was last updated
Score	*real*	YES	Sum of scores obtained by learner across all practice quizzes of course
CourseID	*int*	NO	Course ID, can be joined to Course Table
CertificateUrl	*nvarchar*	YES	Relative Storage URL for Learner Certificates
CertificateDate	*datetime*	YES	Not maintained
ExamScore	*tinyint*	YES	Exam score obtained by learner in a course
IsEligibleForCertificate	*tinyint*	NO	Not maintained
CertificateStatus	*tinyint*	NO	Flag indicating whether learner certificate needs to be generated on next request
NumCompletedLessons	*smallint*	NO	Not maintained
NumCompletedKCs	*smallint*	NO	Not maintained
LastLessonID	*int*	YES	Not maintained

TABLE 7

TABLE_NAME: UserStatus

This Table stores User's Status information in team's deployment.

Field	Storage Type	IS_Nullable	Description
🔑 UserId	*int*	NO	Unique User Id (Primary Key)
Status	*tinyint*	NO	Enum Representing: NotProcessed = 0, Processed = 1, Processing = 2, Deleted = 3
TenantId	*Nvarchar*	YES	TenantId of the logged in user (for teams deployment)

TABLE 8

TABLE_NAME: CourseUsers

This table stores list of all the courses that are assigned to a user. These courses can be directly assigned to the user or can be assigned via a group, learning-path etc.

	Field	Storage Type	IS_Nullable	Description
🔑	CourseId	int	NO	Course ID (Part of Composite key), can be joined to Course Table
🔑	UserId	int	NO	User ID (Part of composite Key), can be joined to MLXUser table to fetch user details.
	CreatedDate	datetime	NO	Datetime when this entry was added

TABLE 9

TABLE_NAME: LearnerModuleProgress

This Table stores information of Progress of Learner for a Course.

	Field	Storage Type	IS_Nullable	Description
🔑	LMPId	bigint	NO	Unique LMP ID, Primary key
	UserId	int	NO	ID of User, can be joined to MLXUser table
	CourseId	int	NO	ID of Course
	CourseItemId	int	NO	ID assigned to a Item (Lesson, assessments)
	IsComplete	bit	YES	Flag to know the status of the item
	Score	real	NO	Score obtained in assessment
	AddedDate	datetime	NO	Datetime of when this record is inserted
	VideoProgressDuration	int	YES	Not maintained
	CompletedDate	datetime	YES	Datetime of when the Course item is finished
	UserAttempts	int	NO	Attempts made to complete the Course Item
	Metadata	nvarchar	YES	Stores Metadata related to SCORM lesson

TABLE 10

TABLE_NAME: Product

This Table stores details of a product that is linked to an offer on the platform. This table was created with a vision that an offer can have multiple type of products linked to it. Currently, we support only one kind of product that is a course on the platform and this table has one to one mapping with a course. For all practical purposes this table can be ignored and all the joins involving product can be directly performed on course table as they have the same IDs.

Field	Storage Type	IS_Nullable	Description
ProductID	int	NO	Unique Product ID, Primary key (same as CourseId field in Course Table)
ProductName	nvarchar	NO	Same as
CreateDatetime	datetime	NO	Datetime when the Product was created.
ChangeDatetime	datetime	NO	Datetime when the Product entry was last updated.
CreatedBy	int	NO	User Id of the admin user who created the product.
UpdatedBy	int	NO	UserId of the user that last updated the product details.
ProductDesc	nvarchar	YES	Same as Description field from course table.
ProductTypeID	smallint	NO	3 – Denotes it's a course
CourseImage	nvarchar	YES	Same as CourseIconFileUrl from course table.
IsActive	bit	NO	Denotes if the Product is active or not.
Tags	nvarchar	YES	Unused column.

TABLE 11

TABLE_NAME: OfferProduct

This Table stores details of all the products that belong to an offer.

Field	Storage Type	IS_Nullable	Description
OfferID	int	NO	Offer ID (Part of Composite key), can be joined to Offer Table
CourseID	int	NO	CourseID, can be joined to Course table
CreateDatetime	datetime	NO	DateTime when the mapping was created.
ChangeDatetime	datetime	NO	DateTime when the mapping was updated last.
CreatedBy	int	NO	UserId of the user that created the offer to product mapping.
UpdatedBy	nvarchar	NO	UserId of the user that updated the offer to product mapping.
IsRoot	bit	YES	Not used.

TABLE 12

TABLE_NAME: Notification

This Table stores notification that are sent to Learners.

Field	Storage Type	IS_Nullable	Description
🔑 NotificationId	*int*	NO	Unique Notification ID, Primary Key
Message	*nvarchar*	YES	Text contained in the notification
CreatedBy	*int*	YES	User ID of Admin who sent this notification
OrganizationId	*int*	NO	ID of Organization in which this Notification is created
DetailsJSON	*nvarchar*	YES	Course details of notification in JSON format
ActionLink	*nvarchar*	YES	Course URL for which notification was generated
Action	*tinyint*	NO	Enum Representing CourseEnrollment = 0, CourseAssignment = 1, CourseCompleted = 2, ForumReply = 3, ForumPost = 4, CourseAdded = 5, CourseUpdated = 6, QuizUnlocked = 7, CourseDeadlineApproaching = 8, LessonDeadlineApproaching = 9, QuizDeadlineApproaching = 10, CourseRecommendation = 11, CourseAdminAdded = 12, GroupAdminAdded = 13, CourseAnnouncement = 14, GroupAnnouncement = 15, GroupCourseAdded = 16
Entity	*tinyint*	NO	Enum Representing Group = 0, Course = 1, Lesson = 2, Quiz = 3, Analytics = 4, Forum = 5, Jobs = 6
Type	*tinyint*	NO	Enum Representing Announcement = 0, Notification = 1
CreateDateTime	*datetime*	NO	Datetime of when this Notification was created

TABLE 13

TABLE_NAME: NotificationRecipient

This Table stores notification status and recipient UserID.

Field	Storage Type	IS_Nullable	Description
🔑 NotificationRecipientId	*int*	NO	Unique Notification Recipient ID, Primary Key
NotificationId	*int*	NO	Notification ID, can be joined to Notification Table
UserId	*int*	NO	User ID of Recipient
Status	*tinyint*	NO	Enum Representing Unread = 0, Read = 1, ActionPerformed = 2
CreateDateTime	*datetime*	NO	Datetime of when this notification was sent

TABLE 14

TABLE_NAME: Organization

This Table stores Organization details, if enabled.

Field	Storage Type	IS_Nullable	Description
🔑 OrganizationID	*int*	NO	Unique Organization ID, Primary Key
OrganizationName	*nvarchar*	NO	Unique name of the Organization
OrganizationDesc	*nvarchar*	YES	Description given while creating an Org
CreateDatetime	*datetime*	NO	Datetime of when this Org is created
ChangeDatetime	*datetime*	NO	Datetime of when this Org is last updated
CreatedBy	*nvarchar*	NO	User ID of Admin who created this Org
UpdatedBy	*nvarchar*	NO	User ID of Admin who last Updated this Org
Settings	*nvarchar*	NO	Org Related branding settings
Url	*nvarchar*	YES	Not Maintained
Logo	*nvarchar*	YES	Not Maintained

TABLE 15

TABLE_NAME: Group

This Table stores Group information.

Field	Storage Type	IS_Nullable	Description
🔑 GroupID	*int*	NO	Unique ID for a Group, Primary Key
GroupName	*nvarchar*	YES	Name of the Group
Description	*nvarchar*	YES	Description given for a Group (Not Maintained)
OrgId	*int*	NO	Organization ID for which this Group is created
Rules	*nvarchar*	YES	JSON format of Rules applied for a smart group
GroupType	*tinyint*	NO	Used for checking if it is an MS Teams group
CreatedBy	*int*	NO	User Id of Admin who created this Group
CreateDateTime	*datetime*	NO	Datetime of when this group is created

TABLE 16

TABLE_NAME: GroupAdmin

This Table stores Group Administrator information.

Field	Storage Type	IS_Nullable	Description
🔑 GroupAdminID	*int*	NO	Group Admin unique ID, Primary Key
GroupId	*int*	NO	Group ID, can be joined to Group Table
AdminId	*int*	NO	User ID of the Admin
CreateDateTime	*datetime*	NO	Datetime of when was the Administrator added to group

TABLE 17

TABLE_NAME: GroupUser

This Table stores Users in Group information.

Field	Storage Type	IS_Nullable	Description
🔑 GroupUserID	*int*	NO	Unique Group user ID, Primary Key
GroupID	*int*	NO	Group ID, can be joined to Group table
UserId	*int*	NO	User ID, can be joined to MLXUser table
CreateDateTime	*datetime*	NO	Datetime of when user added to group
CreatedBy	*int*	NO	User ID of who added the user to group

TABLE 18

TABLE_NAME: LearningPath

This Table stores Learning Path information.

Field	Storage Type	IS_Nullable	Description
🔑 LearningPathID	*int*	NO	Unique LearningPath ID, Primary Key
Name	*nvarchar*	YES	Learning Path Name
Description	*nvarchar*	YES	Description for a LP when created
LocalizedNames	*nvarchar*	YES	Names of translated versions of LP
LocalizedDescriptions	*nvarchar*	YES	Description of translated versions of LP
DefaultLanguageCode	*nvarchar*	YES	Default language code of MCT
IconFileURL	*nvarchar*	YES	Encrypted Thumbnail storage URL
OrderRestrictionEnabled	*bit*	NO	Flag to know if Course order is restricted in this LP
CertificateTemplateId	*int*	NO	Certificate template ID
LocalizedCertificateTemplateIds	*nvarchar*	YES	Certificate template ID for localized versions of LP
OrgId	*int*	NO	Organization ID in which this LP was created
EnrollmentType	*bit*	NO	Not in use, will be used in future.
CreateDatetime	*datetime*	NO	Datetime when this LP was created
ChangeDatetime	*datetime*	NO	Datetime when this LP was last updated
CreatedBy	*int*	NO	User ID of Admin who created the LP
UpdatedBy	*int*	NO	User ID of Admin who updated the LP
CertificateStatus	*Tinyint*	NO	Flag to know if the certificate is enabled

TABLE 19

TABLE_NAME: LearningPathGroupAssignment

This Table stores the Learning Paths that are assigned to each Group.

Field	Storage Type	IS_Nullable	Description
🔑 LearningPathGroupMapID	*int*	NO	LP group map ID, Primary Key
LearningPathID	*int*	NO	Learning Path ID, can be joined to LearningPath Table
GroupID	*int*	NO	Group ID, can be joined to Group table
AddedDatetime	*datetime*	NO	Datetime when LP was assigned to a Group
AddedBy	*int*	NO	The User ID of the Admin, who added this group to the LP

TABLE 20

TABLE_NAME: LearningPathCourseMap

This Table stores Courses that are put together to create Learning Path.

Field	Storage Type	IS_Nullable	Description
🔑 LearningPathCourseMapID	*int*	NO	Unique LP Course Map ID, Primary Key
LearningPathID	*int*	NO	Learning Path ID, can be joined to Learning Path Table
CourseID	*int*	NO	Course ID, can be joined to Course table
DisplayOrder	*int*	NO	Order in which course appears in that Learning Path
CreateDatetime	*datetime*	NO	Datetime when this course was added to this LP
ChangeDatetime	*datetime*	NO	Datetime when this course was last updated in LP
CreatedBy	*int*	NO	UserID of Admin who added the courses to LP
UpdatedBy	*int*	NO	UserID of Admin who updated the courses in LP

TABLE 21

TABLE_NAME: LearningPathAdmin

This Table stores Learning Path Administrator information.

Field	Storage Type	IS_Nullable	Description
🔑 LearningPathAdminID	*int*	NO	Unique LP admin ID, primary key
LearningPathID	*int*	NO	Learning Path ID, can be joined to LP table
AdminUserID	*int*	NO	Learning path Admin User ID
AddedDateTime	*datetime*	NO	Datetime of when an admin was added to LP
AddedBy	*int*	NO	The User ID of the Admin, who added this user to the LP Admin list

TABLE 22

TABLE_NAME: LearningPathUserActivity

This Table stores Learning Path completion progress for a user.

Field	Storage Type	IS_Nullable	Description
🔑 LearningPathUserActivityID	*int*	NO	Primary Key
LearningPathID	*int*	NO	Learning Path ID, can be connected to LP table
UserID	*int*	NO	ID of the User
CompletionStatus	*tinyint*	NO	Completion Status of Learning Path
CompletionDate	*datetime*	YES	Completion date of Learning Path
CreateDatetime	*datetime*	NO	Datetime when the entry was created.
ChangeDatetime	*datetime*	NO	Datetime when the entry was last updated.
CertificateUrl	*nvarchar*	YES	Relative Storage URL for Learner LP Certificate
CertificateStatus	*tinyint*	NO	Flag indicating whether learner certificate needs to be generated on next request

TABLE 23

TABLE_NAME: GroupMapping

This Table stores Group Mapping information in Team's deployment, so that the group present in Team's deployment is in sync with MCT.

Field	Storage Type	IS_Nullable	Description
🔑 GroupId	*int*	NO	Unique Group Id (Primary Key)
ObjectId	*nvarchar*	NO	Corresponding ObjectId in Azure Active Directory
TenantId	*nvarchar*	YES	Tenant Id of the Azure AD group, populated only for Teams deployment
Status	*tinyint*	NO	Enum Representing: NotProcessed = 0, Processed = 1, Processing = 2, Deleted = 3

TABLE 24

TABLE_NAME: CourseGroup

This Table stores Course Group mapping information.

Field	Storage Type	IS_Nullable	Description
🔑 CourseGroupID	int	NO	Unique Id (Primary Key)
GroupID	int	NO	Group ID
CourseId	int	NO	Course ID
CreateDateTime	datetime	NO	The timestamp when the course was added to the group
Priority	int	NO	Priority of the course in this group

TABLE 25

TABLE_NAME: CourseInstructors

This Table stores Course Administrator information.

Field	Storage Type	IS_Null able	Description
🔑 CourseId	int	NO	Course ID
InstructorEmailId	varchar	NO	Contact of the course Administrator
CreatedDate	datetime	NO	The timestamp when user was added as Admin
CreatedBy	varchar	NO	The User ID of the Admin, who added this user to the course Admin list

TABLE 26

TABLE_NAME: CourseItems

This Table stores items (lessons and assessments) of each course.

Field	Storage Type	IS_Nullable	Description
🔑 CourseItemId	int	NO	Unique ID (Primary key)
CourseId	int	NO	Course ID
DisplayOrder	int	NO	Display order of the course item
IsPublished	bit	NO	Flag to indicate, whether its published or not.
IsChild	bit	NO	Unused
Uuid	uniqueidentifier	YES	Universal Unique Identifier (ID to link Offline tables) - Not Maintained

TABLE 27

TABLE_NAME: KCQuestion

This Table stores the mapping of a Quiz (KC i.e., Knowledge Check) and questions.

Field	Storage Type	IS_Nullable	Description
KCQuestionId	*int*	NO	Unique ID (primary Key)
KCId	*int*	NO	KC ID
QuestionId	*int*	NO	Question ID
DisplayOrder	*int*	NO	Display order of the question in the quiz

TABLE 28

TABLE_NAME: LearnerKCAnswers

This Table stores answer given by learners for the quizzes (KC).

Field	Storage Type	IS_Nullable	Description
UserId	*int*	NO	User ID
ModuleId	*int*	NO	KC ID
CourseId	*int*	NO	Course ID
QuestionId	*int*	NO	Question ID
IsCorrect	*bit*	NO	Flag indicating whether the use gave correct answer or not
Answer	*nvarchar*	YES	Used selected position number
CorrectAnswer	*nvarchar*	NO	Correct answer's display order
AddedTime	*datetime*	NO	The timestamp when the user attempted the questions
AnswerExplanation	*nvarchar*	YES	Unused
MigrationStatus	int	NO	Flag to denote if the entry is migrated to 'LearnerAssessmentResponses'

TABLE 29

TABLE_NAME: LearnerAssessmentResponses

This Table stores answer given by learners for the quizzes, data from LearnerKCAnswers will be migrated to this table.

Field	Storage Type	IS_Nullable	Description
🔑 UserId	*int*	NO	User ID
🔑 ModuleId	*int*	NO	KC ID
🔑 CourseId	*int*	NO	Course ID
Answer	*nvarchar*	YES	Used selected position number
MigratedTime	*datetime*	NO	Timestamp when data is migrated from 'LearnerKCAnswers' table
AddedTime	*datetime*	NO	The timestamp when the user attempted the questions

TABLE 30

TABLE_NAME: Offer

This Table stores Category information.

Field	Storage Type	IS_Nullable	Description
🔑 OfferID	*int*	NO	Category ID (Primary key)
OfferName	*nvarchar*	NO	Category name
LocalizedOfferNames	*nvarchar*	YES	Stores translated names of Category name
OfferDesc	*nvarchar*	YES	Category description
DefaultLanguageCode	*nvarchar*	YES	Stores default language code
CreateDatetime	*datetime*	NO	Timestamp, when this category was created
ChangeDatetime	*datetime*	NO	Last timestamp when this category was updated
CreatedBy	*nvarchar*	NO	ID of the user, who has created this category
UpdatedBy	*nvarchar*	NO	ID of the user, who has last updated this category
Logo	*nvarchar*	YES	Category Thumbnail URL
Url	*nvarchar*	YES	Unused
ParentOfferId	*int*	YES	Unused
OrgId	*int*	NO	ID of the organization this category belongs to
RowVersion	*timestamp*	NO	Not to be used for analytical queries
Uuid	uniqueidentifier	YES	Universal Unique Identifier (ID to link Offline tables) - Not Maintained

TABLE 31

TABLE_NAME: OfferAdmins

This Table stores Category Administrator information.

Field	Storage Type	IS_Nullable	Description
🔑 OfferId	*int*	NO	Category ID
AdminEmailId	*varchar*	NO	Contact of the category Administrator
AddedDate	*datetime*	NO	The timestamp when this user was added as the category's Admin
AddedBy	*nvarchar*	NO	The User ID of the Admin, who added this user to the category Admin list

TABLE 32

TABLE_NAME: OrganizationAdmins

This Table stores Organization Administrator information.

Field	Storage Type	IS_Nullable	Description
🔑 OrganizationAdminId	*int*	NO	Unique ID (Primary key)
OrganizationId	*int*	NO	Organization ID
AdminEmailId	*nvarchar*	NO	Contact of the Administrator
AddedDate	*datetime*	NO	The timestamp when this user was added as the organization's Admin
AddedBy	*nvarchar*	NO	The User ID of the Admin, who added this user to the organization Admin list

TABLE 33

TABLE_NAME: OrganizationConfig

This Table stores Organization configurations.

Field	Storage Type	IS_Nullable	Description
⚷ OrganizationID	*int*	NO	Organization ID (Primary key)
OrganizationCode	*varchar*	NO	Name of the organization
Settings	*varchar*	NO	Organization settings
Idp	*varchar*	NO	Identity Provider (Unused)
CustomProfileFields	*nvarchar*	YES	Custom profile fields for that organization
CustomProfileFieldsMigrated	*bit*	NO	Flag for migration status from 'OrganizationConfigNew' table
Version	*nvarchar*	YES	Application version information

TABLE 34

TABLE_NAME: OrganizationConfigNew

Temporary table, this Table stores Organization configurations and will be later migrated to 'OrganizationConfig' table

Field	Storage Type	IS_Nullable	Description
⚷ OrganizationID	*int*	NO	Organization ID (Primary key)
CustomProfileFields	*nvarchar*	YES	Org level custom profile fields
CustomProfileFieldsV3	*nvarchar*	YES	Created to maintain backwards compatibility, in case we want to revert Dependent fields

TABLE 34

TABLE_NAME: GlobalConfig

Table stores Global settings applied across instance

Field	Storage Type	IS_Nullable	Description
GCId	int	NO	Global setting ID
Settings	varchar	NO	Setting applied for instance (JSON)
Idp	varchar	NO	Authentication type for instance
Version	nvarchar	YES	Version number for instance

TABLE 35

TABLE_NAME: Tenant

This is used in to support login via multiple tenants in case of Teams deployment.

Field	Storage Type	IS_Nullable	Description
TenantId	nvarchar	NO	The tenantId of the tenant, this is specific to Teams Deployment
OrgId	int	NO	The tenant's organization id, each tenant is mapped to an organization.
CreateDatetime	datetime	NO	The date and time the tenant was created
ChangeDatetime	datetime	NO	The date and time the tenant was last changed
CreatedBy	int	NO	The user id of the user who created the tenant
UpdatedBy	int	NO	The user id of the user who last changed the tenant

TABLE 36

TABLE_NAME: AsyncJobProgress

This is used to track Async job progress for various flows

Field	Storage Type	IS_Nullable	Description
JobId	uniqueidentifier	NO	Async Job Identifier
JobType	int	NO	Type of the Job, i.e., UserDeletion, Smart group user addition etc. This is an ENUM.
Progress	float	NO	Numeric progress for Async job
JobStatus	tinyint	NO	Submitted/InProgress/Succeeded/Failed. This is a ENUM column.
CreateDateTime	datetime	NO	Datetime for when the record was created
LastUpdateDateTime	datetime	NO	Datetime for when the status was updated
CompletionDateTime	datetime	YES	Datetime for when the status was completed
Metadata	nvarchar	YES	Any metadata can be stored here, majorly for error scenarios.
TrackingId	uniqueidentifier	YES	Correlation ID for multiple web jobs, stemming from a single user action.

TABLE 37

TABLE_NAME: UserCourseEnrollments

Field	Storage Type	IS_Nullable	Description
UserCourseEnrollmentId	int	NO	To support course enrolment data for non-group enrolments
CourseId	int	NO	To support course enrolment data for non-group enrolments
UserId	int	NO	To support course enrolment data for non-group enrolments
EnrollmentDate	datetime	NO	To support course enrolment data for non-group enrolments

DB Schema diagram of few important tables connected to MLXUser table.

Changes to DB in Oct 2021 Release:

Fields added:

TABLE_NAME	COLUMN_NAME	REASON
LearningPath	CertificateStatus	LP certificate feature added
LearningPathUserActivity	CertificateUrl	LP certificate feature added
LearningPathUserActivity	CertificateStatus	LP certificate feature added

Fields Removed:

TABLE_NAME	COLUMN_NAME	REASON
CourseUsers	CreatedBy	Performance issue in user deletion flow
LearnerCourseActivity	CreatedBy	Performance issue
LearnerCourseActivity	UpdatedBy	Performance issue
LearningPath	CertificateEnabled	Replaced with 'CertificateStatus'

Changes to DB in Jan 2022 Release:

Fields added:

TABLE_NAME	COLUMN_NAME	REASON
Course	ImportContentType	Type of content (content provider details) imported from Content Marketplace
Course	ImportContentURL	URL of imported content from Content Marketplace
Course	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
CourseItems	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
GroupMapping	TenantId	Added to facilitate login via multiple tenants. Tenant Id of the Azure AD Group (if Teams Deployment)
KC	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
LearnerAssessmentResponses	AddedTime	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table
LearnerAssessmentResponses	Answer	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table
LearnerAssessmentResponses	CourseId	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table

LearnerAssessmentResponses	MigratedTime	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table
LearnerAssessmentResponses	ModuleId	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table
LearnerAssessmentResponses	UserId	To improve Perfromance. Stores learners' responses to questions, data from 'LearnerKCAnswers' will be migrated to this table
LearnerKCAnswers	MigrationStatus	Flag to check Migration status of 'LearnerKCAnswers' to 'LearnerAssessmentResponses'
Lesson	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
MLXUser	TenantId	Added to facilitate login via multiple tenants. TenantId of the logged in user
Offer	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
OrganizationConfig	CustomProfileFieldsMigrated	Flag to check Migration status of CustomProfileFields
OrganizationConfigNew	CustomProfileFields	Temporary table, plan is to later merge it with 'OrganizationConfig' table
OrganizationConfigNew	OrganizationID	Temporary table, plan is to later merge it with 'OrganizationConfig' table
Question	Uuid	Universal Unique Identfier (ID to link Offline tables) - Not Maintained
UserStatus	TenantId	Added to facilitate login via multiple tenants. TenantId of the logged in user (if Teams Deployment)

Fields Removed:

TABLE_NAME	COLUMN_NAME	REASON
QuestionType	QuestionTypeId	Not maintained
QuestionType	QuestionTypeName	Not maintained
Course	Authors	Not maintained
Course	CourseContentURL	Not maintained
Course	Lync	Not maintained
Course	Skype	Not maintained

Changes to DB in Apr 2022 Release:

Fields added:

TABLE_NAME	COLUMN_NAME	Reason
AspNetRoleClaims	ClaimType	Offline Deployment
AspNetRoleClaims	ClaimValue	Offline Deployment
AspNetRoleClaims	Id	Offline Deployment
AspNetRoleClaims	RoleId	Offline Deployment
AspNetRoles	ConcurrencyStamp	Offline Deployment
AspNetRoles	Id	Offline Deployment
AspNetRoles	Name	Offline Deployment
AspNetRoles	NormalizedName	Offline Deployment
AspNetUserClaims	ClaimType	Offline Deployment
AspNetUserClaims	ClaimValue	Offline Deployment
AspNetUserClaims	Id	Offline Deployment
AspNetUserClaims	UserId	Offline Deployment
AspNetUserLogins	LoginProvider	Offline Deployment
AspNetUserLogins	ProviderDisplayName	Offline Deployment
AspNetUserLogins	ProviderKey	Offline Deployment
AspNetUserLogins	UserId	Offline Deployment
AspNetUserRoles	RoleId	Offline Deployment
AspNetUserRoles	UserId	Offline Deployment
AspNetUsers	AccessFailedCount	Offline Deployment
AspNetUsers	ConcurrencyStamp	Offline Deployment
AspNetUsers	Email	Offline Deployment
AspNetUsers	EmailConfirmed	Offline Deployment
AspNetUsers	Id	Offline Deployment
AspNetUsers	LockoutEnabled	Offline Deployment
AspNetUsers	LockoutEnd	Offline Deployment
AspNetUsers	NormalizedEmail	Offline Deployment
AspNetUsers	NormalizedUserName	Offline Deployment
AspNetUsers	PasswordChangeRequired	Offline Deployment
AspNetUsers	PasswordHash	Offline Deployment
AspNetUsers	PhoneNumber	Offline Deployment
AspNetUsers	PhoneNumberConfirmed	Offline Deployment
AspNetUsers	SecurityStamp	Offline Deployment
AspNetUsers	TwoFactorEnabled	Offline Deployment
AspNetUsers	UserName	Offline Deployment

AspNetUserTokens	LoginProvider	Offline Deployment
AspNetUserTokens	Name	Offline Deployment
AspNetUserTokens	UserId	Offline Deployment
AspNetUserTokens	Value	Offline Deployment
EdgeDevice	CreatedAt	Offline Deployment
EdgeDevice	DeviceId	Offline Deployment
EdgeDevice	DeviceName	Offline Deployment
EdgeDevice	DevicePrefix	Offline Deployment
EdgeDevice	IsActive	Offline Deployment
EdgeDevice	UpdatedAt	Offline Deployment
ipv6_database_firewall_rules	create_date	Temp Table
ipv6_database_firewall_rules	end_ipv6_address	Temp Table
ipv6_database_firewall_rules	id	Temp Table
ipv6_database_firewall_rules	modify_date	Temp Table
ipv6_database_firewall_rules	name	Temp Table
ipv6_database_firewall_rules	start_ipv6_address	Temp Table
LearnerModuleProgress	Metadata	Stores Scorm details
Lesson	FileExtension	Added to capture Scorm related changes
Lesson	LessonType	Added to capture Scorm related changes
Lesson	Metadata	Added to capture Scorm related changes
OfferProduct	CourseID	Course ID, previously Product ID
Question	AdditionalInfo	New feature - Fill in the blanks
Tenant	ChangeDatetime	To support login via multiple tenants in case of teams deployment
Tenant	CreateDatetime	To support login via multiple tenants in case of teams deployment
Tenant	CreatedBy	To support login via multiple tenants in case of teams deployment
Tenant	OrgId	To support login via multiple tenants in case of teams deployment
Tenant	TenantId	To support login via multiple tenants in case of teams deployment
Tenant	UpdatedBy	To support login via multiple tenants in case of teams deployment

Fields Removed:

TABLE_NAME	COLUMN_NAME	Reason
Lesson	AuxPdfUrl	Not Maintained
Lesson	AuxPptUrl	Not Maintained
Lesson	AuxVideoUrl	Not Maintained
Lesson	AuxWordUrl	Not Maintained
Lesson	AuxZipUrl	Not Maintained
OfferProduct	ProductID	Replaced by 'CourseID'

Changes to DB in Aug 2022 Release:

Fields Added:

TABLE_NAME	COLUMN_NAME	Reason
AsyncJobProgress	JobId	Async Job Identifier
AsyncJobProgress	JobType	Type of the Job, i.e. UserDeletion, Smart group user addition etc. This is an ENUM.
AsyncJobProgress	Progress	numeric progress.
AsyncJobProgress	JobStatus	Submitted/InProgress/Succeeded/Failed. This is a ENUM column.
AsyncJobProgress	CreateDateTime	Datetime for when the record was created
AsyncJobProgress	LastUpdateDateTime	Datetime for when the status was updated
AsyncJobProgress	CompletionDateTime	Datetime for when the status was completed
AsyncJobProgress	Metadata	Any metadata can be stored here, majorly for error scenarios.
Course	OfflineSync	OfflineDeployment
LearningPath	LocalizedNames	To support LP/Category localization
LearningPath	LocalizedDescriptions	To support LP/Category localization
LearningPath	DefaultLanguageCode	To support LP/Category localization
LearningPath	LocalizedCertificateTemplateIds	To support LP/Category localization
Offer	LocalizedOfferNames	To support LP/Category localization
Offer	DefaultLanguageCode	To support LP/Category localization
OrganizationConfigNew	CustomProfileFieldsV3	To support Dependent fields
GlobalConfig	GCId	To Support Org Branding
GlobalConfig	Settings	To Support Org Branding
GlobalConfig	Idp	To Support Org Branding
GlobalConfig	Version	To Support Org Branding
Lesson	AlternativeMediaId	Streaming locator ID in Media Service
Organization	Settings	Settings for that Organization (Org Branding)

Fields Removed:

TABLE_NAME	COLUMN_NAME	Reason
ipv6_database_firewall_rules	id	Temp Table
ipv6_database_firewall_rules	name	Temp Table
ipv6_database_firewall_rules	start_ipv6_address	Temp Table
ipv6_database_firewall_rules	end_ipv6_address	Temp Table
ipv6_database_firewall_rules	create_date	Temp Table
ipv6_database_firewall_rules	modify_date	Temp Table

Changes to DB in Dec 2022 Release:

Fields Added:

TABLE_NAME	COLUMN_NAME	Reason
EdgeDeviceContentSyncState	Id	To Support Offline Deployments
EdgeDeviceContentSyncState	DeviceName	To Support Offline Deployments
EdgeDeviceContentSyncState	ContentId	To Support Offline Deployments
EdgeDeviceContentSyncState	CreatedAt	To Support Offline Deployments
EdgeDeviceContentSyncState	UpdatedAt	To Support Offline Deployments
EdgeDeviceContentSyncState	IsContentSynced	To Support Offline Deployments
EdgeDeviceContentSyncState	RetryCount	To Support Offline Deployments
OfflineContent	ContentId	To Support Offline Deployments
OfflineContent	CourseUuid	To Support Offline Deployments
OfflineContent	CategoryUuid	To Support Offline Deployments
OfflineContent	CategoryName	To Support Offline Deployments
OfflineContent	ActionType	To Support Offline Deployments
OfflineContent	CreatedAt	To Support Offline Deployments
OfflineContent	UpdatedAt	To Support Offline Deployments
OfflineContent	IsLatest	To Support Offline Deployments

Fields Removed:

Nill

Changes to DB in Mar 2023 Release:

Fields Added:

TABLE_NAME	COLUMN_NAME	Reason
AsyncJobProgress	TrackingId	To support observability of long running web jobs
UserCourseEnrollments	UserCourseEnrollmentId	To support course enrolment data for non-group enrolments
UserCourseEnrollments	CourseId	To support course enrolment data for non-group enrolments
UserCourseEnrollments	UserId	To support course enrolment data for non-group enrolments
UserCourseEnrollments	EnrollmentDate	To support course enrolment data for non-group enrolments

Fields Removed:

Nill