localhost, 13001 Documentation

QueensClassSchedule

Server localhost,13001

Author carlo

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Iocalhost,13001

Databases (1)

• ■ QueensClassSchedule

Server Properties

Property	Value			
Product	Microsoft SQL Server			
Version	15.0.4345.5			
Language	English			
Platform	NT x64			
Edition	Developer Edition (64-bit)			
Engine Edition	3 (Enterprise)			
Processors	20			
OS Version	6.2 (9200)			
Physical Memory	12720			
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/backup/		
Default log file path	/var/opt/mssql/log/		
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

Default fulltext language LCID 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 CLR enabled Blocked process threshold 0 Filestream access level Optimize for ad hoc workloads 100 2049 10 10 10 10 10 10 10 10 10 1				
Two-digit year cutoff 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 CLR enabled Blocked process threshold 0 Filestream access level Optimize for ad hoc workloads False False False False Optimize for ad hoc workloads	Network packet size	4096		
Remote login timeout 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 CLR enabled Blocked process threshold False Blocked process threshold False Optimize for ad hoc workloads False False False	Default fulltext language LCID	1033		
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	Two-digit year cutoff	2049		
Max text replication size 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 CLR enabled Blocked process threshold 0 Filestream access level Optimize for ad hoc workloads 65536 65536 65536 6 65536 0 65536 0 65536 0 65536 0 65536 0 65536 0 65536 6	Remote login timeout	10		
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	Cursor threshold	-1		
Max degree of parallelism Min server memory 16 Max server memory 2147483647 Scan for startup procs False Transform noise words False CLR enabled Blocked process threshold Filestream access level Optimize for ad hoc workloads O Table False False False False False False	Max text replication size	65536		
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	Parallelism cost threshold	5		
Max server memory 2147483647 Scan for startup procs False Transform noise words CLR enabled False Blocked process threshold Filestream access level Optimize for ad hoc workloads False 2147483647 False False False False False	Max degree of parallelism	0		
Scan for startup procs False Transform noise words False CLR enabled False Blocked process threshold 0 Filestream access level Optimize for ad hoc workloads False	Min server memory	16		
Transform noise words CLR enabled False Blocked process threshold Filestream access level Optimize for ad hoc workloads False False	Max server memory	2147483647		
CLR enabled False Blocked process threshold 0 Filestream access level False Optimize for ad hoc workloads False	Scan for startup procs	False		
Blocked process threshold 0 Filestream access level False Optimize for ad hoc workloads False	Transform noise words	False		
Filestream access level Optimize for ad hoc workloads False False	CLR enabled	False		
Optimize for ad hoc workloads False	Blocked process threshold	0		
	Filestream access level	False		
CLR strict security True	Optimize for ad hoc workloads	False		
	CLR strict security	True		

□ User databases

Databases (1)

• ■ QueensClassSchedule

☐ QueensClassSchedule Database

Database Properties

Property	Value		
SQL Server Version	SqlServer2019		
Compatibility Level	SQL Server 2016		
Last backup time	04/12/2021		
Last log backup time	-		
Creation date	May 16 2024		
Users	7		
Database Encryption Enabled	False		
Database Encryption Algorithm	None		
Database size	144.00 MB		
Unallocated space	2.18 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/log/QueensClassScheduleCurrent- Semester_0.ldf

■ Tables

Objects

Name
Academic.Class
Academic.Course
Academic.Department
Academic.Instructor
Administrative.ModeOfInstruction
DbSecurity.UserAuthorization
Facilities.BuildingLocation
Facilities.RoomLocation
Process.WorkflowSteps
Uploadfile.CurrentSemesterCourseOfferings

☐ [Academic].[Class]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4748
Created	1:25:14 PM Thursday, May 16, 2024
Last Modified	1:31:57 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	ClassId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
FK	Courseld	[Udt].[StandardINT]	4	NOT NULL	
	ClassCode	[Udt].[CodeType]	20	NOT NULL	
	Semester	[Udt].[StandardName]	200	NOT NULL	
	Section	[Udt].[CodeType]	20	NOT NULL	
FK	InstructorId	[Udt].[StandardINT]	4	NOT NULL	
FK	RoomLocationId	[Udt].[StandardINT]	4	NOT NULL	
FK	ModeOfInstructionId	[Udt].[StandardINT]	4	NOT NULL	
	Enrolled	[Udt].[StandardINT]	4	NOT NULL	
	MaxEnrollment	[Udt].[StandardINT]	4	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL	
	DateAdded	[Udt].[DateAdded]	8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PKClassCB1927C02279C4C2	ClassId	True

Foreign Keys

Name	Columns
FK_Class_Course	Courseld->[Academic].[Course].[Courseld]
FK_Class_Instructor	InstructorId->[Academic].[Instructor].[InstructorId]

FK_Class_ModeOfInstruction	ModeOfInstructionId->[Administrative].[ModeOfInstruction].[ModeOfInstructionId]
FK_Class_RoomLocation	RoomLocationId->[Facilities].[RoomLocation].[RoomLocationId]

SQL Script

```
CREATE TABLE [Academic].[Class]
[ClassId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[CourseId] [Udt].[StandardINT] NOT NULL,
[ClassCode] [Udt].[CodeType] NOT NULL,
[Semester] [Udt].[StandardName] NOT NULL,
[Section] [Udt].[CodeType] NOT NULL,
[InstructorId] [Udt].[StandardINT] NOT NULL,
[RoomLocationId] [Udt].[StandardINT] NOT NULL,
[ModeOfInstructionId] [Udt].[StandardINT] NOT NULL,
[Enrolled] [Udt].[StandardINT] NOT NULL,
[MaxEnrollment] [Udt].[StandardINT] NOT NULL,
[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,
[DateAdded] [Udt].[DateAdded] NOT NULL,
[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL
) ON [PRIMARY]
ALTER TABLE [Academic].[Class] ADD CONSTRAINT [PK__Class__CB1927C02279C4C2] PRIMARY KEY CLUSTERED
([ClassId]) ON [PRIMARY]
ALTER TABLE [Academic].[Class] ADD CONSTRAINT [FK Class Course] FOREIGN KEY ([CourseId])
REFERENCES [Academic].[Course] ([CourseId])
ALTER TABLE [Academic].[Class] ADD CONSTRAINT [FK Class Instructor] FOREIGN KEY ([InstructorId])
REFERENCES [Academic].[Instructor] ([InstructorId])
ALTER TABLE [Academic].[Class] ADD CONSTRAINT [FK Class ModeOfInstruction] FOREIGN KEY ([ModeOf-
InstructionId]) REFERENCES [Administrative].[ModeOfInstruction] ([ModeOfInstructionId])
ALTER TABLE [Academic].[Class] ADD CONSTRAINT [FK Class RoomLocation] FOREIGN KEY ([RoomLocation-
Id]) REFERENCES [Facilities].[RoomLocation] ([RoomLocationId])
```

Uses

[Academic].[Course]
[Academic].[Instructor]
[Administrative].[ModeOfInstruction]
[Facilities].[RoomLocation]
[Udt].[CodeType]
[Udt].[DateAdded]
[Udt].[DateOfLastUpdate]
[Udt].[StandardINT]
[Udt].[StandardName]
[Udt].[SurrogateKeyInt]

Project > localhost,13001 > User databases > QueensClass-Schedule > Tables > Academic.Class

Academic

Used By

[Project3].[Load_Class]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateStarSchemaData]

☐ [Academic].[Course]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1627
Created	1:25:14 PM Thursday, May 16, 2024
Last Modified	1:31:57 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	Courseld	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	CourseName	[Udt].[StandardName]	200	NOT NULL	
	Credits	[Udt].[Credits]	5	NOT NULL	
	CourseDescription	[Udt].[DescriptionText]	510	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL	
	DateAdded	[Udt].[DateAdded]	8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PKCourseC92D71A7F0A81962	Courseld	True

```
CREATE TABLE [Academic].[Course]

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

[CourseName] [Udt].[StandardName] NOT NULL,

[Credits] [Udt].[Credits] NOT NULL,

[CourseDescription] [Udt].[DescriptionText] NOT NULL,

[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,

[DateAdded] [Udt].[DateAdded] NOT NULL,

[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [Academic].[Course] ADD CONSTRAINT [PK_Course_C92D71A7F0A81962] PRIMARY KEY

CLUSTERED ([CourseId]) ON [PRIMARY]
```

GO

Uses

[Udt].[Credits]

[Udt].[DateAdded]

[Udt].[DateOfLastUpdate]

[Udt].[DescriptionText]

[Udt].[StandardINT]

[Udt].[StandardName]

[Udt].[SurrogateKeyInt]

Academic

Used By

[Academic].[Class]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateStarSchemaData]

[Academic].[Department]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	85
Created	1:25:14 PM Thursday, May 16, 2024
Last Modified	1:25:14 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PKP C	DepartmentId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1	
	DepartmentName	[Udt].[StandardName]	200	NOT NULL		
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL		
	DateAdded	[Udt].[DateAdded]	8	NOT NULL		(sysdatetime())
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL		(sysdatetime())

Indexes

Key	Name		Unique
PKP C	PKDepartmeB2079BEDF7C403BA	DepartmentId	True

```
CREATE TABLE [Academic].[Department]
(
[DepartmentId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[DepartmentName] [Udt].[StandardName] NOT NULL,
[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,
[DateAdded] [Udt].[DateAdded] NOT NULL CONSTRAINT [DF__Departmen__DateA__078C1F06] DEFAULT
(sysdatetime()),
[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF__Departmen__DateO__0880433F]
DEFAULT (sysdatetime())
) ON [PRIMARY]
GO
ALTER TABLE [Academic].[Department] ADD CONSTRAINT [PK__Departme__B2079BEDF7C403BA] PRIMARY KEY
CLUSTERED ([DepartmentId]) ON [PRIMARY]
GO
```

Uses

[Udt].[DateAdded] [Udt].[DateOfLastUpdate] [Udt].[StandardINT] [Udt].[StandardName] [Udt].[SurrogateKeyInt] Academic

Used By

[dbo].[InstructorDepartmentTeaching]
[Project3].[Load_Course]
[Project3].[Load_Department]
[Project3].[Load_Instructor]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateStarSchemaData]

[Academic].[Instructor]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1597
Created	1:25:14 PM Thursday, May 16, 2024
Last Modified	1:31:57 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Persisted	Computed	Max Length (Bytes)	Nullability	Identity
PK	InstructorId	[Udt].[SurrogateKeyInt]			4	NOT NULL	1 - 1
	LastName	[Udt].[LastName]			70	NOT NULL	
	FirstName	[Udt].[FirstName]			40	NOT NULL	
	FullName	nvarchar(57)	True	True	114	NOT NULL	
	DepartmentsTaught	[Udt].[StandardINT]			4	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]			4	NOT NULL	
	DateAdded	[Udt].[DateAdded]			8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]			8	NOT NULL	

Computed columns

Name	Column definition	
FullName	(concat([LastName],', ',[FirstName]))	

Indexes

Key	Name	Key Columns	Unique
PK C	PKInstruct9D010A9B9AB1D763	InstructorId	True

SQL Script

```
CREATE TABLE [Academic].[Instructor]

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

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

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

[FullName] AS (concat([LastName],', ',[FirstName])) PERSISTED NOT NULL,

[DepartmentsTaught] [Udt].[StandardINT] NOT NULL,

[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,

[DateAdded] [Udt].[DateAdded] NOT NULL,

[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [Academic].[Instructor] ADD CONSTRAINT [PK_Instruct_9D010A9B9AB1D763] PRIMARY KEY

CLUSTERED ([InstructorId]) ON [PRIMARY]

GO
```

Uses

[Udt].[DateAdded] [Udt].[DateOfLastUpdate] [Udt].[FirstName] [Udt].[LastName] [Udt].[StandardINT] [Udt].[SurrogateKeyInt] Academic

Used By

[Academic].[Class]
[Project3].[Load_Class]
[Project3].[Load_Instructor]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateStarSchemaData]

[Administrative].[ModeOfInstruction]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4
Created	1:24:58 PM Thursday, May 16, 2024
Last Modified	1:31:57 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	ModeOfInstructionId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	InstructionType	[Udt].[StandardName]	200	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL	
	DateAdded	[Udt].[DateAdded]	8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK C	PKModeOfInAAEA555340726A36	ModeOfInstructionId	True

```
CREATE TABLE [Administrative].[ModeOfInstruction]
[ModeOfInstructionId] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[InstructionType] [Udt].[StandardName] NOT NULL,
[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,
[DateAdded] [Udt].[DateAdded] NOT NULL,
[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL
) ON [PRIMARY]
ALTER TABLE [Administrative].[ModeOfInstruction] ADD CONSTRAINT [PK ModeOfIn AAEA555340726A36]
PRIMARY KEY CLUSTERED ([ModeOfInstructionId]) ON [PRIMARY]
```

Uses

[Udt].[DateAdded] [Udt].[DateOfLastUpdate] [Udt].[StandardINT] [Udt].[StandardName] [Udt].[SurrogateKeyInt] Administrative

Used By

[Academic].[Class] [Project3].[Load_Class] [Project3].[Load_ModeOfInstruction] [Project3].[ShowTableStatusRowCount] [Project3].[TruncateStarSchemaData]

[DbSecurity].[UserAuthorization]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	10
Created	1:24:58 PM Thursday, May 16, 2024
Last Modified	1:24:58 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PK C	UserAuthorizationKey	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1	
	ClassTime	[Udt].[ClassTime]	5	NULL allowed		('09:15')
	IndividualProject	[Udt].[IndividualProject]	120	NULL allowed		('PROJECT 3')
	GroupMemberLastName	[Udt].[LastName]	70	NOT NULL		
	GroupMemberFirstName	[Udt].[FirstName]	40	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_0FEC36CBB7BF9D9A	UserAuthorizationKey	True

```
CREATE TABLE [DbSecurity].[UserAuthorization]
[UserAuthorizationKey] [Udt].[SurrogateKeyInt] NOT NULL IDENTITY(1, 1),
[ClassTime] [Udt].[ClassTime] NULL CONSTRAINT [DF UserAutho Class 7C1A6C5A] DEFAULT ('09:15'),
[IndividualProject] [Udt].[IndividualProject] NULL CONSTRAINT [DF_UserAutho_Indiv_7D0E9093]
DEFAULT ('PROJECT 3'),
[GroupMemberLastName] [Udt].[LastName] NOT NULL,
[GroupMemberFirstName] [Udt].[FirstName] NOT NULL,
[GroupName] [Udt].[GroupName] NOT NULL CONSTRAINT [DF_UserAutho_Group_7E02B4CC] DEFAULT
('Group 4'),
[DateAdded] [Udt].[DateAdded] NULL CONSTRAINT [DF_UserAutho_DateA_7EF6D905] DEFAULT
```

```
(sysdatetime())
) ON [PRIMARY]

GO
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [PK_UserAuth_OFEC36CBB7BF9D9A]
PRIMARY KEY CLUSTERED ([UserAuthorizationKey]) ON [PRIMARY]

GO
```

Uses

[Udt].[ClassTime] [Udt].[DateAdded] [Udt].[FirstName] [Udt].[GroupName] [Udt].[IndividualProject] [Udt].[LastName] [Udt].[SurrogateKeyInt] DbSecurity

☐ [Facilities].[BuildingLocation]

Properties

Property	Value	
Collation	SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	23	
Created	1:24:58 PM Thursday, May 16, 2024	
Last Modified	1:31:57 PM Thursday, May 16, 2024	

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	BuildingId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
	BuildingName	[Udt].[StandardName]	200	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL	
	DateAdded	[Udt].[DateAdded]	8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Building_5463CDC498968B62	BuildingId	True

```
CREATE TABLE [Facilities].[BuildingLocation]

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

[BuildingName] [Udt].[StandardName] NOT NULL,

[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,

[DateAdded] [Udt].[DateAdded] NOT NULL,

[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [Facilities].[BuildingLocation] ADD CONSTRAINT [PK_Building_5463CDC498968B62]

PRIMARY KEY CLUSTERED ([BuildingId]) ON [PRIMARY]

GO
```

Project > localhost,13001 > User databases > QueensClass-Schedule > Tables > Facilities.BuildingLocation

Uses

[Udt].[DateAdded] [Udt].[DateOfLastUpdate] [Udt].[StandardINT] [Udt].[StandardName] [Udt].[SurrogateKeyInt] Facilities

Used By

[Facilities].[RoomLocation]
[Project3].[Load_BuildingLocation]
[Project3].[Load_RoomLocation]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateStarSchemaData]

☐ [Facilities].[RoomLocation]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	318
Created	1:24:58 PM Thursday, May 16, 2024
Last Modified	1:31:57 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	RoomLocationId	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1
FK	BuildingId	[Udt].[StandardINT]	4	NOT NULL	
	RoomNumber	[Udt].[CodeType]	20	NOT NULL	
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL	
	DateAdded	[Udt].[DateAdded]	8	NOT NULL	
	DateOfLastUpdate	[Udt].[DateOfLastUpdate]	8	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK C	PK_RoomLoca_874C559985BACEF1	RoomLocationId	True

Foreign Keys

Name	Columns
FK_RoomLocation_BuildingId	BuildingId->[Facilities].[BuildingLocation].[BuildingId]

```
CREATE TABLE [Facilities].[RoomLocation]

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

[BuildingId] [Udt].[StandardINT] NOT NULL,

[RoomNumber] [Udt].[CodeType] NOT NULL,

[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL,

[DateAdded] [Udt].[DateAdded] NOT NULL,
```

```
[DateOfLastUpdate] [Udt].[DateOfLastUpdate] NOT NULL
) ON [PRIMARY]
ALTER TABLE [Facilities].[RoomLocation] ADD CONSTRAINT [PK RoomLoca 874C559985BACEF1] PRIMARY
KEY CLUSTERED ([RoomLocationId]) ON [PRIMARY]
ALTER TABLE [Facilities].[RoomLocation] ADD CONSTRAINT [FK RoomLocation BuildingId] FOREIGN KEY
([BuildingId]) REFERENCES [Facilities].[BuildingLocation] ([BuildingId])
```

Uses

[Facilities].[BuildingLocation] [Udt].[CodeType]

[Udt].[DateAdded]

[Udt].[DateOfLastUpdate]

[Udt].[StandardINT]

[Udt].[SurrogateKeyInt]

Facilities

Used By

[Academic].[Class]

[Project3].[Load_Class]

[Project3].[Load_RoomLocation]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateStarSchemaData]

[Process].[WorkflowSteps]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	13
Created	1:24:58 PM Thursday, May 16, 2024
Last Modified	1:24:58 PM Thursday, May 16, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PK# C	WorkFlowStepKey	[Udt].[SurrogateKeyInt]	4	NOT NULL	1 - 1	
	WorkFlowStepDescription	[Udt].[DescriptionText]	510	NOT NULL		
	WorkFlowStepTableRowCount	[Udt].[StandardINT]	4	NOT NULL		((0))
	StartingDateTime	[Udt].[DateAdded]	8	NOT NULL		(sysdatetime())
	EndingDateTime	[Udt].[DateOfLastUpdate]	8	NOT NULL		(sysdatetime())
	ClassTime	[Udt].[ClassTime]	5	NOT NULL		('09:15')
	UserAuthorizationKey	[Udt].[StandardINT]	4	NOT NULL		

Indexes

Key	Name	Key Columns	Unique
PKP C	PKWorkflow27726CBFFC7C67A4	WorkFlowStepKey	True

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

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

[WorkFlowStepDescription] [Udt].[DescriptionText] NOT NULL,

[WorkFlowStepTableRowCount] [Udt].[StandardINT] NOT NULL CONSTRAINT [DF_WorkflowS_Work-F_01D345B0] DEFAULT ((0)),

[StartingDateTime] [Udt].[DateAdded] NOT NULL CONSTRAINT [DF_WorkflowS_Start_02C769E9] DEFAULT
```

```
(sysdatetime()),
[EndingDateTime] [Udt].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF__WorkflowS__Endin__03BB8E22]
DEFAULT (sysdatetime()),
[ClassTime] [Udt].[ClassTime] NOT NULL CONSTRAINT [DF__WorkflowS__Class__04AFB25B] DEFAULT
('09:15'),
[UserAuthorizationKey] [Udt].[StandardINT] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Process].[WorkflowSteps] ADD CONSTRAINT [PK__Workflow__27726CBFFC7C67A4] PRIMARY KEY
CLUSTERED ([WorkFlowStepKey]) ON [PRIMARY]
GO
```

Uses

[Udt].[ClassTime]

[Udt].[DateAdded]

[Udt].[DateOfLastUpdate]

[Udt].[DescriptionText]

[Udt].[StandardINT]

[Udt].[SurrogateKeyInt]

Process

Used By

[Process].[usp_TrackWorkFlows]

[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,
```

```
[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
```

Uses

Uploadfile

Used By

[dbo].[InstructorDepartmentTeaching]

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_Instructor]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]



Objects

Name

dbo. Instructor Department Teaching

 $Utils.uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint$

[dbo].[InstructorDepartmentTeaching]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	1:28:46 AM Friday, May 17, 2024
Last Modified	1:28:46 AM Friday, May 17, 2024

Columns

Name	Data Type	Max Length (Bytes)
LastName	varchar(50)	50
FirstName	varchar(50)	50
InstructorFullName	varchar(101)	101
DepartmentId	[Udt].[SurrogateKeyInt]	4
DepartmentName	[Udt].[StandardName]	200

```
CREATE VIEW [dbo].[InstructorDepartmentTeaching] AS
   SELECT DISTINCT
        SUBSTRING(Old.Instructor, 1, CHARINDEX(',', Old.Instructor) - 1) AS LastName,
        LTRIM(SUBSTRING(Old.Instructor, CHARINDEX(',',', Old.Instructor) + 1, LEN(Old.Instructor)))
AS FirstName,
        CONCAT (
            SUBSTRING(Old.Instructor, 1, CHARINDEX(',', Old.Instructor) - 1),
            LTRIM(SUBSTRING(Old.Instructor, CHARINDEX(',', Old.Instructor) + 1,
LEN(Old.Instructor)))
       ) AS InstructorFullName,
        AD.DepartmentId AS DepartmentId,
       AD.DepartmentName AS DepartmentName
        [{\tt Uploadfile}] \verb|.[CurrentSemesterCourseOfferings]| \verb|AS| Old| \\
    INNER JOIN
        [Academic].[Department] AD
        ON LEFT(Old.[Course (hr, crd)], CHARINDEX(' ', Old.[Course (hr, crd)]) - 1) =
AD.DepartmentName
   WHERE
        CHARINDEX(',', Old.Instructor) > 0;
```

GO

Uses

[Academic].[Department]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Udt].[StandardName]
[Udt].[SurrogateKeyInt]

[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.AddForeignKeysToStarSchemaData
Project3.DropForeignKeysFromStarSchemaData
Project3.Load_BuildingLocation
Project3.Load_Class
Project3.Load_Course
Project3.Load_Department
Project3.Load_Instructor
Project3.Load_ModeOfInstruction
Project3.Load_RoomLocation
Project3.LoadQueensCourseSchedule
Project3.ShowTableStatusRowCount
Project3.TruncateStarSchemaData

[Process].[usp_TrackWorkFlows]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StartTime	datetime2	8
@WorkFlowDescription	nvarchar(100)	200
@WorkFlowStepTableRowCount	int	4
@UserAuthorizationKey	int	4

```
-- Author: Ileana Aguilar
-- Create date: May 11, 2024
-- Description: Inserts workflow step details into the [Process].[WorkflowSteps] table,
-- including description, row count, start and end time, user authorization key, and then prints
a confirmation message.
-- -----
CREATE PROCEDURE [Process].[usp_TrackWorkFlows]
   @StartTime DATETIME2,
   @WorkFlowDescription NVARCHAR(100),
   @WorkFlowStepTableRowCount INT,
   @UserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   INSERT INTO [Process].[WorkflowSteps]
       WorkFlowStepDescription,
       WorkFlowStepTableRowCount,
       StartingDateTime,
       UserAuthorizationKey
   VALUES
       @WorkFlowDescription,
```

```
@WorkFlowStepTableRowCount,
    @StartTime,
    @UserAuthorizationKey
);

PRINT 'Workflow step details inserted successfully.';
END;
GO
```

[Process].[WorkflowSteps]

Process

Used By

[Project3].[AddForeignKeysToStarSchemaData]

[Project3].[DropForeignKeysFromStarSchemaData]

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_Instructor]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]

[Project3].[LoadQueensCourseSchedule]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateStarSchemaData]

[Project3].[AddForeignKeysToStarSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Arrafi Talukder
-- Create Date: May 13, 2024
-- Description: Add foreign keys to star schema tables in Project3
-- -----
CREATE PROCEDURE [Project3].[AddForeignKeysToStarSchemaData]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   EXEC [Process].[usp TrackWorkFlows]
       @StartTime = @CurrentTime,
       @WorkFlowDescription = 'Add foreign keys to star schema tables in Project3',
       @WorkFlowStepTableRowCount = 0,
       @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
   -- Foreign key between Class and Course
   ALTER TABLE [Academic].[Class] WITH CHECK ADD CONSTRAINT [FK_Class_Course] FOREIGN KEY
([CourseId]) REFERENCES [Academic].[Course] ([CourseId]);
   ALTER TABLE [Academic].[Class] CHECK CONSTRAINT [FK_Class_Course];
   -- Foreign key between Class and Instructor
   ALTER TABLE [Academic].[Class] WITH CHECK ADD CONSTRAINT [FK Class Instructor] FOREIGN KEY
([InstructorId]) REFERENCES [Academic].[Instructor] ([InstructorId]);
   ALTER TABLE [Academic].[Class] CHECK CONSTRAINT [FK Class Instructor];
```

```
-- Foreign key between Class and RoomLocation
   ALTER TABLE [Academic].[Class] WITH CHECK ADD CONSTRAINT [FK Class RoomLocation] FOREIGN KEY
([RoomLocationId]) REFERENCES [Facilities].[RoomLocation] ([RoomLocationId]);
   ALTER TABLE [Academic].[Class] CHECK CONSTRAINT [FK Class RoomLocation];
   -- Foreign key between Class and ModeOfInstruction
   ALTER TABLE [Academic].[Class] WITH CHECK ADD CONSTRAINT [FK Class ModeOfInstruction] FOREIGN
KEY ([ModeOfInstructionId]) REFERENCES [Administrative].[ModeOfInstruction] ([ModeOfInstruction-
Id]);
   ALTER TABLE [Academic].[Class] CHECK CONSTRAINT [FK Class ModeOfInstruction];
   -- Foreign key between RoomLocation and Department
   ALTER TABLE [Facilities].[RoomLocation] WITH CHECK ADD CONSTRAINT [FK RoomLocation Building-
Id] FOREIGN KEY ([BuildingId]) REFERENCES [Facilities].[BuildingLocation] ([BuildingId]);
   ALTER TABLE [Facilities].[RoomLocation] CHECK CONSTRAINT [FK RoomLocation BuildingId];
   PRINT 'Foreign key constraints added successfully.'
END;
GO
```

[Process].[usp_TrackWorkFlows] Project3

Used By

[Project3].[DropForeignKeysFromStarSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Ileana Aquilar
-- Create date: May 11, 2024
-- Description: Drops all foreign keys from star schema tables in Project3
-- -----
CREATE PROCEDURE [Project3].[DropForeignKeysFromStarSchemaData]
@GroupMemberUserAuthorizationKey INT
BEGIN
   SET NOCOUNT ON;
   BEGIN TRY
    DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   EXEC [Process].[usp_TrackWorkFlows]
       @StartTime = @CurrentTime,
       @WorkFlowDescription = 'Drops all foreign keys from star schema tables in Project3',
       @WorkFlowStepTableRowCount = 0,
       @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
       DECLARE @sql NVARCHAR(MAX) = N'';
       -- Collect commands to drop FKs from Academic schema
       SELECT @sql += 'ALTER TABLE ' + QUOTENAME (OBJECT SCHEMA NAME (parent object id))
              + '.' + QUOTENAME (OBJECT NAME (parent object id))
              + ' DROP CONSTRAINT ' + QUOTENAME(name) + '; '
       FROM sys.foreign keys
       WHERE referenced object id IN (SELECT object id FROM sys.objects WHERE schema id =
SCHEMA ID('Academic'));
```

```
-- Collect commands to drop FKs from Facilities schema
        SELECT @sql += 'ALTER TABLE ' + QUOTENAME (OBJECT SCHEMA NAME (parent object id))
                + '.' + QUOTENAME (OBJECT_NAME (parent_object_id))
                + ' DROP CONSTRAINT ' + QUOTENAME (name) + ';
        FROM sys.foreign keys
       WHERE referenced object id IN (SELECT object id FROM sys.objects WHERE schema id =
SCHEMA_ID('Facilities'));
        -- Collect commands to drop FKs from Administrative schema
       SELECT @sql += 'ALTER TABLE ' + QUOTENAME(OBJECT SCHEMA NAME(parent object id))
               + '.' + QUOTENAME (OBJECT NAME (parent object id))
               + ' DROP CONSTRAINT ' + QUOTENAME(name) + '; '
        FROM sys.foreign keys
       WHERE referenced object id IN (SELECT object id FROM sys.objects WHERE schema id =
SCHEMA_ID('Administrative'));
       -- Execute the SQL statements collected
       EXEC sp executesql @sql;
       PRINT 'Foreign key constraints dropped successfully.'
   END TRY
   BEGIN CATCH
       PRINT 'An error occurred: ' + ERROR MESSAGE();
   END CATCH
END;
GO
```

[Process].[usp_TrackWorkFlows] Project3

Used By

[Project3].[Load_BuildingLocation]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Arrafi Talukder
-- Create date: May 14, 2024
-- Description: Inserts data into the Facilities.BuildingLocation table.
-- -----
CREATE PROCEDURE [Project3].[Load BuildingLocation]
   @GroupMemberUserAuthorizationKey INT
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO [Facilities].[BuildingLocation]
       (BuildingName, UserAuthorizationKey, DateAdded, DateOfLastUpdate)
   SELECT DISTINCT
       LEFT(Old.[Location], CHARINDEX(' ', Old.[Location]) - 1) AS BuildingName,
       @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
       @CurrentTime AS DateAdded,
       @CurrentTime AS DateOfLastUpdate
       [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
   WHERE
       CHARINDEX(' ', Old.[Location]) > 0;
   SELECT @RowCount = COUNT(*) FROM [Facilities].[BuildingLocation];
```

Project > localhost,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Load_-BuildingLocation

```
EXEC [Process].[usp_TrackWorkFlows]
    @StartTime = @CurrentTime,
    @WorkFlowDescription = 'Inserts data into the Facilities.BuildingLocation table.',
    @WorkFlowStepTableRowCount = @RowCount,
    @UserAuthorizationKey = @GroupMemberUserAuthorizationKey

PRINT 'Building location data load complete.'
END
GO
```

Uses

[Facilities].[BuildingLocation]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_Class]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Ileana Aquilar
-- Create date: May 12, 2024
-- Description: Inserts data into the Academic.Class table.
-- -----
CREATE PROCEDURE [Project3].[Load Class]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO Academic.Class
       (CourseId, ClassCode, Semester, Section, InstructorId, RoomLocationId, ModeOfInstruction-
Id, Enrolled, MaxEnrollment, UserAuthorizationKey, DateAdded, DateOfLastUpdate)
   SELECT DISTINCT
      AC.CourseId,
      Old.[Code] AS ClassCode,
       Old.Semester,
       Old.Sec,
      AI.InstructorId,
       RL.RoomLocationId,
       MOI.ModeOfInstructionId,
       Old.Enrolled,
       Old.[Limit],
       @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
       @CurrentTime AS DateAdded,
       @CurrentTime AS DateOfLastUpdate
```

```
FROM
        [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
        Academic.Course AC ON AC.CourseName = LEFT(Old.[Course (hr, crd)], CHARINDEX('(',
Old.[Course (hr, crd)]) - 1)
    INNER JOIN
       Academic.Instructor AI ON AI.FullName = Old.Instructor
    INNER JOIN
       Facilities.RoomLocation RL ON RL.RoomNumber = SUBSTRING(Old.Location, PATINDEX('%[0-9]%',
Old.Location), LEN(Old.Location))
    INNER JOIN
        Administrative.ModeOfInstruction MOI ON MOI.InstructionType = Old.[Mode of Instruction]
    SELECT @RowCount = COUNT(*) FROM Academic.Class;
   EXEC [Process].[usp_TrackWorkFlows]
        @StartTime = @CurrentTime,
        @WorkFlowDescription = 'Inserts data into the Academic.Class table.',
        @WorkFlowStepTableRowCount = @RowCount,
        @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
   PRINT 'Class data load complete.'
END
GO
```

[Academic].[Class]
[Academic].[Course]
[Academic].[Instructor]
[Administrative].[ModeOfInstruction]
[Facilities].[RoomLocation]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_Course]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- ------
-- Author: Carlo Ace Sagad
-- Create date: 05/12/2024
-- Description: Inserts data into the Academic.Course table.
-- -----
CREATE PROCEDURE [Project3].[Load_Course]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
      DECLARE @RowCount INT;
   INSERT INTO Academic.Course
       (CourseName, Credits, CourseDescription, UserAuthorizationKey, DateAdded, DateOfLast-
Update)
   SELECT DISTINCT
       LEFT(Old.[Course (hr, crd)], CHARINDEX('(', Old.[Course (hr, crd)]) - 1) AS CourseName,
       CASE
          WHEN TRY CAST (SUBSTRING (Old. [Course (hr, crd)], CHARINDEX ('(', Old. [Course (hr,
crd)]) + 1, CHARINDEX(',',', Old.[Course (hr, crd)]) - CHARINDEX('(', Old.[Course (hr, crd)]) - 1)
AS DECIMAL(3,1)) IS NOT NULL
           THEN TRY_CAST(SUBSTRING(Old.[Course (hr, crd)], CHARINDEX('(', Old.[Course (hr,
crd)]) + 1, CHARINDEX(',',', Old.[Course (hr, crd)]) - CHARINDEX('(', Old.[Course (hr, crd)]) - 1)
AS DECIMAL(3,1))
           ELSE 0.0
       END AS Credits,
       Old.[Description] AS CourseDescription,
```

```
@GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
        @CurrentTime AS DateAdded,
        @CurrentTime AS DateOfLastUpdate
    FROM
        [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
    WHERE
        CHARINDEX('(', Old.[Course (hr, crd)]) > 0 AND
        CHARINDEX(',', Old.[Course (hr, crd)]) > 0;
    SELECT @RowCount = COUNT(*) FROM [Academic].[Department];
   EXEC [Process].[usp TrackWorkFlows]
        @StartTime = @CurrentTime,
        @WorkFlowDescription = 'Inserts data into the Academic.Course table.',
        @WorkFlowStepTableRowCount = @RowCount,
        @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
    PRINT 'Course data load complete.'
END
GO
```

[Academic].[Course]
[Academic].[Department]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_Department]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ileana Aguilar
-- Create date: May 11, 2024
-- Description: Inserts data into the Academic.Department table and updates workflow step with
CREATE PROCEDURE [Project3].[Load_Department]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO [Academic].[Department]
       (DepartmentName, UserAuthorizationKey, DateAdded, DateOfLastUpdate)
   SELECT DISTINCT
       LEFT(Old.[Course (hr, crd)], CHARINDEX(' ', Old.[Course (hr, crd)]) - 1) AS Department-
Name,
        @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
        @CurrentTime AS DateAdded,
        @CurrentTime AS DateOfLastUpdate
    FROM
        [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
    WHERE
        CHARINDEX(' ', Old.[Course (hr, crd)]) > 0;
```

Project > localhost,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Load_-Department

```
SELECT @RowCount = COUNT(*) FROM [Academic].[Department];

EXEC [Process].[usp_TrackWorkFlows]
    @StartTime = @CurrentTime,
    @WorkFlowDescription = 'Inserts data into the Academic.Department table.',
    @WorkFlowStepTableRowCount = @RowCount,
    @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;

PRINT 'Department data load complete.';
END
GO
```

Uses

[Academic].[Department]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_Instructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- ------
-- Author: Ileana Aquilar
-- Create date: May 12, 2024
-- Description: Inserts data into the Academic.Instructor table.
CREATE PROCEDURE [Project3].[Load_Instructor]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO Academic.Instructor
       (LastName, FirstName, DepartmentsTaught, UserAuthorizationKey, DateAdded, DateOfLast-
Update)
   SELECT DISTINCT
       SUBSTRING(Old.Instructor, 1, CHARINDEX(',', Old.Instructor) - 1) AS LastName,
       LTRIM(SUBSTRING(Old.Instructor, CHARINDEX(',', Old.Instructor) + 1, LEN(Old.Instructor)))
AS FirstName,
       COUNT (DISTINCT AD. DepartmentId) AS DepartmentsTaught,
       @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
       @CurrentTime AS DateAdded,
       @CurrentTime AS DateOfLastUpdate
   FROM
       [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
   INNER JOIN
       [Academic].[Department] AD ON LEFT(Old.[Course (hr, crd)], CHARINDEX(' ', Old.[Course
(hr, crd)]) - 1) = AD.DepartmentName
```

Project > localhost,13001 > User databases > QueensClass-Schedule > Programmability > Stored Procedures > Project3.Load_-Instructor

Uses

[Academic].[Department]
[Academic].[Instructor]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_ModeOfInstruction]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Carlo Ace Sagad
-- Create date: 05/12/2024
-- Description: Inserts data into the Administrative.ModeOfInstruction table.
-- -----
CREATE PROCEDURE [Project3].[Load_ModeOfInstruction]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO Administrative.ModeOfInstruction
       (InstructionType, UserAuthorizationKey, DateAdded, DateOfLastUpdate)
SELECT DISTINCT
      Old.[Mode of Instruction] AS InstructionType,
       @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
       @CurrentTime AS DateAdded,
       @CurrentTime AS DateOfLastUpdate
   FROM
       [Uploadfile].[CurrentSemesterCourseOfferings] AS Old;
   SELECT @RowCount = COUNT(*) FROM Administrative.ModeOfInstruction
   EXEC [Process].[usp_TrackWorkFlows]
```

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

```
@StartTime = @CurrentTime,
    @WorkFlowDescription = 'Inserts data into the Administrative.ModeOfInstruction table.',
    @WorkFlowStepTableRowCount = @RowCount,
    @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;

PRINT 'Mode of instruction data load complete.'
END
GO
```

Uses

[Administrative].[ModeOfInstruction]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[Load_RoomLocation]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Taruna Mangar
-- Create date: May 12, 2024
-- Description: Inserts data into the Facilities.RoomLocation table.
-- -----
CREATE PROCEDURE [Project3].[Load_RoomLocation]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   DECLARE @RowCount INT;
   INSERT INTO Facilities.RoomLocation
      (BuildingId, RoomNumber, UserAuthorizationKey, DateAdded, DateOfLastUpdate)
   SELECT DISTINCT
       BL.BuildingId AS BuildingId,
       RIGHT (Old.Location, LEN (Old.Location) - CHARINDEX(' ', Old.Location)) AS RoomNumber,
       @GroupMemberUserAuthorizationKey AS UserAuthorizationKey,
       @CurrentTime AS DateAdded,
       @CurrentTime AS DateOfLastUpdate
   FROM
       [Uploadfile].[CurrentSemesterCourseOfferings] AS Old
       Facilities.BuildingLocation BL ON BL.BuildingName = LEFT(Old.Location, CHARINDEX(' ',
Old.Location) - 1)
   WHERE
       CHARINDEX(' ', Old.Location) > 0;
```

```
SELECT @RowCount = COUNT(*) FROM Facilities.RoomLocation;

EXEC [Process].[usp_TrackWorkFlows]
    @StartTime = @CurrentTime,
    @WorkFlowDescription = 'Inserts data into the Facilities.RoomLocation table.',
    @WorkFlowStepTableRowCount = @RowCount,
    @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;

PRINT 'Room location data load complete.'
END
GO
```

[Facilities].[BuildingLocation]
[Facilities].[RoomLocation]
[Uploadfile].[CurrentSemesterCourseOfferings]
[Process].[usp_TrackWorkFlows]
Project3

Used By

[Project3].[LoadQueensCourseSchedule]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Taruna Mangar
-- Create date: May 14, 2024
-- Description: Inserts data into the Project3 star schema
-- -----
CREATE PROCEDURE [Project3].[LoadQueensCourseSchedule]
   @GroupMemberUserAuthorizationKey INT
AS
BEGIN
  SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   EXEC [Process].[usp_TrackWorkFlows]
       @StartTime = @CurrentTime,
       @WorkFlowDescription = 'Inserts data into the Project3 star schema',
       @WorkFlowStepTableRowCount = 0,
       @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
   EXEC [Project3].[DropForeignKeysFromStarSchemaData] @GroupMemberUserAuthorizationKey = 1;
   EXEC [Project3].[ShowTableStatusRowCount]
       @GroupMemberUserAuthorizationKey = 5,
       @TableStatus = N'Pre-truncate of tables';
   EXEC [Project3].[TruncateStarSchemaData] @GroupMemberUserAuthorizationKey = 4;
```

```
EXEC [Project3].[Load_Department] @GroupMemberUserAuthorizationKey = 1;
EXEC [Project3].[Load_BuildingLocation] @GroupMemberUserAuthorizationKey = 4;
EXEC [Project3].[Load_ModeOfInstruction] @GroupMemberUserAuthorizationKey = 3;
EXEC [Project3].[Load_Course] @GroupMemberUserAuthorizationKey = 3;
EXEC [Project3].[Load_RoomLocation] @GroupMemberUserAuthorizationKey = 2;
EXEC [Project3].[Load_Instructor] @GroupMemberUserAuthorizationKey = 1;
EXEC [Project3].[Load_Class] @GroupMemberUserAuthorizationKey = 1;

EXEC [Project3].[AddForeignKeysToStarSchemaData] @GroupMemberUserAuthorizationKey = 4;

EXEC [Project3].[ShowTableStatusRowCount]
    @GroupMemberUserAuthorizationKey = 5,
    @TableStatus = N'Row Count after loading the star schema';

END;
GO

END;
```

```
[Process].[usp_TrackWorkFlows]
[Project3].[AddForeignKeysToStarSchemaData]
[Project3].[DropForeignKeysFromStarSchemaData]
[Project3].[Load_BuildingLocation]
[Project3].[Load_Class]
[Project3].[Load_Course]
[Project3].[Load_Department]
[Project3].[Load_Instructor]
[Project3].[Load_ModeOfInstruction]
[Project3].[Load_RoomLocation]
[Project3].[ShowTableStatusRowCount]
[Project3].[TruncateStarSchemaData]
Project3
```

[Project3].[ShowTableStatusRowCount]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Bin Xie
-- Create Date: May 13, 2024
-- Description: Shows the status and row count of each table in Project3
-- -----
CREATE PROCEDURE [Project3].[ShowTableStatusRowCount]
    @GroupMemberUserAuthorizationKey INT,
    @TableStatus VARCHAR(64)
AS
BEGIN
   SET NOCOUNT ON;
    DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
    EXEC [Process].[usp_TrackWorkFlows]
        @StartTime = @CurrentTime,
        @WorkFlowDescription = 'Shows the status and row count of each table in Project3',
         @WorkFlowStepTableRowCount = 0,
         @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
    -- Fetch and display row counts from Academic schema tables
    SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Academic.Department', COUNT(*) FROM [Academic].[Department];
SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Academic.Course', COUNT(*) FROM [Academic].[Course];
    {\tt SELECT} \  \, {\tt UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,}
TableName = 'Academic.Instructor', COUNT(*) FROM [Academic].[Instructor];
SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Academic.Class', COUNT(*) FROM [Academic].[Class];
```

```
-- Fetch and display row counts from Facilities schema tables

SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Facilities.BuildingLocation', COUNT(*) FROM [Facilities].[BuildingLocation];

SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Facilities.RoomLocation', COUNT(*) FROM [Facilities].[RoomLocation];

-- Fetch and display row counts from Administrative schema tables

SELECT UserAuthorizationKey = @GroupMemberUserAuthorizationKey, TableStatus = @TableStatus,
TableName = 'Administrative.ModeOfInstruction', COUNT(*) FROM [Administrative].[ModeOf-Instruction];

PRINT 'Each row of each table has been successfully counted.'

END;
GO
```

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[usp_TrackWorkFlows]

Project3

Used By

[Project3].[TruncateStarSchemaData]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- -----
-- Author: Arrafi Talukder
-- Create Date: May 13, 2024
-- Description: Truncates each table in Project3 schema.
-- -----
CREATE PROCEDURE [Project3].[TruncateStarSchemaData]
@GroupMemberUserAuthorizationKey INT
BEGIN
   SET NOCOUNT ON;
   DECLARE @CurrentTime DATETIME2 = SYSDATETIME();
   EXEC [Process].[usp TrackWorkFlows]
       @StartTime = @CurrentTime,
       @WorkFlowDescription = 'Truncates each table in Project3 schema.',
       @WorkFlowStepTableRowCount = 0,
       @UserAuthorizationKey = @GroupMemberUserAuthorizationKey;
   TRUNCATE TABLE [Academic].[Department];
   TRUNCATE TABLE [Academic].[Course];
   TRUNCATE TABLE [Academic].[Instructor];
   TRUNCATE TABLE [Academic].[Class];
   TRUNCATE TABLE [Facilities].[BuildingLocation];
   TRUNCATE TABLE [Facilities].[RoomLocation];
```

```
TRUNCATE TABLE [Administrative].[ModeOfInstruction];

PRINT 'All tables in Project3 schema have been truncated successfully.'
END;
GO
```

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[usp_TrackWorkFlows]

Project3

Used By

■ 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

```
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
                  int
         , @iiMax
         , @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.ClassTime
Udt.CodeType
Udt.Credits
Udt.DateAdded
Udt.DateOfLastUpdate
Udt.DescriptionText
Udt.FirstName
Udt.GroupName
Udt.IndividualProject
Udt.LastName
Udt.PrimaryKeyInt
Udt.StandardINT
Udt.StandardName
Udt.SurrogateKeyInt

[Udt].[ClassTime]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	char
Length	5

SQL Script

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

Uses

Udt

Used By

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

[Udt].[CodeType]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	varchar
Length	20

SQL Script

CREATE TYPE [Udt].[CodeType] FROM varchar (20) NOT NULL
GO

Uses

Udt

Used By

[Academic].[Class] [Facilities].[RoomLocation]

[Udt].[Credits]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	decimal
Length	5

SQL Script

CREATE TYPE [Udt].[Credits] FROM decimal (3, 1) NOT NULL
GO

Uses

Udt

Used By

[Academic].[Course]

[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

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[DbSecurity].[UserAuthorization]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[WorkflowSteps]

[Udt].[DateOfLastUpdate]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	datetime2
Length	8

SQL Script

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

Uses

Udt

Used By

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[WorkflowSteps]

[Udt].[DescriptionText]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	255

SQL Script

CREATE TYPE [Udt].[DescriptionText] FROM nvarchar (255) NOT NULL
GO

Uses

Udt

Used By

[Academic].[Course] [Process].[WorkflowSteps]

[Udt].[FirstName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	20

SQL Script

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

Uses

Udt

Used By

[Academic].[Instructor]
[DbSecurity].[UserAuthorization]

[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].[LastName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	35

SQL Script

CREATE TYPE [Udt].[LastName] FROM nvarchar (35) NOT NULL
GO

Uses

Udt

Used By

[Academic].[Instructor]
[DbSecurity].[UserAuthorization]

[Udt].[PrimaryKeyInt]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

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

Uses

Udt

[Udt].[StandardINT]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

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

Uses

Udt

Used By

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[WorkflowSteps]

[Udt].[StandardName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	100

SQL Script

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

Uses

Udt

Used By

[Academic].[Class]
[Academic].[Course]
[Academic].[Department]
[Administrative].[ModeOfInstruction]
[Facilities].[BuildingLocation]
[dbo].[InstructorDepartmentTeaching]

[Udt].[SurrogateKeyInt]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

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

Uses

Udt

Used By

[Academic].[Class]

[Academic].[Course]

[Academic].[Department]

[Academic].[Instructor]

[Administrative].[ModeOfInstruction]

[DbSecurity].[UserAuthorization]

[Facilities].[BuildingLocation]

[Facilities].[RoomLocation]

[Process].[WorkflowSteps]

[dbo].[InstructorDepartmentTeaching]

1 Users

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

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
Academic
Administrative
DbSecurity
Facilities
GroupNameProject3
Process
Project3
Udt
Uploadfile
Utils
YourLastName

△ Academic

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Academic].[Class]
[Academic].[Course]
[Academic].[Department]
[Academic].[Instructor]

△ Administrative

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Administrative]
AUTHORIZATION [dbo]
GO

Used By

[Administrative].[ModeOfInstruction]

♣ DbSecurity

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[DbSecurity].[UserAuthorization]

△ Facilities

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Facilities].[BuildingLocation] [Facilities].[RoomLocation]

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [GroupNameProject3]
AUTHORIZATION [dbo]
GO

△ 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].[AddForeignKeysToStarSchemaData]

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

[Project3].[Load_BuildingLocation]

[Project3].[Load_Class]

[Project3].[Load_Course]

[Project3].[Load_Department]

[Project3].[Load_Instructor]

[Project3].[Load_ModeOfInstruction]

[Project3].[Load_RoomLocation]

[Project3].[LoadQueensCourseSchedule]

[Project3].[ShowTableStatusRowCount]

[Project3].[TruncateStarSchemaData]



Property	Value
Owner	dbo

SQL Script

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

Used By

[Udt].[ClassTime]

[Udt].[CodeType]

[Udt].[Credits]

[Udt].[DateAdded]

[Udt].[DateOfLastUpdate]

[Udt].[DescriptionText]

[Udt].[FirstName]

[Udt].[GroupName]

[Udt].[IndividualProject]

[Udt].[LastName]

[Udt].[PrimaryKeyInt]

[Udt].[StandardINT]

[Udt].[StandardName]

[Udt].[SurrogateKeyInt]

♣ Uploadfile

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Upload file]. [Current Semester Course Offerings]



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