127.0.0.1,13001 Documentation

QueensClassSchedule

Server 127.0.0.1,13001 Author Aureljo Pepa

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Table of Contents

able of Contents	2
127.0.0.1,13001	5
User databases	7
QueensClassSchedule Database	8
III Tables	10
[DbSecurity].[UserAuthorization]	11
[Dept].[Class]	13
[Dept].[Course]	16
[Dept].[Department]	18
[Dept].[Instructor]	20
[Dept].[Instructor_Department_Bridge]	22
[Dept].[ModeOfInstruction]	24
[Location].[BuildingLocation]	26
[Location].[RoomLocation]	28
[Process].[WorkflowSteps]	30
[Uploadfile].[CurrentSemesterCourseOfferings]	32
Views	34
[Utils].[uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint]	35
Stored Procedures	38
[Process].[usp_TrackWorkFlows]	39
[Project3].[AddForeignKeysToSchemaData]	40
[Project3].[DropForeignKeysFromSchemaData]	
[Project3].[Load_BuildingLocation]	44
[Project3].[Load_Class]	46
[Project3].[Load_Course]	49
[Project3].[Load_Department]	
[Project3].[Load_DeptInstructorDepartmentBridge]	
[Project3].[Load_Instructor]	55
[Project3].[Load_InstructorDepartmentBridge]	
[Project3].[Load_ModeOfInstruction]	
[Project3].[Load_RoomLocation]	
[Project3].[LoadQueensCourseSchedule]	
[Project3].[LoadStarSchemaData]	
[Project3].[ShowTableStatusRowCount]	
[Project3].[TruncateSchemaData]	
Table-valued Functions	
[dbo].[DatabaseObjects]	72

[dbo].[JSONHierarchy]	73
User-Defined Data Types	
៉ឺទៀ [Udt].[Building]	79
[Udt].[ClassTime]	
៉ៃៀ [Udt].[CourseDay]	
[Udt].[CourseDescription]	
ill [Udt].[CourseName]	
[Udt].[CourseTime]	
iii [Udt].[DateAdded]	
[Udt].[DeptName]	
iii [Udt].[Description]	
[Udt].[Enrolled]	
៉ឺទៀ [Udt].[FirstName]	
៉ាំ [Udt].[FullName]	
iii [Udt].[GroupName]	
[Udt].[IndividualProject]	
iii [Udt].[InsMode]	
៉ៃៀ [Udt].[LastName]	
ille [Udt].[Limit]	
៉ៃៀ [Udt].[Name]	
៉ៃឱ្យ [Udt].[Number]	
[Udt].[RoomNumber]	
iii [[Udt].[Row]	
[Udt].[SurrogateKeyInt]	
1 Users	
♣ BiStudent	102
1 dbo	103
£C3\thehitman	104
⊈ guest	
student	106
Database Roles	107
db_accessadmin	107
db_backupoperator	107
db_datareader	
db_datawriter	108
db_ddladmin	109
db_denydatareader	109
db_denydatawriter	

db_owner	109
db_securityadmin	
public	110
⚠ Schemas	111
⚠ DbSecurity	
⚠ Dept	113
	114
▲ Location	115
↑ Process	
↑ Project3	117
^ ∪dt	118
⚠ Uploadfile	
⚠ Utils	120
↑ YourLastName	121

127.0.0.1,13001

Databases (1)

• ■ QueensClassSchedule

Server Properties

Property	Value		
Product	Microsoft SQL Server		
Version	15.0.4322.2		
Language	English		
Platform	NT x64		
Edition	Developer Edition (64-bit)		
Engine Edition	3 (Enterprise)		
Processors	12		
OS Version	6.2 (9200)		
Physical Memory	3017		
Is Clustered	False		
Root Directory	C:\		
Collation	SQL_Latin1_General_CP1_CI_AS		

Server Settings

Property	Value		
Default data file path	/var/opt/mssql/data/		
Default backup file path	/var/opt/mssql/log/		
Default log file path	/var/opt/mssql/data/		
Recovery Interval (minutes)	0		
Default index fill factor	0		
Default backup media retention	0		
Compress Backup	False		

Advanced Server Settings

Property	Value
Locks	0
Nested triggers enabled	True
Allow triggers to fire others	True
Default language	English

Network packet size	4096
Default fulltext language LCID	1033
Two-digit year cutoff	2049
Remote login timeout	10
Cursor threshold	-1
Max text replication size	65536
Parallelism cost threshold	5
Max degree of parallelism	0
Min server memory	16
Max server memory	2147483647
Scan for startup procs	False
Transform noise words	False
CLR enabled	False
Blocked process threshold	0
Filestream access level	False
Optimize for ad hoc workloads	False
CLR strict security	True

☐ User databases		
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Databases (1)

• ■ QueensClassSchedule

☐ QueensClassSchedule Database

Database Properties

Property	Value
SQL Server Version	SqlServer2019
Compatibility Level	SQL Server 2016
Last backup time	12/08/2023
Last log backup time	-
Creation date	Dec 8 2023
Users	7
Database Encryption Enabled	False
Database Encryption Algorithm	None
Database size	144.00 MB
Unallocated space	2.42 MB

Database Options

Property Value			
Compatibility Level	130		
Database collation	SQL_Latin1_General_CP1_CI_AS		
Restrict access	MULTI_USER		
Is read-only	False		
Auto close	False		
Auto shrink	False		
Database status	ONLINE		
In standby	False		
Cleanly shutdown	False		
Supplemental logging enabled	False		
Snapshot isolation state	OFF		
Read committed snapshot on	False		
Recovery model	FULL		
Page verify option	CHECKSUM		
Auto create statistics	True		
Auto update statistics	True		
Auto update statistics asynchronously	False		
ANSI NULL default	False		
ANSI NULL enabled	False		
ANSI padding enabled	False		

ANSI warnings enabled	False
Arithmetic abort enabled	False
Concatenating NULL yields NULL	False
Numeric roundabort enabled	False
Quoted Identifier On	False
Recursive triggers enabled	False
Close cursors on commit	False
Local cursors by default	False
Fulltext enabled	True
Trustworthy	False
Database chaining	False
Forced parameterization	False
Master key encrypted by server	False
Published	False
Subscribed	False
Merge published	False
Is distribution database	False
Sync with backup	False
Service broker GUID	9f5d9c27-bc5c-4d67-9b27-e7ae78bc354f
Service broker enabled	False
Date correlation	False
CDC enabled	False
Encrypted	False
Honor broker priority	False
Default language	English
Default fulltext language LCID	1033
Nested triggers enabled	True
Transform noise words	False
Two-digit year cutoff	2049
Containment	NONE
Target recovery time	60
Database owner	sa

Files

Name	Туре	Size	Maxsize	Autogrowth	File Name
QC2019	Data	8.00 MB	unlimited	64.00 MB	/var/opt/mssql/data/QueensClassScheduleCurrent- Semester.mdf
QC2019_log	Log	136.00 MB	2048.00 GB	64.00 MB	/var/opt/mssql/data/QueensClassScheduleCurrent- Semester_0.ldf

■ Tables

Objects

Name
DbSecurity.UserAuthorization
Dept.Class
Dept.Course
Dept.Department
Dept.Instructor
Dept.Instructor_Department_Bridge
Dept.ModeOfInstruction
Location.BuildingLocation
Location.RoomLocation
Process.WorkflowSteps
Uploadfile.CurrentSemesterCourseOfferings

[DbSecurity].[UserAuthorization]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	6
Created	2:41:10 AM Thursday, December 7, 2023
Last Modified	2:41:24 AM Thursday, December 7, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PK C	UserAuthorizationKey	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1	
	ClassTime	[Udt].[ClassTime]	10	NULL allowed		('09:15')
	IndividualProject	[Udt].[IndividualProject]	120	NULL allowed		('Project 3')
	GroupMemberLastName	[Udt].[LastName]	100	NOT NULL		
	GroupMemberFirstName	[Udt].[FirstName]	100	NOT NULL		
	GroupName	[Udt].[GroupName]	40	NOT NULL		('Group 4')
	DateAdded	[Udt].[DateAdded]	8	NULL allowed		(sysdatetime())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_UserAuth_0FEC36CBE5F86547	UserAuthorizationKey	True

```
CREATE TABLE [DbSecurity].[UserAuthorization]
[UserAuthorizationKey] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[ClassTime] [Udt].[ClassTime] NULL CONSTRAINT [DF UserAutho Class 56B3DD81] DEFAULT ('09:15'),
[IndividualProject] [Udt].[IndividualProject] NULL CONSTRAINT [DF_UserAutho_Indiv_57A801BA]
DEFAULT ('Project 3'),
[GroupMemberLastName] [Udt].[LastName] NOT NULL,
[GroupMemberFirstName] [Udt].[FirstName] NOT NULL,
[GroupName] [Udt].[GroupName] NOT NULL CONSTRAINT [DF_UserAutho_Group_589C25F3] DEFAULT
('Group 4'),
[DateAdded] [Udt].[DateAdded] NULL CONSTRAINT [DF_UserAutho_DateA_59904A2C] DEFAULT
```

```
(sysdatetime())
) ON [PRIMARY]
GO
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [PK_UserAuth_OFEC36CBE5F86547]
PRIMARY KEY CLUSTERED ([UserAuthorizationKey]) ON [PRIMARY]
GO
```

[Udt].[ClassTime]

[Udt].[DateAdded]

[Udt].[FirstName]

[Udt].[GroupName]

[Udt].[IndividualProject]

[Udt].[LastName]

[Udt].[SurrogateKeyInt]

DbSecurity

Used By

[Process].[WorkflowSteps]

■ [Dept].[Class]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	3193
Created	6:04:48 AM Friday, December 8, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	ClassId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	Section	[Udt].[InsMode]	50	NOT NULL	
	Code	[Udt].[InsMode]	50	NOT NULL	
FK	Courseld	[Udt].[SurrogateKeyInt]	4	NOT NULL	
	Day	[Udt].[InsMode]	50	NOT NULL	
	Time	[Udt].[InsMode]	50	NOT NULL	
FK	Bridgeld	[Udt].[SurrogateKeyInt]	4	NULL allowed	
FK	BuildingLocationId	[Udt].[SurrogateKeyInt]	4	NULL allowed	
FK	RoomLocationId	[Udt].[SurrogateKeyInt]	4	NULL allowed	
	Enrolled	[Udt].[Number]	4	NOT NULL	
	Limit	[Udt].[Number]	4	NOT NULL	
FK	Modeld	[Udt].[SurrogateKeyInt]	4	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PK2 C	PKClassCB1927C0386D3B80	ClassId	True

Foreign Keys

Name	Columns
FK_BuildingLocation	BuildingLocationId->[Location].[BuildingLocation].[BuildingLocationId]
FK_Courses	Courseld->[Dept].[Course].[Courseld]
FK_DepartmentInstructorBridge	Bridgeld->[Dept].[Instructor_Department_Bridge].[Bridgeld]

FK_Mode	Modeld->[Dept].[ModeOfInstruction].[Modeld]
FK_RoomLocation	RoomLocationId->[Location].[RoomLocation]d]

SQL Script

```
CREATE TABLE [Dept].[Class]
[ClassId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[Section] [Udt].[InsMode] NOT NULL,
[Code] [Udt].[InsMode] NOT NULL,
[CourseId] [Udt].[SurrogateKeyInt] NOT NULL,
[Day] [Udt].[InsMode] NOT NULL,
[Time] [Udt].[InsMode] NOT NULL,
[BridgeId] [Udt].[SurrogateKeyInt] NULL,
[BuildingLocationId] [Udt].[SurrogateKeyInt] NULL,
[RoomLocationId] [Udt].[SurrogateKeyInt] NULL,
[Enrolled] [Udt].[Number] NOT NULL,
[Limit] [Udt].[Number] NOT NULL,
[ModeId] [Udt].[SurrogateKeyInt] NULL
) ON [PRIMARY]
GO
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [PK Class CB1927C0386D3B80] PRIMARY KEY CLUSTERED
([ClassId]) ON [PRIMARY]
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [FK BuildingLocation] FOREIGN KEY ([BuildingLocation-
Id]) REFERENCES [Location].[BuildingLocation] ([BuildingLocationId])
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [FK Courses] FOREIGN KEY ([CourseId]) REFERENCES
[Dept].[Course] ([CourseId])
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [FK DepartmentInstructorBridge] FOREIGN KEY ([Bridge-
Id]) REFERENCES [Dept].[Instructor Department Bridge] ([BridgeId])
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [FK Mode] FOREIGN KEY ([ModeId]) REFERENCES
[Dept].[ModeOfInstruction] ([ModeId])
ALTER TABLE [Dept].[Class] ADD CONSTRAINT [FK RoomLocation] FOREIGN KEY ([RoomLocationId])
REFERENCES [Location].[RoomLocation] ([RoomLocationId])
```

Uses

[Dept].[Course]
[Dept].[Instructor_Department_Bridge]
[Dept].[ModeOfInstruction]
[Location].[BuildingLocation]
[Location].[RoomLocation]
[Udt].[InsMode]
[Udt].[Number]
[Udt].[SurrogateKeyInt]
Dept

Author: Aureljo Pepa

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Tables > Dept.Class

Used By

[Project3].[Load_Class] [Project3].[ShowTableStatusRowCount] [Project3].[TruncateSchemaData]

I [Dept].[Course]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1627
Created	4:07:59 AM Friday, December 8, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	Courseld	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	CourseName	[Udt].[CourseName]	40	NOT NULL	
	CourseDescription	[Udt].[CourseDescription]	100	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK C	PKCourseC92D71A795BA0D28	Courseld	True

SQL Script

```
CREATE TABLE [Dept].[Course]
(
[CourseId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[CourseName] [Udt].[CourseName] NOT NULL,
[CourseDescription] [Udt].[CourseDescription] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Dept].[Course] ADD CONSTRAINT [PK_Course_C92D71A795BA0D28] PRIMARY KEY CLUSTERED ([CourseId]) ON [PRIMARY]
GO
```

Uses

[Udt].[CourseDescription] [Udt].[CourseName] [Udt].[SurrogateKeyInt] Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Tables > Dept.Course

Dept

Used By

[Dept].[Class]
[Project3].[Load_Class]
[Project3].[Load_Course]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]

■ [Dept].[Department]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	83
Created	2:05:32 AM Thursday, December 7, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	DepartmentId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	DepartmentName	[Udt].[DeptName]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK	PKDepartmeB2079BEDD30654AB	DepartmentId	True

Check Constraints

Name	On Column	Constraint
CHK_DepartmentName_Length	DepartmentName	(len([DepartmentName])<=(4))

```
CREATE TABLE [Dept].[Department]
(
[DepartmentId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[DepartmentName] [Udt].[DeptName] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Dept].[Department] ADD CONSTRAINT [CHK_DepartmentName_Length] CHECK
((len([DepartmentName]) <= (4)))
GO
ALTER TABLE [Dept].[Department] ADD CONSTRAINT [PK_Departme_B2079BEDD30654AB] PRIMARY KEY
CLUSTERED ([DepartmentId]) ON [PRIMARY]</pre>
```

[Udt].[DeptName] [Udt].[SurrogateKeyInt] Dept

Used By

[Dept].[Instructor_Department_Bridge]

[Project3].[Load_Class]

[Project3].[Load_Department]

[Project3].[Load_DeptInstructorDepartmentBridge]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateSchemaData]

■ [Dept].[Instructor]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1596
Created	2:41:45 AM Thursday, December 7, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	InstructorId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	InstructorFirstName	[Udt].[FirstName]	100	NOT NULL	
	InstructorLastName	[Udt].[LastName]	100	NOT NULL	
	InstructorFullName	[Udt].[FullName]	200	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK	PKInstruct9D010A9B10B93C1A	InstructorId	True

SQL Script

```
CREATE TABLE [Dept].[Instructor]

(
[InstructorId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),

[InstructorFirstName] [Udt].[FirstName] NOT NULL,

[InstructorLastName] [Udt].[LastName] NOT NULL,

[InstructorFullName] [Udt].[FullName] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [Dept].[Instructor] ADD CONSTRAINT [PK_Instruct_9D010A9B10B93C1A] PRIMARY KEY

CLUSTERED ([InstructorId]) ON [PRIMARY]

GO
```

Uses

[Udt].[FirstName]

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Tables > Dept.Instructor

[Udt].[FullName] [Udt].[LastName] [Udt].[SurrogateKeyInt] Dept

Used By

[Dept].[Instructor_Department_Bridge]

[Project3].[Load_Class]

 $[Project 3]. [Load_DeptInstructorDepartmentBridge] \\$

[Project3].[Load_Instructor]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateSchemaData]

□ [Dept].[Instructor_Department_Bridge]

Properties

Property	Value
Row Count (~)	1730
Created	2:53:09 AM Thursday, December 7, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	Bridgeld	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
F	InstructorId	[Udt].[SurrogateKeyInt]	4	NOT NULL	
FK	DepartmentId	[Udt].[SurrogateKeyInt]	4	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PKInstructBEA1F60248A4F7C0	Bridgeld	True

Foreign Keys

Name	Columns
FK_DepartmentId	DepartmentId->[Dept].[Department].[DepartmentId]
FK_InstructorId	InstructorId->[Dept].[Instructor].[InstructorId]

```
CREATE TABLE [Dept].[Instructor_Department_Bridge]
(
[BridgeId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[InstructorId] [Udt].[SurrogateKeyInt] NOT NULL,
[DepartmentId] [Udt].[SurrogateKeyInt] NOT NULL
) ON [PRIMARY]

GO
ALTER TABLE [Dept].[Instructor_Department_Bridge] ADD CONSTRAINT [PK__Instruct__BEA1F60248A4F7C0]
PRIMARY KEY CLUSTERED ([BridgeId]) ON [PRIMARY]

GO
ALTER TABLE [Dept].[Instructor_Department_Bridge] ADD CONSTRAINT [FK_DepartmentId] FOREIGN KEY
([DepartmentId]) REFERENCES [Dept].[Department] ([DepartmentId])
```

```
GO

ALTER TABLE [Dept].[Instructor_Department_Bridge] ADD CONSTRAINT [FK_InstructorId] FOREIGN KEY
([InstructorId]) REFERENCES [Dept].[Instructor] ([InstructorId])

GO
```

[Dept].[Department]
[Dept].[Instructor]
[Udt].[SurrogateKeyInt]
Dept

Used By

[Dept].[Class]
[Project3].[Load_Class]
[Project3].[Load_DeptInstructorDepartmentBridge]
[Project3].[Load_InstructorDepartmentBridge]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]

[Dept].[ModeOfInstruction]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4
Created	5:53:42 AM Friday, December 8, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	Modeld	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	Mode Of Instruction	[Udt].[InsMode]	50	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PKModeOfInD83F75C4651216A2	Modeld	True

Check Constraints

Name	On Column	Constraint
CHK_ModeOfInstruction	Mode Of Instruction	(len([Mode Of Instruction])<=(50))

```
CREATE TABLE [Dept].[ModeOfInstruction]

(
[ModeId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),

[Mode Of Instruction] [Udt].[InsMode] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [Dept].[ModeOfInstruction] ADD CONSTRAINT [CHK_ModeOfInstruction] CHECK ((len([Mode Of Instruction]) <= (50)))

GO

ALTER TABLE [Dept].[ModeOfInstruction] ADD CONSTRAINT [PK_ModeOfIn_D83F75C4651216A2] PRIMARY KEY CLUSTERED ([ModeId]) ON [PRIMARY]

GO
```

[Udt].[InsMode] [Udt].[SurrogateKeyInt] Dept

Used By

[Dept].[Class]
[Project3].[Load_Class]
[Project3].[Load_ModeOfInstruction]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]

☐ [Location].[BuildingLocation]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	23
Created	5:04:30 AM Friday, December 8, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	BuildingLocationId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	RoomBuilding	[Udt].[Building]	10	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PK	PK_Building_F5F37F5FBB971E4D	BuildingLocationId	True

Check Constraints

Name	On Column	Constraint
CHK_Building_Length	RoomBuilding	(len([RoomBuilding])<=(5))

```
CREATE TABLE [Location].[BuildingLocation]

(
[BuildingLocationId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),

[RoomBuilding] [Udt].[Building] NULL

) ON [PRIMARY]

GO

ALTER TABLE [Location].[BuildingLocation] ADD CONSTRAINT [CHK_Building_Length] CHECK ((len([Room-Building]) <= (5)))

GO

ALTER TABLE [Location].[BuildingLocation] ADD CONSTRAINT [PK_Building_F5F37F5FBB971E4D] PRIMARY KEY CLUSTERED ([BuildingLocationId]) ON [PRIMARY]

GO
```

[Udt].[Building] [Udt].[SurrogateKeyInt] Location

Used By

[Dept].[Class]
[Project3].[Load_BuildingLocation]
[Project3].[Load_Class]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]

☐ [Location].[RoomLocation]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	251
Created	5:59:41 AM Friday, December 8, 2023
Last Modified	7:01:36 AM Friday, December 8, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	RoomLocationId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	RoomNumber	[Udt].[RoomNumber]	10	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP C	PKRoomLoca874C5599548C4C8E	RoomLocationId	True

Check Constraints

Name	On Column	Constraint
CHK_Room_Length	RoomNumber	(len([RoomNumber])<=(10))

```
CREATE TABLE [Location].[RoomLocation]
(
[RoomLocationId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[RoomNumber] [Udt].[RoomNumber] NULL
) ON [PRIMARY]
GO
ALTER TABLE [Location].[RoomLocation] ADD CONSTRAINT [CHK_Room_Length] CHECK ((len([Room-Number]) <= (10)))
GO
ALTER TABLE [Location].[RoomLocation] ADD CONSTRAINT [PK_RoomLoca_874C5599548C4C8E] PRIMARY KEY CLUSTERED ([RoomLocationId]) ON [PRIMARY]
GO
```

[Udt].[RoomNumber] [Udt].[SurrogateKeyInt] Location

Used By

[Dept].[Class]

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_RoomLocation]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateSchemaData]

[Process].[WorkflowSteps]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	77
Created	2:41:24 AM Thursday, December 7, 2023
Last Modified	2:41:24 AM Thursday, December 7, 2023

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PKP C	WorkFlowStepKey	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1	
FK	UserAuthorizationKey	[Udt].[SurrogateKeyInt]	4	NOT NULL		
	WorkFlowStepDescription	[Udt].[Description]	200	NOT NULL		
	WorkFlowStepTableRowCount	[Udt].[Row]	4	NULL allowed		((0))
	StartingDateTime	[Udt].[DateAdded]	8	NULL allowed		(sysdatetime())
	EndingDateTime	[Udt].[DateAdded]	8	NULL allowed		(sysdatetime())
	ClassTime	[Udt].[ClassTime]	10	NULL allowed		('09:15')

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Workflowsteps	WorkFlowStepKey	True

Foreign Keys

Name	Columns
FK_UserAuthorizationKey	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorizationKey]

```
CREATE TABLE [Process].[WorkflowSteps]
```

```
[WorkFlowStepKey] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[UserAuthorizationKey] [Udt].[SurrogateKeyInt] NOT NULL,
[WorkFlowStepDescription] [Udt].[Description] NOT NULL,
[WorkFlowStepTableRowCount] [Udt].[Row] NULL CONSTRAINT [DFT WorkflowSteps WorkFlowStepTableRow-
Count] DEFAULT ((0)),
[StartingDateTime] [Udt].[DateAdded] NULL CONSTRAINT [DFT_WorkflowSteps_StartingDateTime] DEFAULT
(sysdatetime()),
[EndingDateTime] [Udt].[DateAdded] NULL CONSTRAINT [DFT WorkflowSteps EndingDateTime] DEFAULT
(sysdatetime()),
[ClassTime] [Udt].[ClassTime] NULL CONSTRAINT [DFT WorkflowSteps ClassTime] DEFAULT ('09:15')
) ON [PRIMARY]
ALTER TABLE [Process].[WorkflowSteps] ADD CONSTRAINT [PK Workflowsteps] PRIMARY KEY CLUSTERED
([WorkFlowStepKey]) ON [PRIMARY]
ALTER TABLE [Process].[WorkflowSteps] ADD CONSTRAINT [FK_UserAuthorizationKey] FOREIGN KEY
([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([UserAuthorizationKey])
GO
```

[DbSecurity].[UserAuthorization]

[Udt].[ClassTime]

[Udt].[DateAdded]

[Udt].[Description]

[Udt].[Row]

[Udt].[SurrogateKeyInt]

Process

Used By

[Process].[usp_TrackWorkFlows]

[Project3].[AddForeignKeysToSchemaData]

[Project3].[DropForeignKeysFromSchemaData]

[Project3].[Load BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_DeptInstructorDepartmentBridge]

[Project3].[Load_Instructor]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]

[Project3].[TruncateSchemaData]

[Uploadfile].[CurrentSemesterCourseOfferings]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Неар	True
Row Count (~)	4522
Created	4:31:20 PM Monday, April 12, 2021
Last Modified	4:33:21 PM Monday, April 12, 2021

Columns

Name	Data Type	Max Length (Bytes)	Nullability	Default
Semester	varchar(50)	50	NULL allowed	('Current Semester')
Sec	varchar(50)	50	NULL allowed	
Code	varchar(50)	50	NULL allowed	
Course (hr, crd)	varchar(50)	50	NULL allowed	
Description	varchar(50)	50	NULL allowed	
Day	varchar(50)	50	NULL allowed	
Time	varchar(50)	50	NULL allowed	
Instructor	varchar(50)	50	NULL allowed	
Location	varchar(50)	50	NULL allowed	
Enrolled	varchar(50)	50	NULL allowed	
Limit	varchar(50)	50	NULL allowed	
Mode of Instruction	varchar(50)	50	NULL allowed	

```
CREATE TABLE [Uploadfile].[CurrentSemesterCourseOfferings]

(
[Semester] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL CONSTRAINT [DF_Current-SemesterCourseOfferings_Semester] DEFAULT ('Current Semester'),

[Sec] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Code] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Course (hr, crd)] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Description] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Time] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Instructor] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Location] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Enrolled] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Enrolled] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,
```

```
[Limit] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Mode of Instruction] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL

) ON [PRIMARY]

GO
```

Uploadfile

Used By

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_DeptInstructorDepartmentBridge]

[Project3].[Load_Instructor]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]



Objects

Name

 $Utils.uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint$

[Utils].[uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint]

Properties

Property	Value		
Collation	SQL_Latin1_General_CP1_CI_AS		
ANSI Nulls On	True		
Quoted Identifier On	True		
Created	9:19:15 AM Sunday, October 27, 2019		
Last Modified	9:19:15 AM Sunday, October 27, 2019		

Columns

Name	Data Type	Max Length (Bytes)
FullyQualifiedTableName	nvarchar(257)	514
SchemaName	[sys].[sysname]	256
TableName	[sys].[sysname]	256
ColumnName	[sys].[sysname]	256
OrdinalPosition	int	4
FullyQualifiedDomainName	nvarchar(257)	514
DomainName	[sys].[sysname]	256
DataType	nvarchar(128)	256
IsNullable	varchar(3)	3
DefaultName	[sys].[sysname]	256
DefaultNameDefinition	nvarchar(4000)	8000
CheckConstraintRuleName	[sys].[sysname]	256
CheckConstraintRuleNameDefinition	nvarchar(4000)	8000

```
CREATE VIEW [Utils].[uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint] AS

SELECT CONCAT(tbl.TABLE_SCHEMA, '.', tbl.TABLE_NAME) AS FullyQualifiedTableName,

tbl.TABLE_SCHEMA AS SchemaName,

tbl.TABLE_NAME AS TableName,

col.COLUMN_NAME AS ColumnName,

col.ORDINAL_POSITION AS OrdinalPosition,

CONCAT(col.DOMAIN_SCHEMA, '.', col.DOMAIN_NAME) AS FullyQualifiedDomainName,

col.DOMAIN_NAME AS DomainName,
```

```
CASE
            WHEN col.DATA TYPE = 'varchar'
            THEN CONCAT('varchar(', CHARACTER MAXIMUM LENGTH, ')')
            WHEN col.DATA TYPE = 'nvarchar'
            THEN CONCAT('nvarchar(', CHARACTER MAXIMUM LENGTH, ')')
            WHEN col.DATA TYPE = 'nchar'
            THEN CONCAT('nchar(', CHARACTER MAXIMUM LENGTH, ')')
             WHEN col.DATA TYPE = 'numeric'
            THEN CONCAT('numeric(', NUMERIC PRECISION RADIX, ', ',
                        NUMERIC SCALE, ')')
             WHEN col.DATA_TYPE = 'decimal'
            THEN CONCAT('decimal(', NUMERIC PRECISION RADIX, ', ',
                       NUMERIC SCALE, ')')
            ELSE col.DATA TYPE
        END AS DataType ,
        col.IS NULLABLE AS IsNullable,
        dcn.DefaultName ,
        col.COLUMN DEFAULT AS DefaultNameDefinition ,
        cc.CONSTRAINT NAME AS CheckConstraintRuleName,
        cc.CHECK CLAUSE AS CheckConstraintRuleNameDefinition
        ( SELECT TABLE CATALOG ,
FROM
                   TABLE SCHEMA ,
                   TABLE NAME ,
                   TABLE TYPE
                   INFORMATION SCHEMA. TABLES
         FROM
                  ( TABLE TYPE = 'BASE TABLE' )
         WHERE
        ) AS tbl
        INNER JOIN ( SELECT TABLE CATALOG ,
                            TABLE SCHEMA ,
                            TABLE NAME ,
                            COLUMN NAME ,
                            ORDINAL POSITION ,
                            COLUMN DEFAULT ,
                            IS NULLABLE ,
                            DATA TYPE ,
                            CHARACTER MAXIMUM LENGTH ,
                            CHARACTER OCTET LENGTH ,
                            NUMERIC PRECISION ,
                            NUMERIC PRECISION RADIX ,
                            NUMERIC SCALE ,
                            DATETIME PRECISION ,
                            CHARACTER SET CATALOG ,
                            CHARACTER SET SCHEMA ,
                            CHARACTER SET NAME ,
                            COLLATION CATALOG ,
                            COLLATION SCHEMA ,
                            COLLATION NAME ,
                            DOMAIN CATALOG ,
                            DOMAIN SCHEMA ,
                            DOMAIN NAME
                     FROM INFORMATION SCHEMA.COLUMNS
                   ) AS col ON col.TABLE CATALOG = tbl.TABLE CATALOG
```

```
AND col.TABLE SCHEMA = tbl.TABLE SCHEMA
                               AND col.TABLE NAME = tbl.TABLE NAME
       LEFT OUTER JOIN ( SELECT t.name AS TableName ,
                                   SCHEMA_NAME(s.schema_id) AS SchemaName ,
                                   ac.name AS ColumnName ,
                                   d.name AS DefaultName
                         FROM
                                  sys.all columns AS ac
                                   INNER JOIN sys.tables AS t ON ac.object id = t.object id
                                   INNER JOIN sys.schemas AS s ON t.schema id = s.schema id
                                    INNER JOIN sys.default_constraints AS d ON
ac.default object id = d.object id
                       ) AS dcn ON dcn.SchemaName = tbl.TABLE SCHEMA
                                   AND dcn.TableName = tbl.TABLE NAME
                                   AND dcn.ColumnName = col.COLUMN NAME
       LEFT OUTER JOIN ( SELECT
                                   cu.TABLE CATALOG ,
                                   cu.TABLE SCHEMA ,
                                    cu.TABLE NAME ,
                                    cu.COLUMN_NAME ,
                                    c.CONSTRAINT CATALOG ,
                                    c.CONSTRAINT SCHEMA ,
                                    c.CONSTRAINT NAME ,
                                   c.CHECK CLAUSE
                         FROM
                                   INFORMATION SCHEMA.CONSTRAINT COLUMN USAGE
                                   AS cu
                                   INNER JOIN INFORMATION SCHEMA.CHECK CONSTRAINTS
                                   AS c ON c.CONSTRAINT NAME = cu.CONSTRAINT NAME
                       ) AS cc ON cc.TABLE_SCHEMA = tbl.TABLE_SCHEMA
                                  AND cc.TABLE_NAME = tbl.TABLE_NAME
                                  AND cc.COLUMN NAME = col.COLUMN NAME
GO
```

Utils

■ Stored Procedures

Objects

Name
Process.usp_TrackWorkFlows
Project3.AddForeignKeysToSchemaData
Project3.DropForeignKeysFromSchemaData
Project3.Load_BuildingLocation
Project3.Load_Class
Project3.Load_Course
Project3.Load_Department
Project3.Load_DeptInstructorDepartmentBridge
Project3.Load_Instructor
Project3.Load_InstructorDepartmentBridge
Project3.Load_ModeOfInstruction
Project3.Load_RoomLocation
Project3.LoadQueensCourseSchedule
Project3.LoadStarSchemaData
Project3.ShowTableStatusRowCount
Project3.TruncateSchemaData

[Process].[usp_TrackWorkFlows]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKeyInt	4
@WorkFlowStepDescription	Description	200
@StartTime	DateAdded	8
@EndTime	DateAdded	8
@WorkFlowStepTableRowCount	int	4

SQL Script

```
CREATE PROCEDURE [Process].[usp_TrackWorkFlows]
    @UserAuthorizationKey [Udt].[SurrogateKeyInt],
    @WorkFlowStepDescription [Udt].[Description],
    @StartTime [Udt].[DateAdded],
    @EndTime [Udt].[DateAdded],
    @WorkFlowStepTableRowCount INT

AS

BEGIN
    INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-DateTime, EndingDateTime, WorkFlowStepTableRowCount)
    VALUES (@UserAuthorizationKey, @WorkFlowStepDescription, @StartTime, @EndTime, @WorkFlowStep-TableRowCount)

END;
GO
```

Uses

[Process].[WorkflowSteps]
[Udt].[DateAdded]
[Udt].[Description]
[Udt].[SurrogateKeyInt]
Process

[Project3].[AddForeignKeysToSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- ------
-- Author:
               Arnan Khan
-- Create date: 11/10/2023
-- Description: Adds Foreign Keys back to tables.
-- -----
CREATE PROCEDURE [Project3].[AddForeignKeysToSchemaData]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
BEGIN
  declare @startT DATETIME2;
   declare @endT DATETIME2;
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   --Foreign Keys for .Instructor Department Bridge table.
   ALTER TABLE [Dept].[Instructor_Department_Bridge]
   ADD CONSTRAINT FK InstructorId Foreign Key(InstructorId)
   REFERENCES [Dept].[Instructor] (InstructorId);
   ALTER TABLE [Dept].[Instructor Department Bridge]
   ADD CONSTRAINT FK DepartmentId Foreign Key(DepartmentId)
   REFERENCES [Dept].[Department] (DepartmentId);
   --Foreign Keys for .Class Table
   ALTER TABLE [Dept].[Class] WITH CHECK ADD CONSTRAINT [FK_Courses] FOREIGN KEY ([CourseId])
   References [Dept].[Course] ([CourseId]);
   ALTER TABLE [Dept].[Class] WITH CHECK ADD CONSTRAINT [FK BuildingLocation] FOREIGN KEY
([BuildingLocationId])
   References [Location].[BuildingLocation] ([BuildingLocationId]);
```

```
ALTER TABLE [Dept].[Class] WITH CHECK ADD CONSTRAINT [FK RoomLocation] FOREIGN KEY ([Room-
LocationId])
    References [Location].[RoomLocation] ([RoomLocationId]);
    ALTER TABLE [Dept].[Class] WITH CHECK ADD CONSTRAINT [FK_DepartmentInstructorBridge] FOREIGN
KEY ([BridgeId])
    References [Dept].[Instructor_Department_Bridge] ([BridgeId]);
   ALTER TABLE [Dept].[Class] WITH CHECK ADD CONSTRAINT [FK Mode] FOREIGN KEY ([ModeId])
    REFERENCES [Dept].ModeOfInstruction([ModeId]);
    declare @rowCount as INT;
   set @rowCount = 0;
   set @startT = SYSDATETIME();
    set @endT = SYSDATETIME();
    INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-
DateTime, EndingDateTime, WorkFlowStepTableRowCount)
    VALUES (
        @GroupMemberUserAuthorizationKey,
        \ensuremath{\text{N'Adds}} all the foreign key constraints to the tables.',
        @startT,
         @endT,
        @rowCount
    );
END;
GO
```

[Process].[WorkflowSteps] [Udt].[SurrogateKeyInt] Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[DropForeignKeysFromSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- -----
-- Author:
            Arnan Khan
-- Create date: 12/04/2023
-- Description: Drop the Foreign Keys From the Star Schema
-- -----
CREATE PROCEDURE [Project3].[DropForeignKeysFromSchemaData]
   @GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   declare @startT DATETIME2;
   declare @endT DATETIME2;
   SET NOCOUNT ON;
   --Remove the Foreign Keys for the [Dept].[Instructor Department Bridge] Table
   ALTER TABLE [Dept].[Instructor Department Bridge] DROP CONSTRAINT IF EXISTS FK InstructorId;
   ALTER TABLE [Dept].[Instructor Department Bridge] DROP CONSTRAINT IF EXISTS FK DepartmentId;
   -- Remove FK for Dept. Class
   ALTER TABLE [Dept].[Class] DROP CONSTRAINT IF EXISTS FK Courses;
   ALTER TABLE [Dept]. [Class] DROP CONSTRAINT IF EXISTS FK BuildingLocation;
   ALTER TABLE [Dept].[Class] DROP CONSTRAINT IF EXISTS FK RoomLocation;
   ALTER TABLE [Dept].[Class] DROP CONSTRAINT IF EXISTS FK DepartmentInstructorBridge;
   ALTER TABLE [Dept].[Class] DROP CONSTRAINT IF EXISTS FK Mode;
   declare @rowCount as INT;
   set @rowCount = 0;
   set @startT = SYSDATETIME();
   set @endT = SYSDATETIME();
   INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-
```

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Drop-ForeignKeysFromSchemaData

```
DateTime, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(

@GroupMemberUserAuthorizationKey,

N'Drops All The Foreign Keys in the Tables.',

@startT,

@endT,

@rowCount

);

END;

GO
```

Uses

[Process].[WorkflowSteps] [Udt].[SurrogateKeyInt] Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_BuildingLocation]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- -----
-- Author:
           Arnan Khan
-- Create date: 12/05/2023
-- Description: Loads Data into Location.BuildingLocation
-- -----
CREATE PROCEDURE [Project3].[Load_BuildingLocation]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO Location.BuildingLocation(RoomBuilding)
   SELECT
      DISTINCT
       SUBSTRING(Location, 1, CHARINDEX(' ', Location))
   FROM Uploadfile.CurrentSemesterCourseOfferings
   WHERE [Location] != ' ';
   declare @rowCount as INT;
   set @rowCount = (SELECT COUNT(*) FROM Location.RoomLocation);
```

```
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();

INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-DateTime, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(
    @GroupMemberUserAuthorizationKey,
    N'Loads all of the Room Buildings.',
    @startT,
    @endT,
    @rowCount
);
END
GO
```

[Location].[BuildingLocation]
[Location].[RoomLocation]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_Class]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
CREATE PROCEDURE [Project3].[Load_Class]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
       -- interfering with SELECT statements.
       SET NOCOUNT ON;
       DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
      DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
INSERT INTO [Dept].[Class](Section, Code, CourseId, Day, Time, BridgeId, BuildingLocationId,
RoomLocationId, Enrolled, Limit, ModeId)
SELECT
   DISTINCT
   CSCO.Sec,
   CSCO.Code,
   C.CourseId,
   CSCO.[Day],
   CSCO.[Time],
   IDB.BridgeId,
   BL.BuildingLocationId,
   RL.RoomLocationId,
   CSCO.Enrolled,
   CSCO.Limit,
    MOI.ModeId
```

```
FROM Uploadfile.CurrentSemesterCourseOfferings as CSCO
INNER JOIN Dept.Course as C on C.CourseName = SUBSTRING([Course (hr, crd)], 1, CHARINDEX(' (',
[Course (hr, crd)]) - 1)
INNER JOIN Dept.Instructor as I on I.InstructorFullName=CSCO.Instructor
INNER JOIN Dept.Department as D on D.DepartmentName = substring(CSCO.[Course (hr, crd)], 1, 4)
INNER JOIN Dept.Instructor Department Bridge as IDB on IDB.InstructorId=I.InstructorId AND
IDB.DepartmentId=D.DepartmentId
INNER JOIN Location. Building Location as BL on BL. RoomBuilding = SUBSTRING (CSCO. [Location], 1,
CHARINDEX(' ', CSCO.[Location]))
INNER JOIN Location.RoomLocation as RL on RL.RoomNumber = SUBSTRING(CSCO.Location, CHARINDEX(' ',
CSCO.Location), LEN(CSCO.Location))
INNER JOIN Dept.ModeOfInstruction as MOI on MOI.[Mode Of Instruction] = CSCO.[Mode of
Instruction];
declare @rowCount as INT;
set @rowCount = (SELECT COUNT(*) FROM Dept.Class);
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();
INSERT INTO Process. WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, StartingDate-
Time, EndingDateTime, WorkFlowStepTableRowCount)
VALUES (
   @GroupMemberUserAuthorizationKey,
   N'Loads the class and attributes',
   @startT.
        @endT,
   @rowCount
);
END
GO
```

```
[Dept].[Class]
[Dept].[Course]
[Dept].[Department]
[Dept].[Instructor]
[Dept].[Instructor_Department_Bridge]
[Dept].[ModeOfInstruction]
[Location].[BuildingLocation]
[Location].[RoomLocation]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3
```

Used By

[Project3].[LoadQueensCourseSchedule]

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Load_-Class

[Project3].[LoadStarSchemaData]

[Project3].[Load_Course]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
CREATE PROCEDURE [Project3].[Load Course]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
       -- interfering with SELECT statements.
       SET NOCOUNT ON;
       DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
      DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
INSERT INTO Dept.Course(CourseName, CourseDescription)
SELECT DISTINCT
   SUBSTRING([Course (hr, crd)], 1, CHARINDEX(' (', [Course (hr, crd)]) - 1) AS CourseCode,
   Description
   SUBSTRING(Instructor, 1, CHARINDEX(',', Instructor) - 1),
    SUBSTRING(Instructor, CHARINDEX(',', Instructor) + 2, LEN(Instructor))
FROM Uploadfile.CurrentSemesterCourseOfferings;
declare @rowCount as INT;
set @rowCount = (SELECT COUNT(*) FROM Dept.Course);
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();
```

```
INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, StartingDate-
Time, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(
    @GroupMemberUserAuthorizationKey,
    N'Loads the course and attributes',
    @startT,
     @endT,
    @rowCount
);
END
GO
```

[Dept].[Course]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_Department]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- -----
-- Author:
              Samin
-- Create date: 12/04/2023
-- Description: Loads Data into Dept.Department
-- -----
CREATE PROCEDURE [Project3].[Load Department]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO [Dept].[Department] (DepartmentName)
   SELECT DISTINCT substring([Course (hr, crd)], 1, 4)
   FROM Uploadfile.CurrentSemesterCourseOfferings;
   declare @rowCount as INT;
   set @rowCount = (SELECT COUNT(*) FROM Dept.Department);
   DECLARE @endT DATETIME2;
   set @endT = SYSDATETIME();
```

[Dept].[Department]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_DeptInstructorDepartmentBridge]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- ------
-- Author:
              Arnan
-- Create date: 12/04/2023
-- Description: Loads
-- -----
CREATE PROCEDURE [Project3].[Load_DeptInstructorDepartmentBridge]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO Dept.Instructor_Department_Bridge(InstructorId, DepartmentId)
   SELECT DISTINCT
      I.InstructorId, D.DepartmentId
   FROM Uploadfile.CurrentSemesterCourseOfferings as O
   INNER JOIN Dept.Department as D on D.DepartmentName = substring(O.[Course (hr, crd)], 1, 4)
   INNER JOIN Dept.Instructor as I on I.InstructorFullName = O.Instructor;
   declare @rowCount as INT;
   set @rowCount = (SELECT COUNT(*) FROM Dept.Department);
```

```
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();

INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-DateTime, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(

@GroupMemberUserAuthorizationKey,
N'Loads all the distinct departments into the Dept.Department Table.',
@startT,
@endT,
@endT,
@rowCount
)

END
GO
```

[Dept].[Department]
[Dept].[Instructor]
[Dept].[Instructor_Department_Bridge]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_Instructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- ------
-- Author:
              Arnan Khan
-- Create date: 12/04/2023
-- Description: Loads Data into Dept.Instructor
-- -----
CREATE PROCEDURE [Project3].[Load_Instructor]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO [Dept].[Instructor](InstructorFirstName,InstructorLastName, InstructorFullName)
   SELECT DISTINCT
       SUBSTRING(Instructor, 1, CHARINDEX(',', Instructor) - 1),
       SUBSTRING(Instructor, CHARINDEX(',', Instructor) + 2, LEN(Instructor)),
       Instructor
   FROM Uploadfile.CurrentSemesterCourseOfferings
   WHERE SUBSTRING(Instructor, 1, CHARINDEX(',', Instructor) - 1) != ' ' and
SUBSTRING(Instructor, CHARINDEX(',', Instructor) + 2, LEN(Instructor)) != ' ';
```

```
declare @rowCount as INT;
    set @rowCount = (SELECT COUNT(*) FROM Dept.Instructor);
   DECLARE @endT DATETIME2;
    set @endT = SYSDATETIME();
    INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-
DateTime, EndingDateTime, WorkFlowStepTableRowCount)
    VALUES (
        @GroupMemberUserAuthorizationKey,
        N^{\prime}\operatorname{Loads} all of the Distinct Instructors with the concatnation of their first name and
last name.',
        @startT,
         @endT,
        @rowCount
    );
END
GO
```

[Dept].[Instructor]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_InstructorDepartmentBridge]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- ------
-- Author:
              Arnan
-- Create date: 12/04/2023
-- Description: Loads
-- -----
CREATE PROCEDURE [Project3].[Load_InstructorDepartmentBridge]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO Dept.Instructor_Department_Bridge(InstructorId, DepartmentId)
   SELECT DISTINCT
      I.InstructorId, D.DepartmentId
   FROM Uploadfile.CurrentSemesterCourseOfferings as O
   INNER JOIN Dept.Department as D on D.DepartmentName = substring(O.[Course (hr, crd)], 1, 4)
   INNER JOIN Dept.Instructor as I on I.InstructorFullName = O.Instructor
   declare @rowCount as INT;
   set @rowCount = (SELECT COUNT(*) FROM Dept.Department);
```

```
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();

INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-DateTime, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(
    @GroupMemberUserAuthorizationKey,
    N'Loads all the distinct departments into the Dept.Department Table.',
    @startT,
    @endT,
    @endT,
    @rowCount
)
END
GO
```

[Dept].[Department]
[Dept].[Instructor]
[Dept].[Instructor_Department_Bridge]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

[Project3].[Load_ModeOfInstruction]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
CREATE PROCEDURE [Project3].[Load_ModeOfInstruction]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
       SET NOCOUNT ON;
       DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
       DECLARE @startT DATETIME2;
    set @startT = SYSDATETIME();
    DECLARE @DateOfLastUpdate DATETIME2;
    SET @DateOfLastUpdate = SYSDATETIME();
Insert Into [Dept].[ModeOfInstruction] ([Mode Of Instruction])
Select Distinct [Mode Of Instruction]
{\tt From \ Uploadfile.} Current {\tt Semester Course Offerings;}
declare @rowCount as INT;
set @rowCount = (SELECT COUNT(*) FROM [Dept].[ModeOfInstruction]);
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();
INSERT INTO Process. WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, StartingDate-
Time, EndingDateTime, WorkFlowStepTableRowCount)
VALUES (
    @GroupMemberUserAuthorizationKey,
```

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Load_-ModeOfInstruction

```
N'Loads the Mode of Instruction',
    @startT,
        @endT,
        @rowCount
);
END;
GO
```

Uses

[Dept].[ModeOfInstruction]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[Load_RoomLocation]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- -----
-- Author:
           Mudabir Rizvi
-- Create date: 12/05/2023
-- Description: Loads Data into Location.RoomLocation
-- -----
CREATE PROCEDURE [Project3].[Load RoomLocation]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   DECLARE @DateAdded DATETIME2;
   SET @DateAdded = SYSDATETIME();
   DECLARE @startT DATETIME2;
   set @startT = SYSDATETIME();
   DECLARE @DateOfLastUpdate DATETIME2;
   SET @DateOfLastUpdate = SYSDATETIME();
   INSERT INTO Location.RoomLocation(RoomNumber)
   SELECT
      DISTINCT
       SUBSTRING (Location, CHARINDEX (' ', Location), LEN (Location))
   FROM Uploadfile.CurrentSemesterCourseOfferings
   WHERE [Location] != ' ';
   declare @rowCount as INT;
   set @rowCount = (SELECT COUNT(*) FROM Location.RoomLocation);
```

```
DECLARE @endT DATETIME2;
set @endT = SYSDATETIME();

INSERT INTO Process.WorkflowSteps (UserAuthorizationKey, WorkFlowStepDescription, Starting-DateTime, EndingDateTime, WorkFlowStepTableRowCount)

VALUES(
    @GroupMemberUserAuthorizationKey,
    N'Loads all of the Room Locations.',
    @startT,
    @endT,
    @rowCount
);
END
GO
```

[Location].[RoomLocation]
[Process].[WorkflowSteps]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[SurrogateKeyInt]
Project3

Used By

[Project3].[LoadQueensCourseSchedule] [Project3].[LoadStarSchemaData]

[Project3].[LoadQueensCourseSchedule]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

```
-- -----
 - Author:
-- Create date:
-- Description:
CREATE PROCEDURE [Project3].[LoadQueensCourseSchedule]
   -- Add the parameters for the stored procedure here
AS
BEGIN
   SET NOCOUNT ON;
         Drop All of the foreign keys prior to truncating tables in the star schema
    EXEC [Project3].[DropForeignKeysFromSchemaData] @GroupMemberUserAuthorizationKey = 2;
        Check row count before truncation
    EXEC [Project3].[ShowTableStatusRowCount]
        \texttt{@GroupMemberUserAuthorizationKey} = 2 \textit{,} \quad \text{-- Change --1 to the appropriate UserAuthorization--} 
Key
        @TableStatus = N'''Pre-truncate of tables''';
        Always truncate the Star Schema Data
    EXEC [Project3].[TruncateSchemaData] @GroupMemberUserAuthorizationKey = 2;
        Load the star schema
   EXEC [Project3].[Load Instructor] @GroupMemberUserAuthorizationKey = 2; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load Department] @GroupMemberUserAuthorizationKey = 1; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load DeptInstructorDepartmentBridge] @GroupMemberUserAuthorizationKey = 2;
   EXEC [Project3].[Load ModeOfInstruction] @GroupMemberUserAuthorizationKey = 4; -- Change -1
to the appropriate UserAuthorizationKey
   EXEC [Project3].[Load Course] @GroupMemberUserAuthorizationKey = 3; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load RoomLocation] @GroupMemberUserAuthorizationKey = 6; -- Change -1 to
```

```
the appropriate UserAuthorizationKey
   EXEC [Project3].[Load BuildingLocation] @GroupMemberUserAuthorizationKey= 2; -- Change -1
to the appropriate UserAuthorizationKey
   EXEC [Project3].[Load Class] @GroupMemberUserAuthorizationKey = 4; -- Change -1 to the
appropriate UserAuthorizationKey
         Recreate all of the foreign keys prior after loading the star schema
    ___
         Check row count before truncation
   EXEC [Project3].[ShowTableStatusRowCount]
        @GroupMemberUserAuthorizationKey = 2, -- Change -1 to the appropriate UserAuthorization-
Key
        @TableStatus = N'''Row Count after loading the star schema''';
  EXEC [Project3].[AddForeignKeysToSchemaData] @GroupMemberUserAuthorizationKey = 2; -- Change
-1 to the appropriate UserAuthorizationKey
END;
GO
```

```
[Project3].[AddForeignKeysToSchemaData]
[Project3].[DropForeignKeysFromSchemaData]
[Project3].[Load_BuildingLocation]
[Project3].[Load_Class]
[Project3].[Load_Course]
[Project3].[Load_Department]
[Project3].[Load_DeptInstructorDepartmentBridge]
[Project3].[Load_Instructor]
[Project3].[Load_ModeOfInstruction]
[Project3].[Load_RoomLocation]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]
Project3
```

[Project3].[LoadStarSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

```
-- -----
 - Author:
-- Create date:
-- Description:
CREATE PROCEDURE [Project3].[LoadStarSchemaData]
   -- Add the parameters for the stored procedure here
AS
BEGIN
   SET NOCOUNT ON;
         Drop All of the foreign keys prior to truncating tables in the star schema
    EXEC [Project3].[DropForeignKeysFromSchemaData] @GroupMemberUserAuthorizationKey = 2;
        Check row count before truncation
   EXEC [Project3].[ShowTableStatusRowCount]
        \texttt{@GroupMemberUserAuthorizationKey} = 2 \textit{,} \quad \text{-- Change --1 to the appropriate UserAuthorization--} 
Key
       @TableStatus = N'''Pre-truncate of tables''';
        Always truncate the Star Schema Data
    EXEC [Project3].[TruncateSchemaData] @GroupMemberUserAuthorizationKey = 2;
        Load the star schema
   EXEC [Project3].[Load Instructor] @GroupMemberUserAuthorizationKey = 2; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load Department] @GroupMemberUserAuthorizationKey = 1; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load DeptInstructorDepartmentBridge] @GroupMemberUserAuthorizationKey = 2;
   EXEC [Project3].[Load ModeOfInstruction] @GroupMemberUserAuthorizationKey = 4; -- Change -1
to the appropriate UserAuthorizationKey
   EXEC [Project3].[Load Course] @GroupMemberUserAuthorizationKey = 3; -- Change -1 to the
appropriate UserAuthorizationKey
   EXEC [Project3].[Load RoomLocation] @GroupMemberUserAuthorizationKey = 6; -- Change -1 to
```

```
the appropriate UserAuthorizationKey
   EXEC [Project3].[Load BuildingLocation] @GroupMemberUserAuthorizationKey= 2; -- Change -1
to the appropriate UserAuthorizationKey
   EXEC [Project3].[Load Class] @GroupMemberUserAuthorizationKey = 4; -- Change -1 to the
appropriate UserAuthorizationKey
         Recreate all of the foreign keys prior after loading the star schema
    __
         Check row count before truncation
   EXEC [Project3].[ShowTableStatusRowCount]
        @GroupMemberUserAuthorizationKey = 2, -- Change -1 to the appropriate UserAuthorization-
Key
        @TableStatus = N'''Row Count after loading the star schema''';
  EXEC [Project3].[AddForeignKeysToSchemaData] @GroupMemberUserAuthorizationKey = 2; -- Change
-1 to the appropriate UserAuthorizationKey
END;
GO
```

```
[Project3].[AddForeignKeysToSchemaData]
[Project3].[DropForeignKeysFromSchemaData]
[Project3].[Load_BuildingLocation]
[Project3].[Load_Class]
[Project3].[Load_Course]
[Project3].[Load_Department]
[Project3].[Load_DeptInstructorDepartmentBridge]
[Project3].[Load_Instructor]
[Project3].[Load_ModeOfInstruction]
[Project3].[Load_RoomLocation]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateSchemaData]
Project3
```

[Project3].[ShowTableStatusRowCount]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4
@TableStatus	varchar(64)	64

```
CREATE PROCEDURE [Project3].[ShowTableStatusRowCount]
@GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt],
@TableStatus VARCHAR(64)
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   select TableStatus = @TableStatus, TableName = 'Course', COUNT(*) as [RowCount] FROM
[Dept].Course;
   select TableStatus = @TableStatus, TableName = 'Department', COUNT(*) as [RowCount] FROM
[Dept].Department;
   select TableStatus = @TableStatus, TableName = 'Instructor', COUNT(*)as [RowCount] FROM
[Dept].Instructor;
   select TableStatus = @TableStatus, TableName = 'Instructor Department Bridge', COUNT(*)as [Row-
Count] FROM [Dept].Instructor Department Bridge;
   select TableStatus = @TableStatus, TableName = 'Class', COUNT(*) as [RowCount] FROM
[Dept].Class;
   select TableStatus = @TableStatus, TableName = 'RoomLocation', COUNT(*) as [RowCount] FROM
[Location].RoomLocation;
   select TableStatus = @TableStatus, TableName = 'BuildingLocation', COUNT(*) as [RowCount] FROM
[Location].BuildingLocation;
   select TableStatus = @TableStatus, TableName = 'ModeOfInstruction', COUNT(*) as [RowCount] FROM
[Dept].ModeOfInstruction;
END;
```

Project > 127.0.0.1,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Show-TableStatusRowCount

GO

Uses

[Dept].[Class]

[Dept].[Course]

[Dept].[Department]

[Dept].[Instructor]

[Dept].[Instructor_Department_Bridge]

[Dept].[ModeOfInstruction]

[Location].[BuildingLocation]

[Location].[RoomLocation]

[Udt].[SurrogateKeyInt]

Project3

Used By

[Project3].[LoadQueensCourseSchedule]

[Project3].[LoadStarSchemaData]

[Project3].[TruncateSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@GroupMemberUserAuthorizationKey	SurrogateKeyInt	4

```
-- -----
-- Author:
              Arnan Khan
-- Create date: 12/06/2023
-- Description: @GroupMemberUserAuthorizationKey:
-- authorization key for stored procedure
-- -----
CREATE PROCEDURE [Project3].[TruncateSchemaData]
   @GroupMemberUserAuthorizationKey [Udt].[SurrogateKeyInt]
AS
BEGIN
   declare @startT DATETIME2;
   declare @endT DATETIME2;
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
   SET NOCOUNT ON;
   truncate table Dept.Instructor Department Bridge;
   truncate table Dept.Instructor;
   truncate table Dept.Department;
   truncate table Dept.ModeOfInstruction;
   truncate table Dept.Course;
   truncate table Location.RoomLocation;
   truncate table Location. Building Location;
   truncate table Dept.Class;
   declare @rowCount as INT;
   set @rowCount = 0;
   set @startT = SYSDATETIME();
   set @endT = SYSDATETIME();
```

[Dept].[Class]

[Dept].[Course]

[Dept].[Department]

[Dept].[Instructor]

[Dept].[Instructor Department Bridge]

[Dept].[ModeOfInstruction]

[Location].[BuildingLocation]

[Location].[RoomLocation]

[Process].[WorkflowSteps]

[Udt].[SurrogateKeyInt]

Project3

Used By

[Project3].[LoadQueensCourseSchedule]

[Project3].[LoadStarSchemaData]

■ Table-valued Functions

Objects

Name

dbo.DatabaseObjects

dbo.JSONHierarchy

🖪 [dbo].[DatabaseObjects]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@ListOfObjectIDs	varchar(max)	max

```
create function [dbo].[DatabaseObjects]
   Summary: >
    lists out the full names, schemas and (where appropriate)
     the owner of the object.
   Author: PhilFactor
   Date: 10/9/2017
   Examples:
      - Select * from dbo.DatabaseObjects('2123154609,960722475,1024722703')
    A table with the id, name of object and so on.
   @ListOfObjectIDs varchar(max)
returns table
--WITH ENCRYPTION|SCHEMABINDING, ..
as
return
   select object id
        , schema name(schema id) + '.' + coalesce(object name(parent object id) + '.', '') +
name as name
   from sys.objects as ob
       inner join openjson(N'[' + @ListOfObjectIDs + N']')
          on convert(int, Value) = ob.object id
);
```

[dbo].[JSONHierarchy]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@JSONData	varchar(max)	max
@Parent_object_ID	int	4
@MaxObject_id	int	4
@type	int	4

SQL Script

```
create function [dbo].[JSONHierarchy]
   @JSONData varchar(max)
  , @Parent object ID int = null
 , @MaxObject id int = 0
  , @type int = null
returns @ReturnTable table
   -- https://www.red-gate.com/simple-talk/blogs/consuming-hierarchical-json-documents-sql-
server-using-openjson/?utm source=simpletalk&utm medium=pubemail&utm content=20171010-
slota1&utm term=simpletalkmain
   Element_ID int identity(1, 1) primary key /* internal surrogate primary key gives the order
of parsing and the list order */
 , SequenceNo int null
                                             /* the sequence number in a list */
                                             /* if the element has a parent then it is in this
  , Parent ID int
column. The document is the ultimate parent, so you can get the structure from recursing from the
document */
  , Object ID int
                                             /* each list or object has an object id. This ties
all elements to a parent. Lists are treated as objects here */
 , Name nvarchar(2000)
                                            /* the name of the object */
  , StringValue nvarchar(max) not null
                                            /*the string representation of the value of the
element. */
  , ValueType varchar(10) not null
                                            /* the declared type of the value represented as a
string in StringValue*/
```

```
begin
   --the types of JSON
   declare @null int = 0
         , @string int = 1
         , @int int = 2
         , @boolean int = 3
         , @object int = 5;
   declare @OpenJSONData table
      sequence int identity(1, 1)
     , [key] varchar(200)
     , Value varchar(max)
     , type int
   );
   declare @key
                   varchar(200)
       , @Value varchar(max)
         , @Thetype int
         , @ii
                    int
         , @iiMax int
         , @NewObject int
         , @firstchar char(1);
   insert into @OpenJSONData
      [key]
     , Value
     , type
   select [Key]
       , Value
        , Type
   from openjson(@JSONData);
   select @ii = 1
        , @iiMax = scope identity();
   select @firstchar
       = --the first character to see if it is an object or an array
       substring(
                  @JSONData
                  , patindex(
                              '%[^' + char(0) + '- ' + char(160) + ']%'
                             , ' ' + @JSONData + '!!' collate SQL_Latin1_General_CP850_BIN
                           ) - 1
                 , 1
               );
   if @type is null
      and @firstchar in ( '[', '{')
       insert into @ReturnTable
```

```
SequenceNo
      , Parent ID
      , Object ID
      , Name
      , StringValue
      , ValueType
    select 1
        , null
         , 1
         , '-1
         , 11
         , case @firstchar
               when '[' then
                  'array'
               else
                  'object'
           end:
    select @type
                             = case @firstchar
                                   when '[' then
                                       @array
                                   else
                                       @object
                               end
         , @Parent_object_ID = 1
         , @MaxObject_id = coalesce(@MaxObject_id, 1) + 1;
end;
while (@ii <= @iiMax)</pre>
begin
    --OpenJSON renames list items with 0-nn which confuses the consumers of the table
   select @key = case
                          when [key] like '[0-9]%' then
                          else
                             [key]
                      end
         , @Value = Value
         , @Thetype = type
    from @OpenJSONData
    where sequence = @ii;
   if @Thetype in ( @array, @object ) --if we have been returned an array or object
   begin
        select @MaxObject id = coalesce(@MaxObject id, 1) + 1;
        --just in case we have an object or array returned
        insert into @ReturnTable --record the object itself
           SequenceNo
          , Parent ID
          , Object ID
          , Name
          , StringValue
```

```
, ValueType
   select @ii
        , @Parent_object_ID
        , @MaxObject_id
        , @key
        , 11
         , case @Thetype
              when @array then
                 'array'
              else
                  'object'
           end;
   insert into @ReturnTable --and return all its children
       SequenceNo
     , Parent_ID
     , Object_ID
     , [Name]
     , StringValue
     , ValueType
   select SequenceNo
        , Parent_ID
        , Object_ID
        , [Name]
        , StringValue
        , ValueType
   from dbo.JSONHierarchy(@Value, @MaxObject_id, @MaxObject_id, @type);
   select @MaxObject id = max(Object ID) + 1
   from @ReturnTable;
end:
else
   insert into @ReturnTable
       SequenceNo
     , Parent ID
     , Object_ID
     , Name
     , StringValue
     , ValueType
   select @ii
        , @Parent_object_ID
        , null
        , @key
        , @Value
         , case @Thetype
              when @string then
                  'string'
              when @null then
```

" User-Defined Data Types

Objects

Name
Udt.Building
Udt.ClassTime
Udt.CourseDay
Udt.CourseDescription
Udt.CourseName
Udt.CourseTime
Udt.DateAdded
Udt.DeptName
Udt.Description
Udt.Enrolled
Udt.FirstName
Udt.FullName
Udt.GroupName
Udt.IndividualProject
Udt.InsMode
Udt.LastName
Udt.Limit
Udt.Name
Udt.Number
Udt.RoomNumber
Udt.Row
Udt.SurrogateKeyInt

iii [Udt].[Building]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nchar
Length	5

SQL Script

CREATE TYPE [Udt].[Building] FROM nchar (5) NULL
GO

Uses

Udt

Used By

[Location].[BuildingLocation]

[Udt].[ClassTime]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nchar
Length	5

SQL Script

CREATE TYPE [Udt].[ClassTime] FROM nchar (5) NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization] [Process].[WorkflowSteps]

[Udt].[CourseDay]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [Udt].[CourseDay] FROM nvarchar (50) NOT NULL
GO

Uses

Udt

[Udt].[CourseDescription]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [Udt].[CourseDescription] FROM nvarchar (50) NOT NULL
GO

Uses

Udt

Used By

[Dept].[Course]

[Udt].[CourseName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [Udt].[CourseName] FROM nvarchar (20) NOT NULL
GO

Uses

Udt

Used By

[Dept].[Course]

[Udt].[CourseTime]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [Udt].[CourseTime] FROM nvarchar (50) NOT NULL
GO

Uses

Udt

[Udt].[DateAdded]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	datetime2
Length	8

SQL Script

CREATE TYPE [Udt].[DateAdded] FROM datetime2 NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization] [Process].[WorkflowSteps] [Process].[usp_TrackWorkFlows]

[Udt].[DeptName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nchar
Length	4

SQL Script

CREATE TYPE [Udt].[DeptName] FROM nchar (4) NOT NULL
GO

Uses

Udt

Used By

[Dept].[Department]

[Udt].[Description]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	100

SQL Script

CREATE TYPE [Udt].[Description] FROM nvarchar (100) NOT NULL
GO

Uses

Udt

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlows]

[Udt].[Enrolled]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [Udt].[Enrolled] FROM int NOT NULL
GO

Uses

Udt

[Udt].[FirstName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [Udt].[FirstName] FROM nvarchar (50) NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization] [Dept].[Instructor]

[Udt].[FullName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	100

SQL Script

CREATE TYPE [Udt].[FullName] FROM nvarchar (100) NOT NULL
GO

Uses

Udt

Used By

[Dept].[Instructor]

[Udt].[GroupName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [Udt].[GroupName] FROM nvarchar (20) NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization]

[Udt].[IndividualProject]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	60

SQL Script

CREATE TYPE [Udt].[IndividualProject] FROM nvarchar (60) NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization]

[Udt].[InsMode]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	varchar
Length	50

SQL Script

CREATE TYPE [Udt].[InsMode] FROM varchar (50) NOT NULL
GO

Uses

Udt

Used By

[Dept].[Class]

[Dept].[ModeOfInstruction]

[Udt].[LastName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [Udt].[LastName] FROM nvarchar (50) NOT NULL
GO

Uses

Udt

Used By

[DbSecurity].[UserAuthorization] [Dept].[Instructor]

[Udt].[Limit]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [Udt].[Limit] FROM int NOT NULL
GO

Uses

Udt

iii [Udt].[Name]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	55

SQL Script

CREATE TYPE [Udt].[Name] FROM nvarchar (55) NOT NULL
GO

Uses

Udt

[Udt].[Number]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [Udt].[Number] FROM int NOT NULL
GO

Uses

Udt

Used By

[Dept].[Class]

[Udt].[RoomNumber]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	varchar
Length	10

SQL Script

CREATE TYPE [Udt].[RoomNumber] FROM varchar (10) NULL
GO

Uses

Udt

Used By

[Location].[RoomLocation]

iii [Udt].[Row]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [Udt].[Row] FROM int NOT NULL
GO

Uses

Udt

Used By

[Process].[WorkflowSteps]

[Udt].[SurrogateKeyInt]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

```
CREATE TYPE [Udt].[SurrogateKeyInt] FROM int NULL
GO
```

Uses

Udt

Used By

[DbSecurity].[UserAuthorization]

[Dept].[Class]

[Dept].[Course]

[Dept].[Department]

[Dept].[Instructor]

[Dept].[Instructor_Department_Bridge]

[Dept].[ModeOfInstruction]

[Location].[BuildingLocation]

[Location].[RoomLocation]

[Process].[WorkflowSteps]

[Process].[usp_TrackWorkFlows]

[Project3].[AddForeignKeysToSchemaData]

[Project 3]. [Drop Foreign Keys From Schema Data]

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

 $[Project 3]. [Load_DeptInstructorDepartmentBridge] \\$

[Project3].[Load_Instructor]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateSchemaData]



Objects

Name
BiStudent
dbo
EC3\thehitman
guest
student



Property	Value
Туре	SqlUser
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script

CREATE USER [BiStudent] WITHOUT LOGIN GO



Property	Value
Туре	SqlUser
Login Name	sa
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script

GO



Property	Value
Туре	WindowsUser
Login Name	EC3\thehitman
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script

```
IF NOT EXISTS (SELECT * FROM master.dbo.syslogins WHERE loginname = N'EC3\thehitman')
CREATE LOGIN [EC3\thehitman] FROM WINDOWS
GO
CREATE USER [EC3\thehitman] FOR LOGIN [EC3\thehitman]
GO
```



Property	Value
Туре	SqlUser
Default Schema	guest

SQL Script

GO



Property	Value
Туре	SqlUser
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script

CREATE USER [student] WITHOUT LOGIN GO

La Database Roles

Objects

Name
db_accessadmin
db_backupoperator
db_datareader
db_datawriter
db_ddladmin
db_denydatareader
db_denydatawriter
db_owner
db_securityadmin
public

♣ db_accessadmin

Properties

Property	Value
Owner	dbo

db_backupoperator

Properties

Property	Value
Owner	dbo

db_datareader

Properties

Property	Value
Owner	dbo

Members

- BiStudent
- student

SQL Script

```
ALTER ROLE [db_datareader] ADD MEMBER [BiStudent]

GO

ALTER ROLE [db_datareader] ADD MEMBER [student]

GO
```

Uses

BiStudent student

♣ db_datawriter

Properties

Property	Value
Owner	dbo

db_ddladmin

Properties

Property	Value
Owner	dbo

db_denydatareader

Properties

Property	Value
Owner	dbo

db_denydatawriter

Properties

Property	Value
Owner	dbo

db_owner

Properties

Property	Value
Owner	dbo

Members

• EC3\thehitman

SQL Script

ALTER ROLE [db_owner] ADD MEMBER [EC3\thehitman] GO

Uses

EC3\thehitman

db_securityadmin

Properties

Property	Value
Owner	dbo

♣♣ public

Properties

Property	Value
Owner	dbo

△ Schemas

Objects

Name
DbSecurity
Dept
GroupNameProject3
Location
Process
Project3
Udt
Uploadfile
Utils
YourLastName

♣ DbSecurity

Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [DbSecurity]
AUTHORIZATION [dbo]
GO
```

Used By

[DbSecurity].[UserAuthorization]

△ Dept

Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [Dept]
AUTHORIZATION [dbo]
GO
```

Used By

[Dept].[Class]

[Dept].[Course]

[Dept].[Department]

[Dept].[Instructor]

[Dept].[Instructor_Department_Bridge]

[Dept].[ModeOfInstruction]

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [GroupNameProject3]
AUTHORIZATION [dbo]
GO

△ Location

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Location]
AUTHORIZATION [dbo]
GO

Used By

[Location].[BuildingLocation] [Location].[RoomLocation]

△ Process

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Process]
AUTHORIZATION [dbo]
GO

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlows]

♣ Project3

Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [Project3]
AUTHORIZATION [dbo]
GO
```

Used By

[Project3].[AddForeignKeysToSchemaData]

[Project3].[DropForeignKeysFromSchemaData]

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_DeptInstructorDepartmentBridge]

[Project3].[Load_Instructor]

[Project3].[Load_InstructorDepartmentBridge]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]

[Project3].[LoadQueensCourseSchedule]

[Project3].[LoadStarSchemaData]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateSchemaData]

. ♦ Udt

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Udt]
AUTHORIZATION [dbo]
GO

Used By

[Udt].[Building]

[Udt].[ClassTime]

[Udt].[CourseDay]

[Udt].[CourseDescription]

[Udt].[CourseName]

[Udt].[CourseTime]

[Udt].[DateAdded]

[Udt].[DeptName]

[Udt].[Description]

[Udt].[Enrolled]

[Udt].[FirstName]

[Udt].[FullName]

[Udt].[GroupName]

[Udt].[IndividualProject]

[Udt].[InsMode]

[Udt].[LastName]

[Udt].[Limit]

[Udt].[Name]

[Udt].[Number]

[Udt].[RoomNumber]

[Udt].[Row]

[Udt].[SurrogateKeyInt]

♣ Uploadfile

Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [Uploadfile]
AUTHORIZATION [dbo]
GO
```

Used By

[Upload file]. [Current Semester Course Offerings]



Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [Utils]
AUTHORIZATION [dbo]
GO
```

Used By

 $[Utils]. [uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint] \\$

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [YourLastName]
AUTHORIZATION [dbo]
GO