LOCALHOST,13001 Documentation

QueensClassSchedule

Server LOCALHOST,13001

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■ LOCALHOST,13001

Databases (1)

• | QueensClassSchedule

Server Properties

Property	Value
Product	Microsoft SQL Server
Version	15.0.4249.2
Language	English
Platform	NT x64
Edition	Developer Edition (64-bit)
Engine Edition	3 (Enterprise)
Processors	12
OS Version	6.2 (9200)
Physical Memory	5024
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

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

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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	12/10/2022
Last log backup time	12/10/2022
Creation date	Nov 21 2022
Users	7
Database Encryption Enabled	False
Database Encryption Algorithm	None
Database size	208.00 MB
Unallocated space	63.47 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
Log reuse wait	NOTHING
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	72.00 MB	unlimited	64.00 MB	/var/opt/mssql/data/QueensClassSchedule- CurrentSemester.mdf
QC2019_log	Log	136.00 MB	2048.00 GB	64.00 MB	/var/opt/mssql/log/QueensClassSchedule- CurrentSemester_0.ldf

■ Tables

Objects

Name
DbSecurity.UserAuthorization
Enrollment.Class
Enrollment.Course
Ground.Building
Ground.Room
HR.Department
HR.DepartmentInstructor
HR.Instructor
Process.WorkflowSteps
Schedule.ClassDayTime
Schedule.InstructionMode
Uploadfile.CurrentSemesterCourseOfferings
Uploadfile.RevisedTable

[DbSecurity].[UserAuthorization]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	6
Created	7:16:35 PM Thursday, November 24, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabili ty	Identity	Default
PK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
	ClassTime	[UDT].[ClassTime]	10	NULL allowed		(N'10:45')
	IndividualProject	[UDT].[IndividualProject]	120	NULL allowed		(N'Project 3')
	GroupMemberLastName	[UDT].[LastName]	70	NOT NULL		
	GroupMemberFirstName	[UDT].[FirstName]	40	NOT NULL		
	GroupName	[UDT].[GroupName]	14	NOT NULL		(N'Group2
	DateAdded	[UDT].[DateAdded]	8	NULL allowed		(sysdateti me())
	DateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdateti me())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_DbSecurity.UserAuthorization	UserAuthorizationKey	True

SQL Script

```
CREATE TABLE [DbSecurity].[UserAuthorization]

(
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),

[ClassTime] [UDT].[ClassTime] NULL CONSTRAINT [DF_DbSecurity.UserAuthorization_Class-Time] DEFAULT (N'10:45'),
```

```
[IndividualProject] [UDT].[IndividualProject] NULL CONSTRAINT [DF_DbSecurity.User-Authorization_IndividualProject] DEFAULT (N'Project 3'),

[GroupMemberLastName] [UDT].[LastName] NOT NULL,

[GroupMemberFirstName] [UDT].[FirstName] NOT NULL,

[GroupName] [UDT].[GroupName] NOT NULL CONSTRAINT [DF_DbSecurity.UserAuthorization_-
GroupName] DEFAULT (N'Group2'),

[DateAdded] [UDT].[DateAdded] NULL CONSTRAINT [DF_DbSecurity.UserAuthorization_Date-Added] DEFAULT (sysdatetime()),

[DateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF_DbSecurity.User-Authorization_DateOfLastUpdate] DEFAULT (sysdatetime())

ON [PRIMARY]

GO

ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [PK_DbSecurity.User-Authorization] PRIMARY KEY CLUSTERED ([UserAuthorizationKey]) ON [PRIMARY]

GO
```

Uses

[UDT].[ClassTime]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[FirstName]

[UDT].[GroupName]

[UDT].[IndividualProject]

[UDT].[LastName]

[UDT].[SurrogateKey]

DbSecurity

Used By

[Enrollment].[Course]

[Ground].[Building]

[Ground].[Room]

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

■ [Enrollment].[Class]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4522
Created	4:15:32 AM Tuesday, November 29, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Compu ted	Max Length (Bytes)	Nullabil ity	Identity	Default
PK <mark>P</mark> C ∴	ClassId	[UDT].[SurrogateKey]		4	NOT NULL	1 - 1	
F/P	Courseld	[UDT].[SurrogateKey]		4	NOT NULL		
FK	InstructorNum	[UDT].[SurrogateKey]		4	NOT NULL		
FK	ModeOfInstructionId	[UDT].[SurrogateKey]		4	NOT NULL		
FK	ClassTimeId	[UDT].[SurrogateKey]		4	NOT NULL		
F	Roomld	[UDT].[SurrogateKey]		4	NOT NULL		
	UserAuthorizationKey	[UDT].[SurrogateKey]		4	NOT NULL		
	DateAdded	[UDT].[DateAdded]		8	NOT NULL		(sysdat etime())
	dateOfLastUpdate	[UDT].[DateOfLast- Update]		8	NOT NULL		(sysdat etime())
ф	ClassCode	[UDT].[ClassCode]		10	NOT NULL		
.	ClassSection	[UDT].[ClassSection]		8	NOT NULL		
	MaxEnrollment	[UDT].[MaxEnrollment]		4	NULL allowed		
	Enrollment	[UDT].[Enrollment]		4	NULL allowed		
	Waitlist	int	True	4	NULL allowed		

Computed columns

Name	Column definition
Waitlist	([Enrollment]-[MaxEnrollment])

Indexes

Key	Name	Key Columns	Unique
PK G	PK_Class	ClassId	True
	NCI_CodeSectionClassID	ClassCode, ClassSection, ClassId	True

Check Constraints

Name	Constraint
CK_Class	(NOT [MaxEnrollment] like '%[^0-9]%' AND NOT [Enrollment] like '%[^0-9]%')

Foreign Keys

Name	Columns
FK_Class_ClassDayTime	ClassTimeId->[Schedule].[ClassDayTime].[ClassTimeID]
FK_Class_Course	Courseld->[Enrollment].[Course].[Courseld]
FK_Class_InstructionMode	ModeOfInstructionId->[Schedule].[InstructionMode].[ModeOfInstructionID]
FK_Class_Instructor	InstructorNum->[HR].[Instructor].[InstructorNum]
FK_Class_Room	Roomld->[Ground].[Room].[roomld]

SQL Script

```
CREATE TABLE [Enrollment].[Class]
[ClassId] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[CourseId] [UDT].[SurrogateKey] NOT NULL,
[InstructorNum] [UDT].[SurrogateKey] NOT NULL,
[ModeOfInstructionId] [UDT].[SurrogateKey] NOT NULL,
[ClassTimeId] [UDT].[SurrogateKey] NOT NULL,
[RoomId] [UDT].[SurrogateKey] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Class DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF__Class_DateOfLast-
Update] DEFAULT (sysdatetime()),
[ClassCode] [UDT].[ClassCode] NOT NULL,
[ClassSection] [UDT].[ClassSection] NOT NULL,
[MaxEnrollment] [UDT].[MaxEnrollment] NULL,
[Enrollment] [UDT].[Enrollment] NULL,
[Waitlist] AS ([Enrollment]-[MaxEnrollment])
```

```
) ON [PRIMARY]
GO
ALTER TABLE [Enrollment]. [Class] ADD CONSTRAINT [CK Class] CHECK ((NOT [MaxEnrollment]
like '%[^0-9]%' AND NOT [Enrollment] like '%[^0-9]%'))
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [PK Class] PRIMARY KEY CLUSTERED
([ClassId]) ON [PRIMARY]
GO
CREATE UNIQUE NONCLUSTERED INDEX [NCI CodeSectionClassID] ON [Enrollment].[Class]
([ClassCode], [ClassSection], [ClassId]) ON [PRIMARY]
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [FK Class ClassDayTime] FOREIGN KEY
([ClassTimeId]) REFERENCES [Schedule].[ClassDayTime] ([ClassTimeID])
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [FK Class Course] FOREIGN KEY ([Course-
Id]) REFERENCES [Enrollment].[Course] ([CourseId])
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [FK Class InstructionMode] FOREIGN KEY
([ModeOfInstructionId]) REFERENCES [Schedule].[InstructionMode] ([ModeOfInstructionID])
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [FK Class Instructor] FOREIGN KEY
([InstructorNum]) REFERENCES [HR].[Instructor] ([InstructorNum])
ALTER TABLE [Enrollment].[Class] ADD CONSTRAINT [FK Class Room] FOREIGN KEY ([RoomId])
REFERENCES [Ground].[Room] ([roomId])
```

Uses

[Enrollment].[Course]

[Ground].[Room]

[HR].[Instructor]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

[UDT].[ClassCode]

[UDT].[ClassSection]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[Enrollment]

[UDT].[MaxEnrollment]

[UDT].[SurrogateKey]

Enrollment

Used By

[FinalProject].[LoadClass]

[FinalProject].[TruncateTable]

■ [Enrollment].[Course]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1627
Created	3:20:27 AM Monday, November 28, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PK C	Courseld	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
F 199	DepartmentId	[UDT].[SurrogateKey]	4	NOT NULL		
.	CourseCode	[UDT].[CourseCode]	20	NOT NULL		
	courseDescription	[UDT].[CourseDescription]	80	NOT NULL		
	CourseCredit	[UDT].[CourseCredit]	4	NOT NULL		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdateti me())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdateti me())
	CourseHour	[UDT].[CourseHour]	10	NULL allowed		

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Course	Courseld	True
	NonClusteredIndex-DepartmentIDCourseNum	DepartmentId, Course- Code	True

Foreign Keys

Name	Columns
FK_Course_Department	DepartmentId->[HR].[Department].[departmentId]
FK_Course_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorizationKey]

SQL Script

```
CREATE TABLE [Enrollment].[Course]
[CourseId] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[DepartmentId] [UDT].[SurrogateKey] NOT NULL,
[CourseCode] [UDT].[CourseCode] NOT NULL,
[courseDescription] [UDT].[CourseDescription] NOT NULL,
[CourseCredit] [UDT].[CourseCredit] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Course DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF Course DateOfLast-
Update] DEFAULT (sysdatetime()),
[CourseHour] [UDT].[CourseHour] NULL
) ON [PRIMARY]
ALTER TABLE [Enrollment].[Course] ADD CONSTRAINT [PK Course] PRIMARY KEY CLUSTERED
([CourseId]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-DepartmentIDCourseNum] ON
[Enrollment].[Course] ([DepartmentId], [CourseCode]) ON [PRIMARY]
ALTER TABLE [Enrollment].[Course] ADD CONSTRAINT [FK Course Department] FOREIGN KEY
([DepartmentId]) REFERENCES [HR].[Department] ([departmentId])
ALTER TABLE [Enrollment]. [Course] ADD CONSTRAINT [FK Course UserAuthorization] FOREIGN
KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization]

[HR].[Department]

[UDT].[CourseCode]

[UDT].[CourseCredit]

[UDT].[CourseDescription]

[UDT].[CourseHour]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[SurrogateKey]

Enrollment

Used By

[Enrollment].[Class]
[FinalProject].[LoadClass]
[FinalProject].[loadCourse]
[FinalProject].[TruncateTable]

III [Ground].[Building]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	24
Created	3:25:07 AM Monday, November 28, 2022
Last Modified	4:46:46 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PKC	BuildingId	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
ı.	abbreviation	[UDT].[Abbreviation]	20	NOT NULL		
	BuildingName	[UDT].[BuildingName]	40	NOT NULL		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdatetim e())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdatetim e())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Building	BuildingId	True
	NonClusteredIndex-Abbreviation	abbreviation	True

Check Constraints

Name	Constraint
CK_Building	(len([Abbreviation])<=(10) AND len([BuildingName])<=(20))

Foreign Keys

Name	Columns

FK Building UserAuthorization

UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorizationKey]

SQL Script

```
CREATE TABLE [Ground].[Building]
[BuildingId] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[abbreviation] [UDT].[Abbreviation] NOT NULL,
[BuildingName] [UDT].[BuildingName] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Building DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF Building DateOfLast-
Update] DEFAULT (sysdatetime())
ON [PRIMARY]
GO
ALTER TABLE [Ground].[Building] ADD CONSTRAINT [CK Building] CHECK
((len([Abbreviation]) \le (10) AND len([BuildingName]) \le (20)))
ALTER TABLE [Ground].[Building] ADD CONSTRAINT [PK Building] PRIMARY KEY CLUSTERED
([BuildingId]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-Abbreviation] ON
[Ground].[Building] ([abbreviation]) ON [PRIMARY]
ALTER TABLE [Ground]. [Building] ADD CONSTRAINT [FK Building UserAuthorization] FOREIGN
KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationKey])
```

Uses

[DbSecurity].[UserAuthorization]

[UDT].[Abbreviation]

[UDT].[BuildingName]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[SurrogateKey]

Ground

Used By

[Ground].[Room]

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadRoom]

[FinalProject].[TruncateTable]

☐ [Ground].[Room]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	319
Created	3:31:59 AM Monday, November 28, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PKP C	roomld	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
<u></u>	buildingId	[UDT].[SurrogateKey]	4	NOT NULL		
.	roomNum	[UDT].[RoomNum]	10	NOT NULL		
F/P	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdateti me())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdateti me())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Room	roomld	True
	NonClusteredIndex-BuilidingIDRoom	buildingId, roomNum	True

Foreign Keys

Name	Columns
FK_Room_Building	buildingId->[Ground].[Building].[BuildingId]
FK_Room_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorizationKey]

SQL Script

```
CREATE TABLE [Ground].[Room]
[roomId] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[buildingId] [UDT].[SurrogateKey] NOT NULL,
[roomNum] [UDT].[RoomNum] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Room DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF Room DateOfLast-
Update] DEFAULT (sysdatetime())
) ON [PRIMARY]
ALTER TABLE [Ground].[Room] ADD CONSTRAINT [PK_Room] PRIMARY KEY CLUSTERED ([roomId])
ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-BuilidingIDRoom] ON [Ground].[Room]
([buildingId], [roomNum]) ON [PRIMARY]
ALTER TABLE [Ground]. [Room] ADD CONSTRAINT [FK Room Building] FOREIGN KEY ([building-
Id]) REFERENCES [Ground].[Building] ([BuildingId])
ALTER TABLE [Ground].[Room] ADD CONSTRAINT [FK Room_UserAuthorization] FOREIGN KEY
([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationKey])
```

Uses

[DbSecurity].[UserAuthorization]

[Ground].[Building]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[RoomNum]

[UDT].[SurrogateKey]

Ground

Used By

[Enrollment].[Class]

[FinalProject].[LoadClass]

[FinalProject].[loadRoom]

[FinalProject].[TruncateTable]

III [HR].[Department]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	84
Created	3:08:15 AM Monday, November 28, 2022
Last Modified	5:50:13 AM Saturday, December 10, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PK _C	departmentId	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
<u></u>	DepartmentCode	[UDT].[DepartmentCode]	20	NOT NULL		
	DepartmentName	[UDT].[DepartmentName]	100	NULL allowed		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NULL allowed		(sysdateti me())
	DateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NULL allowed		(sysdateti me())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Department	departmentId	True
	NonClusteredIndex-DepartmentCode	DepartmentCode	True

Check Constraints

Name	On Column	Constraint
CK_Department_DepartmentCode	DepartmentCode	([DepartmentCode] like '[ABCDEFGHIJKLMNOPQRSTUVWXYZ]%')

Foreign Keys

Name	Columns
FK_Department_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorization-Key]

SQL Script

```
CREATE TABLE [HR].[Department]
[departmentId] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[DepartmentCode] [UDT].[DepartmentCode] NOT NULL,
[DepartmentName] [UDT].[DepartmentName] NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NULL CONSTRAINT [DF HR.Department DateAdded] DEFAULT
[DateOfLastUpdate] [UDT].[DateOfLastUpdate] NULL CONSTRAINT [DF_HR.Department_DateOf-
LastUpdate] DEFAULT (sysdatetime())
) ON [PRIMARY]
ALTER TABLE [HR].[Department] ADD CONSTRAINT [CK Department DepartmentCode] CHECK
(([DepartmentCode] like '[ABCDEFGHIJKLMNOPQRSTUVWXYZ]%'))
ALTER TABLE [HR].[Department] ADD CONSTRAINT [PK Department] PRIMARY KEY CLUSTERED
([departmentId]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-DepartmentCode] ON
[HR].[Department] ([DepartmentCode]) ON [PRIMARY]
ALTER TABLE [HR]. [Department] ADD CONSTRAINT [FK Department UserAuthorization] FOREIGN
KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[DepartmentCode]

[UDT].[DepartmentName]

[UDT].[SurrogateKey]

HR

Used By

[Enrollment].[Course]

[HR].[DepartmentInstructor]

[FinalProject].[LoadClass]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Tables > HR.Department

[FinalProject].[TruncateTable]

Ⅲ [HR].[DepartmentInstructor]

Properties

Property	Value
Row Count (~)	1754
Created	3:14:52 AM Monday, November 28, 2022
Last Modified	5:46:46 AM Saturday, December 10, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Default
P	DepartmentID	[UDT].[SurrogateKey]	4	NOT NULL	
P/C .f.	InstructorNum	[UDT].[SurrogateKey]	4	NOT NULL	
FKPFKP	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL	
	DateAdded	[UDT].[DateAdded]	8	NOT NULL	(sysdatetime ())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL	(sysdatetime ())

Indexes

Key	Name Key Columns		Unique
PK G	PK_DeptInstructor	DepartmentID, InstructorNum	
	NCI-InstructorDepartmentId	InstructorNum, DepartmentID	True

Foreign Keys

Name	Columns
FK_DepartmentInstructor_Department	DepartmentID->[HR].[Department].[departmentId]
FK_DepartmentInstructor_Instructor	InstructorNum->[HR].[Instructor].[InstructorNum]
FK_DepartmentInstructor_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[User-AuthorizationKey]
FK_DeptartmentInstructor_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[User-AuthorizationKey]

SQL Script

```
CREATE TABLE [HR].[DepartmentInstructor]
[DepartmentID] [UDT].[SurrogateKey] NOT NULL,
[InstructorNum] [UDT].[SurrogateKey] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF DeptInstructor DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF DeptInstructor Date-
OfLastUpdate] DEFAULT (sysdatetime())
) ON [PRIMARY]
GO
ALTER TABLE [HR]. [DepartmentInstructor] ADD CONSTRAINT [PK DeptInstructor] PRIMARY KEY
CLUSTERED ([DepartmentID], [InstructorNum]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NCI-InstructorDepartmentId] ON [HR].[Department-
Instructor] ([InstructorNum], [DepartmentID]) ON [PRIMARY]
ALTER TABLE [HR].[DepartmentInstructor] ADD CONSTRAINT [FK DepartmentInstructor -
Department] FOREIGN KEY ([DepartmentID]) REFERENCES [HR].[Department] ([departmentId])
ALTER TABLE [HR]. [DepartmentInstructor] ADD CONSTRAINT [FK DepartmentInstructor -
Instructor] FOREIGN KEY ([InstructorNum]) REFERENCES [HR]. [Instructor] ([Instructor-
GO
ALTER TABLE [HR].[DepartmentInstructor] ADD CONSTRAINT [FK DepartmentInstructor User-
Authorization] FOREIGN KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationKey])
ALTER TABLE [HR]. [DepartmentInstructor] ADD CONSTRAINT [FK DeptartmentInstructor User-
Authorization] FOREIGN KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization]
[HR].[Department]
[HR].[Instructor]
[UDT].[DateAdded]
[UDT].[DateOfLastUpdate]
[UDT].[SurrogateKey]
HR

Used Bv

[FinalProject].[LoadDepartmentInstructor] [FinalProject].[TruncateTable]

Ⅲ [HR].[Instructor]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	1597
Created	2:06:08 AM Tuesday, November 29, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Persis ted	Comp uted	Max Lengt h (Bytes	Nullab ility	Identit y	Defaul t
PK C	InstructorNum	[UDT].[SurrogateKey]			4	NOT NULL	1 - 1	
	FirstName	[UDT].[FirstName]			40	NOT NULL		
	LastName	[UDT].[LastName]			70	NOT NULL		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]			4	NOT NULL		
	DateAdded	[UDT].[DateAdded]			8	NOT NULL		(sysda tetime())
	dateOfLastUpdate	[UDT].[DateOfLast- Update]			8	NOT NULL		(sysda tetime())
	FullName	nvarchar(57)	True	True	114	NOT NULL		
	Email	nvarchar(68)	True	True	136	NOT NULL		

Computed columns

Name	Column definition
FullName	(concat([LastName],N', ',[FirstName]))
Email	(concat([FirstName],'.',[LastName],'@qc.cuny.edu'))

Indexes

Key	Name	Key Columns	Unique



Foreign Keys

Name	Columns
FK_Instructor_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[UserAuthorization-Key]

SQL Script

```
CREATE TABLE [HR].[Instructor]
[InstructorNum] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[FirstName] [UDT].[FirstName] NOT NULL,
[LastName] [UDT].[LastName] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Instructor DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF_Instructor_DateOf-
LastUpdate] DEFAULT (sysdatetime()),
[FullName] AS (concat([LastName], N', ', [FirstName])) PERSISTED NOT NULL,
[Email] AS (concat([FirstName],'.', [LastName],'@qc.cuny.edu')) PERSISTED NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [HR].[Instructor] ADD CONSTRAINT [PK Instructor] PRIMARY KEY CLUSTERED
([InstructorNum]) ON [PRIMARY]
ALTER TABLE [HR].[Instructor] ADD CONSTRAINT [FK Instructor UserAuthorization] FOREIGN
KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[FirstName]

[UDT].[LastName]

[UDT].[SurrogateKey]

HR

Used By

[Enrollment].[Class]

[HR].[DepartmentInstructor]

[FinalProject].[LoadClass]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadInstructor]

[FinalProject].[TruncateTable]

■ [Process].[WorkflowSteps]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	13
Created	3:33:31 AM Thursday, November 24, 2022
Last Modified	3:33:31 AM Thursday, November 24, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Identity	Default
PK	WorkFlowStepKey	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
	WorkFlowStepDescription	[UDT].[WFSDescription]	40	NOT NULL		
	WorkFlowStepTableRowCount	[UDT].[WFSRowCount]	4	NULL allowed		((0))
	StartingDateTime	[UDT].[StartTime]	8	NULL allowed		(sysdat etime())
	EndingDateTime	[UDT].[EndTime]	8	NULL allowed		(sysdat etime())
	ClassTime	[UDT].[ClassTime]	10	NULL allowed		('10:45')
	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdat etime())
	DateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdat etime())

Indexes

Key	Name	Key Columns	Unique
PKP G	PK_Process.WorkflowSteps	WorkFlowStepKey	True

SQL Script

```
CREATE TABLE [Process].[WorkflowSteps]
(
[WorkFlowStepKey] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
```

```
[WorkFlowStepDescription] [UDT].[WFSDescription] NOT NULL,
[WorkFlowStepTableRowCount] [UDT].[WFSRowCount] NULL CONSTRAINT [DF Process.Workflow-
Steps WorkFlowStepTableRowCount] DEFAULT ((0)),
[StartingDateTime] [UDT].[StartTime] NULL CONSTRAINT [DF_Process.WorkflowSteps_Starting-
DateDateTime] DEFAULT (sysdatetime()),
[EndingDateTime] [UDT].[EndTime] NULL CONSTRAINT [DF_Process.WorkflowSteps EndingDate-
Time] DEFAULT (sysdatetime()),
[ClassTime] [UDT].[ClassTime] NULL CONSTRAINT [DF Process.WorkflowSteps ClassTime]
DEFAULT ('10:45'),
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF Process.WorkflowSteps DateAdded]
DEFAULT (sysdatetime()),
[DateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF Process.Workflow-
Steps DateOfLastUpdate] DEFAULT (sysdatetime())
) ON [PRIMARY]
GO
ALTER TABLE [Process].[WorkflowSteps] ADD CONSTRAINT [PK Process.WorkflowSteps] PRIMARY
KEY CLUSTERED ([WorkFlowStepKey]) ON [PRIMARY]
```

Uses

[UDT].[ClassTime]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[EndTime]

[UDT].[StartTime]

[UDT].[SurrogateKey]

[UDT].[WFSDescription]

[UDT].[WFSRowCount]

Process

Used By

[FinalProject].[LoadQueensClassSchedule] [Process].[usp_ShowWorkFlowSteps]

[Process].[usp_TrackWorkFlow]

■ [Schedule].[ClassDayTime]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	626
Created	2:50:52 AM Tuesday, November 29, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PKC	ClassTimeID	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
ı.	ClassDay	[UDT].[CourseClassDay]	20	NOT NULL		
. 	ClassTime	[UDT].[CourseClassTime]	40	NOT NULL		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdatetim e())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdatetim e())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_ClassDayTime	ClassTimeID	True
	NonClusteredIndex-DayTime	ClassDay, ClassTime	True

Foreign Keys

Name	Columns
FK_ClassDayTime_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[User-AuthorizationKey]

SQL Script

```
CREATE TABLE [Schedule].[ClassDayTime]
[ClassTimeID] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[ClassDay] [UDT].[CourseClassDay] NOT NULL,
[ClassTime] [UDT].[CourseClassTime] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF ClassDayTime DateAdded] DEFAULT
(sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF ClassDayTime Date-
OfLastUpdate] DEFAULT (sysdatetime())
) ON [PRIMARY]
ALTER TABLE [Schedule].[ClassDayTime] ADD CONSTRAINT [PK ClassDayTime] PRIMARY KEY
CLUSTERED ([ClassTimeID]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-DayTime] ON [Schedule].[ClassDay-
Time] ([ClassDay], [ClassTime]) ON [PRIMARY]
ALTER TABLE [Schedule].[ClassDayTime] ADD CONSTRAINT [FK ClassDayTime User-
Authorization] FOREIGN KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization]

[UDT].[CourseClassDay]

[UDT].[CourseClassTime]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[SurrogateKey]

Schedule

Used By

[Enrollment].[Class]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[TruncateTable]

☐ [Schedule].[InstructionMode]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4
Created	2:59:57 AM Tuesday, November 29, 2022
Last Modified	4:46:47 AM Tuesday, December 6, 2022

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullabilit y	Identity	Default
PK#C	ModeOfInstructionID	[UDT].[SurrogateKey]	4	NOT NULL	1 - 1	
#	ModeOfInstruction	[UDT].[ModeOfInstruction]	30	NOT NULL		
FK	UserAuthorizationKey	[UDT].[SurrogateKey]	4	NOT NULL		
	DateAdded	[UDT].[DateAdded]	8	NOT NULL		(sysdatetim e())
	dateOfLastUpdate	[UDT].[DateOfLastUpdate]	8	NOT NULL		(sysdatetim e())

Indexes

Key	Name	Key Columns	Unique
PK C	PK_InstructionMode	ModeOfInstructionID	True
	NonClusteredIndex-InstructionMode	ModeOfInstruction	True

Foreign Keys

Name	Columns
FK_InstructionMode_UserAuthorization	UserAuthorizationKey->[DbSecurity].[UserAuthorization].[User-AuthorizationKey]

SQL Script

```
CREATE TABLE [Schedule].[InstructionMode]
```

```
[ModeOfInstructionID] [UDT].[SurrogateKey] NOT NULL IDENTITY(1, 1),
[ModeOfInstruction] [UDT].[ModeOfInstruction] NOT NULL,
[UserAuthorizationKey] [UDT].[SurrogateKey] NOT NULL,
[DateAdded] [UDT].[DateAdded] NOT NULL CONSTRAINT [DF InstructionMode DateAdded]
DEFAULT (sysdatetime()),
[dateOfLastUpdate] [UDT].[DateOfLastUpdate] NOT NULL CONSTRAINT [DF InstructionMode -
DateOfLastUpdate] DEFAULT (sysdatetime())
) ON [PRIMARY]
ALTER TABLE [Schedule].[InstructionMode] ADD CONSTRAINT [PK InstructionMode] PRIMARY
KEY CLUSTERED ([ModeOfInstructionID]) ON [PRIMARY]
CREATE UNIQUE NONCLUSTERED INDEX [NonClusteredIndex-InstructionMode] ON
[Schedule].[InstructionMode] ([ModeOfInstruction]) ON [PRIMARY]
ALTER TABLE [Schedule].[InstructionMode] ADD CONSTRAINT [FK InstructionMode User-
Authorization] FOREIGN KEY ([UserAuthorizationKey]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationKey])
GO
```

Uses

[DbSecurity].[UserAuthorization] [UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[ModeOfInstruction]

[UDT].[SurrogateKey]

Schedule

Used By

[Enrollment].[Class]
[FinalProject].[LoadClass]
[FinalProject].[LoadInstructionMode]
[FinalProject].[TruncateTable]

[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	

SQL Script

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

(

[Semester] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL CONSTRAINT [DF_-
CurrentSemesterCourseOfferings_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,
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Tables > Uploadfile.CurrentSemester-CourseOfferings

```
[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

■ [Uploadfile].[RevisedTable]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Неар	True
Row Count (~)	4522
Created	3:13:16 PM Saturday, December 3, 2022
Last Modified	3:37:24 PM Saturday, December 3, 2022

Columns

Name	Data Type	Persisted	Computed	Max Length (Bytes)	Nullability	Default
Semester	varchar(50)			50	NULL allowed	
ClassSec	varchar(50)			50	NULL allowed	
ClassCode	varchar(50)			50	NULL allowed	
Course (hr, crd)	varchar(50)			50	NULL allowed	
DepartmentAcronym	varchar(50)	True	True	50	NULL allowed	
CourseCode	varchar(50)	True	True	50	NULL allowed	
CourseHour	varchar(50)	True	True	50	NULL allowed	
CourseCredit	varchar(1)	True	True	1	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	
InstructorFirstName	varchar(50)	True	True	50	NULL allowed	
InstructorLastName	varchar(50)	True	True	50	NULL allowed	
Location	varchar(50)			50	NULL allowed	(N'TBA TBA')
BuildingAcronym	varchar(50)	True	True	50	NULL	

					allowed
Room	varchar(50)	True	True	50	NULL allowed
Enrolled	varchar(50)			50	NULL allowed
Limit	varchar(50)			50	NULL allowed
Mode of Instruction	varchar(50)			50	NULL allowed

Computed columns

Name	Column definition
DepartmentAcronym	(substring([Course (hr, crd)],(1),charindex(' ',[Course (hr, crd)])-(1)))
CourseCode	(substring([Course (hr, crd)],charindex(' ',[Course (hr, crd)])+(1),(charindex('(',[Course (hr, crd)])-(2))-charindex(' ',[Course (hr, crd)])))
CourseHour	(substring([Course (hr, crd)],charindex('(',[Course (hr, crd)])+(1),(charindex(',',[Course (hr, crd)])-(1))-charindex('(',[Course (hr, crd)])))
CourseCredit	(substring([Course (hr, crd)],charindex(',',[Course (hr, crd)])+(2),(1)))
InstructorFirstName	(substring([Instructor],charindex(',',[Instructor])+(2),len([Instructor])))
InstructorLastName	(substring([Instructor],(1),charindex(',',[Instructor])-(1)))
BuildingAcronym	(substring([location],(1),charindex('',[location])-(1)))
Room	(substring([location],charindex(' ',[location])+(1),len([location])-charindex(' ',[location])))

```
CREATE TABLE [Uploadfile].[RevisedTable]
[Semester] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL,
[ClassSec] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL,
[ClassCode] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL,
[Course (hr, crd)] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL,
[DepartmentAcronym] AS (substring([Course (hr, crd)],(1),charindex(' ',[Course (hr,
crd)])-(1))) PERSISTED,
[CourseCode] AS (substring([Course (hr, crd)], charindex(' ', [Course (hr,
crd)])+(1),(charindex('(',[Course (hr, crd)])-(2))-charindex(',[Course (hr, crd)])))
[CourseHour] AS (substring([Course (hr, crd)], charindex('(', [Course (hr,
crd)])+(1),(charindex(',',[Course (hr, crd)])-(1))-charindex('(',[Course (hr, crd)])))
PERSISTED,
[CourseCredit] AS (substring([Course (hr, crd)], charindex(',', [Course (hr,
crd)])+(2),(1))) PERSISTED,
[Description] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL,
[Day] [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,
[InstructorFirstName] AS
(substring([Instructor],charindex(',',[Instructor])+(2),len([Instructor]))) PERSISTED,
[InstructorLastName] AS (substring([Instructor],(1),charindex(',',[Instructor])-(1)))
PERSISTED,
[Location] [varchar] (50) COLLATE SQL Latin1 General CP1 CI AS NULL CONSTRAINT [DF -
```

```
RevisedTable_Location] DEFAULT (N'TBA TBA'),

[BuildingAcronym] AS (substring([location],(1),charindex(' ',[location])-(1)))

PERSISTED,

[Room] AS (substring([location],charindex(' ',[location])+(1),len([location])-
charindex(' ',[location]))) PERSISTED,

[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

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

[FinalProject].[LoadInstructionMode]

[FinalProject].[LoadInstructor]

[FinalProject].[loadRoom]

■ Views

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
         WHERE
                  ( TABLE TYPE = 'BASE TABLE' )
        ) 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
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Views > Utils.uvw_FindColumn-DefinitionPlusDefaultAndCheckConstraint

```
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
                                   INFORMATION SCHEMA.CONSTRAINT COLUMN USAGE
                         FROM
                                   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
```

Uses

Utils

■ Stored Procedures

Objects

Name
FinalProject.AddForeignKeys
FinalProject.DropForeignKeys
FinalProject.loadBuilding
FinalProject.LoadClass
FinalProject.loadClassDayTime
FinalProject.loadCourse
FinalProject.LoadDepartmentInstructor
FinalProject.LoadDepartments
FinalProject.LoadInstructionMode
FinalProject.LoadInstructor
FinalProject.LoadQueensClassSchedule
FinalProject.loadRoom
FinalProject.TruncateTable
Process.usp_ShowWorkFlowSteps
Process.usp_TrackWorkFlow

[FinalProject].[AddForeignKeys]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/28/2022
-- Description: Add Foreign Keys
CREATE PROCEDURE [FinalProject].[AddForeignKeys]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
  DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   --BUILDING TABLE
   ALTER TABLE Ground. Building
       ADD CONSTRAINT FK Building UserAuthorization
           FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --ROOM TABLE
   ALTER TABLE Ground.Room
       ADD CONSTRAINT FK Room Building
           FOREIGN KEY (buildingId) REFERENCES Ground.Building (BuildingId)
   ALTER TABLE Ground.Room
       ADD CONSTRAINT FK Room UserAuthorization
           FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --INSTRUCTOR TABLE
   ALTER TABLE HR.Instructor
       ADD CONSTRAINT FK Instructor UserAuthorization
```

```
FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --DEPTINSTRUCTOR TABLE
   ALTER TABLE HR.DepartmentInstructor
       ADD CONSTRAINT FK DepartmentInstructor Instructor
            FOREIGN KEY (InstructorNum) REFERENCES HR.Instructor (InstructorNum)
   ALTER TABLE HR.DepartmentInstructor
       ADD CONSTRAINT FK DepartmentInstructor Department
            FOREIGN KEY (DepartmentID) REFERENCES HR.Department (departmentId)
   ALTER TABLE HR.DepartmentInstructor
       ADD CONSTRAINT FK DepartmentInstructor UserAuthorization
           FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --DEPARTMENT TABLE
   ALTER TABLE HR.Department
       ADD CONSTRAINT FK Department UserAuthorization
            FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --COURSE TABLE
   ALTER TABLE Enrollment.Course
       ADD CONSTRAINT FK_Course_Department
            FOREIGN KEY (DepartmentId) REFERENCES HR.Department (departmentId)
   ALTER TABLE Enrollment.Course
       ADD CONSTRAINT FK Course UserAuthorization
           FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --CLASSDAYTIME TABLE
   ALTER TABLE Schedule.ClassDayTime
       ADD CONSTRAINT FK ClassDayTime UserAuthorization
            FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.UserAuthorization
(UserAuthorizationKey)
   --INSTRUCTION MODE TABLE
   ALTER TABLE Schedule.InstructionMode
       ADD CONSTRAINT FK InstructionMode UserAuthorization
           FOREIGN KEY (UserAuthorizationKey) REFERENCES DbSecurity.User-
Authorization (UserAuthorizationKey)
   --CLASS TABLE
   ALTER TABLE Enrollment.Class
       ADD CONSTRAINT FK Class Course
            FOREIGN KEY (CourseId) REFERENCES Enrollment.Course (CourseId)
   ALTER TABLE Enrollment.Class
       ADD CONSTRAINT FK Class Instructor
            FOREIGN KEY (InstructorNum) REFERENCES HR.Instructor (InstructorNum)
```

```
ALTER TABLE Enrollment.Class
       ADD CONSTRAINT FK_Class_InstructionMode
            FOREIGN KEY (ModeOfInstructionID) REFERENCES Schedule.InstructionMode
({\tt ModeOfInstructionID})
   ALTER TABLE Enrollment.Class
       ADD CONSTRAINT FK Class ClassDayTime
            FOREIGN KEY (ClassTimeId) REFERENCES Schedule.ClassDayTime (ClassTimeID)
   ALTER TABLE Enrollment.Class
       ADD CONSTRAINT FK Class Room
           FOREIGN KEY (RoomId) REFERENCES Ground.Room (roomId)
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT = 0
   PRINT 'Added Foreign Keys'
   EXEC [Process].[usp TrackWorkFlow] N'Add Foreign
Keys',@rowcount,@starttime,@endtime,@UserAuthorizationKey
GO
```

[Process].[usp_TrackWorkFlow] [UDT].[SurrogateKey] FinalProject

Used By

[FinalProject].[DropForeignKeys]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/26/22
-- Description: Drop Foreign Keys
-- -----
CREATE PROCEDURE [FinalProject].[DropForeignKeys]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   SET NOCOUNT ON;
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   --INSTRUCTOR TABLE
   ALTER TABLE HR. Instructor
      DROP CONSTRAINT FK Instructor UserAuthorization
   -- DEPARTMENT TABLE
   ALTER TABLE HR.Department
      DROP CONSTRAINT FK_Department_UserAuthorization
   -- DEPTINSTRUCTOR TABLE
   ALTER TABLE hr.departmentInstructor
       DROP CONSTRAINT FK DepartmentInstructor UserAuthorization
   ALTER TABLE hr.departmentInstructor
       DROP CONSTRAINT FK DepartmentInstructor Department
   ALTER TABLE hr.departmentInstructor
       DROP CONSTRAINT FK_DepartmentInstructor_Instructor
   -- COURSE TABLE
   ALTER TABLE Enrollment.Course
```

```
DROP CONSTRAINT FK Course UserAuthorization
   ALTER TABLE Enrollment.Course
       DROP CONSTRAINT FK Course Department
   --BUILDING TABLE
   ALTER TABLE Ground. Building
       DROP CONSTRAINT FK Building UserAuthorization
   --ROOM TABLE
   ALTER TABLE Ground.Room
       DROP CONSTRAINT FK Room Building
   ALTER TABLE Ground.Room
       DROP CONSTRAINT FK_Room_UserAuthorization
   --ClassDayTime table
   ALTER TABLE Schedule.ClassDayTime
       {\tt DROP\ CONSTRAINT\ FK\_ClassDayTime\_UserAuthorization}
    --InstructionMode table
   ALTER TABLE Schedule.InstructionMode
       DROP CONSTRAINT FK InstructionMode UserAuthorization
   --Class Table
   ALTER TABLE Enrollment.Class
       DROP CONSTRAINT FK Class ClassDayTime
   ALTER TABLE Enrollment.Class
       DROP CONSTRAINT FK Class Course
   ALTER TABLE Enrollment.Class
       DROP CONSTRAINT FK_Class_InstructionMode
   ALTER TABLE Enrollment.Class
       DROP CONSTRAINT FK Class Instructor
   ALTER TABLE Enrollment.Class
       DROP CONSTRAINT FK_Class_Room
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT = 0
   EXEC [Process].[usp_TrackWorkFlow] N'Load
Departments', @rowcount, @starttime, @endtime, @UserAuthorizationKey
   PRINT 'Dropped All Foreign Keys'
END
GO
```

[Process].[usp_TrackWorkFlow] [UDT].[SurrogateKey] FinalProject

Project > LOCALHOST,13001 > User databases	> QueensClassSchedule >	· Programmability >	Stored Procedures
> FinalProiect.DropForeignKevs			

Used By

[FinalProject].[loadBuilding]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/27/2022
-- Description: Load Building Table
CREATE PROCEDURE [FinalProject].[loadBuilding]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO Ground.building
       abbreviation,
       buildingName,
       userAuthorizationKey
   SELECT DISTINCT
       rt.BuildingAcronym,
       buildingName = CASE
           WHEN rt.BuildingAcronym = 'AR' THEN 'AR-no building'
           when rt.BuildingAcronym ='AE' then 'Alumni Hall'
           when rt.BuildingAcronym = 'DM' then 'Campbell Dome'
           when rt.BuildingAcronym = 'CA' then 'Colden Auditorium'
           when rt.BuildingAcronym = 'CH' then 'Colwin Hall'
            when rt.BuildingAcronym = 'C1' then 'Continuing Ed 1'
            when rt.BuildingAcronym = 'C2' then 'Continuing Ed 2'
            when rt.BuildingAcronym = 'CD' then 'CD-no building'
           when rt.BuildingAcronym = 'DY' then 'Delany Hall'
```

```
when rt.BuildingAcronym = 'DH' then 'Dining Hall'
            when rt.BuildingAcronym = 'FG' then 'FitzGerald Gym'
            when rt.BuildingAcronym = 'FH' then 'Frese Hall'
            when rt.BuildingAcronym = 'GB' then 'G Building'
            when rt.BuildingAcronym = 'GC' then 'Gertz Center'
            when rt.BuildingAcronym = 'GT' then 'Goldstein Theatre'
            when rt.BuildingAcronym = 'HH' then 'Honors Hall'
            when rt.BuildingAcronym = 'IB' then 'I Building'
            when rt.BuildingAcronym = 'JH' then 'Jefferson Hall'
            when rt.BuildingAcronym = 'KY' then 'Kiely Hall'
            when rt.BuildingAcronym = 'KG' then 'King Hall'
            when rt.BuildingAcronym = 'KS' then 'Kissena Hall'
            when rt.BuildingAcronym = 'KP' then 'Klapper Hall'
            when rt.BuildingAcronym = 'MU' then 'Music Building'
            when rt.BuildingAcronym = 'PH' then 'Powdermaker Hall'
            when rt.BuildingAcronym = 'QH' then 'Queens Hall'
            when rt.BuildingAcronym = 'RA' then 'Rathaus Hall'
            when rt.BuildingAcronym = 'RZ' then 'Razran Hall'
            when rt.BuildingAcronym = 'RE' then 'Remsen Hall'
            when rt.BuildingAcronym = 'RO' then 'Rosenthal Library'
            when rt.BuildingAcronym = 'SB' then 'Science Building'
            when rt.BuildingAcronym = 'SU' then 'Student Union'
            when rt.BuildingAcronym = 'SA' then 'Summit Apartments'
            when rt.BuildingAcronym = 'TBA' then 'To be Announced'
            ELSE 'Unknown'
        END
        ,@UserAuthorizationKey
   FROM Uploadfile.RevisedTable AS rt
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM Ground.Building AS b
   PRINT 'Loaded Building Table'
   EXEC [Process].[usp TrackWorkFlow] N'Load Building
Table', @rowcount, @starttime, @endtime, @UserAuthorizationKey
GΩ
```

[Ground].[Building]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Project > LOCALHOST,13001	> User databases >	QueensClassSchedule >	Programmability >	Stored Procedures
> FinalProiect.loadBuilding				

Used By

[FinalProject].[LoadClass]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/29/2022
-- Description: Load Class Table
CREATE PROCEDURE [FinalProject].[LoadClass]
  @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   -- SET NOCOUNT ON added to prevent extra result sets from
   -- interfering with SELECT statements.
  DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
  SET NOCOUNT ON;
  INSERT INTO Enrollment.Class
(
  CourseId,
   InstructorNum,
  ModeOfInstructionId,
  ClassTimeId,
  RoomId,
   UserAuthorizationKey,
  ClassCode,
  ClassSection,
   MaxEnrollment,
   Enrollment
SELECT DISTINCT
   c.CourseId,
              -- CourseId - SurrogateKey
   i.InstructorNum, -- InstructorNum - SurrogateKey
```

```
cdt.ClassTimeID, -- ClassTimeId - SurrogateKey
   r.roomId, -- RoomId - SurrogateKey
   3, -- UserAuthorizationKey - SurrogateKey
   rt.ClassCode, -- ClassCode - ClassCode
   rt.ClassSec, -- ClassSection - ClassSection
   CAST (rt.limit AS INT), -- MaxEnrollment - MaxEnrollment
   CAST (rt.Enrolled AS INT) -- Enrollment - Enrollment
FROM Uploadfile.RevisedTable AS rt
   INNER JOIN Enrollment.Course AS c
       ON c.CourseCode = rt.CourseCode AND
          c.CourseHour = rt.CourseHour AND
         c.CourseCredit = rt.CourseCredit
   INNER JOIN HR.Department AS d
       ON d.departmentId = c.DepartmentId AND
          d.DepartmentCode = rt.DepartmentAcronym
   INNER JOIN HR. Instructor AS i
       ON i.FirstName = rt.InstructorFirstName AND
          i.LastName = rt.InstructorLastName
   INNER JOIN Schedule.InstructionMode AS im
       ON im.ModeOfInstruction = rt.[Mode of Instruction]
   INNER JOIN Schedule.ClassDayTime AS cdt
       ON cdt.ClassDay = rt.[Day] AND
        cdt.ClassTime = rt.[Time]
   INNER JOIN Ground. Room AS r
      ON r.roomNum = rt.room
   INNER JOIN Ground. Building AS b
       ON b.BuildingId = r.buildingId AND
          b.abbreviation = rt.BuildingAcronym
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM Enrollment.Class
   PRINT 'Loaded Class Table'
   EXEC [Process].[usp TrackWorkFlow] N'Load Class
Table', @rowcount, @starttime, @endtime, @UserAuthorizationKey
END
GO
```

[Enrollment].[Class]
[Enrollment].[Course]
[Ground].[Building]
[Ground].[Room]
[HR].[Department]
[HR].[Instructor]
[Schedule].[ClassDayTime]
[Schedule].[InstructionMode]
[Uploadfile].[RevisedTable]

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.LoadClass

[Process].[usp_TrackWorkFlow] [UDT].[SurrogateKey] FinalProject

Used By

[FinalProject].[loadClassDayTime]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/28/2022
-- Description: Load ClassDayTime Table
CREATE PROCEDURE [FinalProject].[loadClassDayTime]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
  DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO Schedule.ClassDayTime
       ClassDay,
       ClassTime,
       UserAuthorizationKey
   SELECT DISTINCT
      rt.[Day],
       rt.[Time],
       @UserAuthorizationKey
   FROM Uploadfile.RevisedTable AS rt
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM Schedule.ClassDayTime
   PRINT 'Loaded ClassDayTime Table'
   EXEC [Process].[usp TrackWorkFlow] N'Load ClassDayTime
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.loadClassDayTime

Table', @rowcount, @starttime, @endtime, @UserAuthorizationKey

END

GO

Uses

[Schedule].[ClassDayTime]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Used By

[FinalProject].[loadCourse]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/27/2022
-- Description: Load Course Table
-- -----
CREATE PROCEDURE [FinalProject].[loadCourse]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   -- Insert statements for procedure here
   INSERT INTO Enrollment.Course
       DepartmentId,
       CourseCode,
       courseDescription,
       CourseHour,
       CourseCredit,
       UserAuthorizationKey
   SELECT DISTINCT
      d.DepartmentId,
       rt.CourseCode,
       rt.Description,
       rt.CourseHour,
       rt.CourseCredit,
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.loadCourse

Uses

[Enrollment].[Course]
[HR].[Department]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Used By

[FinalProject].[LoadDepartmentInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/26/2022
-- Description: Load DeptInstructor Bridge Table
CREATE PROCEDURE [FinalProject].[LoadDepartmentInstructor]
    @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
  DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO hr.DepartmentInstructor
   DepartmentId,
   InstructorNum,
   UserAuthorizationKey
SELECT DISTINCT
   d.DepartmentId,
   i.InstructorNum,
   @UserAuthorizationKey
FROM Uploadfile.RevisedTable AS rt
  INNER JOIN HR. Department AS d
      ON d.DepartmentCode = rt.DepartmentAcronym
   INNER JOIN hr. Instructor AS i
       ON i.FirstName = rt.InstructorFirstName
       AND i.LastName = rt.InstructorLastName
```

```
DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()

DECLARE @rowcount AS INT

SELECT @rowcount = COUNT(*) FROM [HR].[DepartmentInstructor]

PRINT 'Loaded DeptInstructor Bridge Table'

EXEC [Process].[usp_TrackWorkFlow] N'Load DeptInstructor
Table',@rowcount,@starttime,@endtime,@UserAuthorizationKey

END

GO
```

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Uploadfile].[RevisedTable]

[Process].[usp_TrackWorkFlow]

[UDT].[SurrogateKey]

FinalProject

Used By

[FinalProject].[LoadDepartments]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/25/22
-- Description: Insert Departments into department table
CREATE PROCEDURE [FinalProject].[LoadDepartments]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
  SET NOCOUNT ON;
INSERT INTO HR. Department
       UserAuthorizationKey,
       DepartmentCode,
       DepartmentName
   SELECT DISTINCT
       @UserAuthorizationKey,
       rt.DepartmentAcronym,
       DepartmentName = CASE
            WHEN rt.DepartmentAcronym = 'ACCT' THEN N'Accounting & Information
Systems'
           WHEN rt.DepartmentAcronym = 'AFST' THEN N'African Studies'
           WHEN rt.DepartmentAcronym = 'AMST' THEN N'American Studies'
           WHEN rt.DepartmentAcronym = 'ANTH' THEN N'Anthropology'
```

```
WHEN rt.DepartmentAcronym = 'ARAB' THEN N'Arabic, Islamic, and Middle
            WHEN rt.DepartmentAcronym = 'ARTH' THEN N'Anthropology'
            WHEN rt.DepartmentAcronym = 'ARTS' THEN N'Art Studio'
            WHEN rt.DepartmentAcronym = 'ASTR' THEN N'Astronomy'
            WHEN rt.DepartmentAcronym = 'BALA' THEN N'Business and Liberal Arts'
            WHEN rt.DepartmentAcronym = 'BIOCH' THEN N'Biochemistry'
            WHEN rt.DepartmentAcronym = 'BIOL' THEN N'Biology'
            WHEN rt.DepartmentAcronym = 'BUS' THEN N'Business'
            WHEN rt.DepartmentAcronym = 'CERT' THEN N'Accounting & Information Systems'
            WHEN rt.DepartmentAcronym = 'CESL' THEN N'College English as a Second
Language'
            WHEN rt.DepartmentAcronym = 'CHEM' THEN N'Chemistry'
            WHEN rt.DepartmentAcronym = 'CHIN' THEN N'Chinese'
            WHEN rt.DepartmentAcronym = 'CLAS' THEN N'Classics'
            WHEN rt.DepartmentAcronym = 'CMAL' THEN N'Cultural Studies'
            WHEN rt.DepartmentAcronym = 'CMLIT' THEN N'Comparative Literature'
            WHEN rt.DepartmentAcronym = 'CO-OP' THEN N'Cooperative Education &
Internships'
            WHEN rt.DepartmentAcronym = 'CSCI' THEN N'Computer Science'
            WHEN rt.DepartmentAcronym = 'CUNBA' THEN N'CUNY BA'
            WHEN rt.DepartmentAcronym = 'DANCE' THEN N'Dance'
            WHEN rt.DepartmentAcronym = 'DRAM' THEN N'Drama, Theatre & Dance'
            WHEN rt.DepartmentAcronym = 'EAST' THEN N'East Asian Studies'
            WHEN rt.DepartmentAcronym = 'ECON' THEN N'Economics'
            WHEN rt.DepartmentAcronym = 'ECPCE' THEN N'School Counseling'
            WHEN rt.DepartmentAcronym = 'ECPEL' THEN N'School Leadership'
            WHEN rt.DepartmentAcronym = 'ECPSE' THEN N'Foundations of Special
Education'
            WHEN rt.DepartmentAcronym = 'ECPSP' THEN N'School Psychology'
            WHEN rt.DepartmentAcronym = 'EECE' THEN N'NYS Initial Certification in
Childhood Education'
            WHEN rt.DepartmentAcronym = 'ENGL' THEN N'English'
            WHEN rt.DepartmentAcronym = 'ENSCI' THEN N'Environmental Science'
            WHEN rt.DepartmentAcronym = 'EURO' THEN N'European Language and Literature'
            WHEN rt.DepartmentAcronym = 'FNES' THEN N'Family, Nutrition & Exercise
Sciences'
            WHEN rt.DepartmentAcronym = 'FREN' THEN N'French'
            WHEN rt.DepartmentAcronym = 'GEOL' THEN N'Geology'
            WHEN rt.DepartmentAcronym = 'GERM' THEN N'German'
            WHEN rt.DepartmentAcronym = 'GREEK' THEN N'Greek'
            WHEN rt.DepartmentAcronym = 'GRKMD' THEN N'Modern Greek'
            WHEN rt.DepartmentAcronym = 'GRKST' THEN N'Greek Studies'
            WHEN rt.DepartmentAcronym = 'HEBRW' THEN N'Courses in Hebrew'
            WHEN rt.DepartmentAcronym = 'HIST' THEN N'History'
            WHEN rt.DepartmentAcronym = 'HMNS' THEN N'Honors in the Mathematical &
Natural Sciences'
            WHEN rt.DepartmentAcronym = 'HNRS' THEN N'Honors in the Liberal Arts'
            WHEN rt.DepartmentAcronym = 'HSS' THEN N'Honors in Social Sciences'
            WHEN rt.DepartmentAcronym = 'HTH' THEN N'Honors in the Humanities'
            WHEN rt.DepartmentAcronym = 'IRST' THEN N'Irish Studies'
            WHEN rt.DepartmentAcronym = 'ITAL' THEN N'Italian'
            WHEN rt.DepartmentAcronym = 'JAZZ' THEN N'Jazz'
            WHEN rt.DepartmentAcronym = 'JEWST' THEN N'Jewish Studies'
            WHEN rt.DepartmentAcronym = 'JOURN' THEN N'Journalism'
```

```
WHEN rt.DepartmentAcronym = 'JPNS' THEN N'Japanese'
            WHEN rt.DepartmentAcronym = 'KOR' THEN N'Korean'
            WHEN rt.DepartmentAcronym = 'LABST' THEN N'Labor Studies'
            WHEN rt.DepartmentAcronym = 'LATIN' THEN N'Latin'
            WHEN rt.DepartmentAcronym = 'LBLST' THEN N'Library and Information Studies'
            WHEN rt.DepartmentAcronym = 'LBSCI' THEN N'Libary Science'
            WHEN rt.DepartmentAcronym = 'LCD' THEN N'Linguistics & Communication'
            WHEN rt.DepartmentAcronym = 'LIBR' THEN N'Library'
            WHEN rt.DepartmentAcronym = 'MAM' THEN N'Maintenance Matriculation'
            WHEN rt.DepartmentAcronym = 'MATH' THEN N'Mathematics'
            WHEN rt.DepartmentAcronym = 'MEDST' THEN N'Media Studies'
            WHEN rt.DepartmentAcronym = 'MES' THEN N'Middle Eastern Studies'
            WHEN rt.DepartmentAcronym = 'MUSIC' THEN N'The Aaron Copland School of
Music'
            WHEN rt.DepartmentAcronym = 'PERM' THEN N'Permit to Cuny College'
            WHEN rt.DepartmentAcronym = 'PHIL' THEN N'Philosophy'
            WHEN rt.DepartmentAcronym = 'PHYS' THEN N'Physics'
            WHEN rt.DepartmentAcronym = 'PORT' THEN N'Portuguese'
            WHEN rt.DepartmentAcronym = 'PSCI' THEN N'Political Science'
            WHEN rt.DepartmentAcronym = 'PSYCH' THEN N'Psychology'
            WHEN rt.DepartmentAcronym = 'RLGST' THEN N'Regligious Studies'
            WHEN rt.DepartmentAcronym = 'RM' THEN N'Risk Management'
            WHEN rt.DepartmentAcronym = 'RUSS' THEN N'Russian'
            WHEN rt.DepartmentAcronym = 'SEEK' THEN N'Special Programs'
            WHEN rt.DepartmentAcronym = 'SEYS' THEN N'Secondary Education & Youth
Services!
            WHEN rt.DepartmentAcronym = 'SEYSL' THEN N'Secondary Education: Literacy
Education!
            WHEN rt.DepartmentAcronym = 'SOC' THEN N'Sociology'
            WHEN rt.DepartmentAcronym = 'SPAN' THEN N'Spanish'
            WHEN rt.DepartmentAcronym = 'SPST' THEN N'Interdisciplinary and Special
Studies'
            WHEN rt.DepartmentAcronym = 'STABD' THEN N'Accounting & Information
Systems'
            WHEN rt.DepartmentAcronym = 'STPER' THEN N'Student Personnel'
            WHEN rt.DepartmentAcronym = 'URBST' THEN N'Urban Studies'
            WHEN rt.DepartmentAcronym = 'WGS' THEN N'Women and Gender Studies'
            ELSE 'Unknown Department'
    FROM Uploadfile.RevisedTable AS rt
            DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
            DECLARE @rowcount AS INT
            SELECT @rowcount = COUNT(*) FROM [HR].[Department]
       EXEC [Process].[usp TrackWorkFlow] N'Load
Departments', @rowcount, @starttime, @endtime, @UserAuthorizationKey
END
GO
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.LoadDepartments

[Uploadfile].[RevisedTable] [Process].[usp_TrackWorkFlow] [UDT].[SurrogateKey] FinalProject

Used By

[FinalProject].[LoadInstructionMode]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/28/2022
-- Description: Load InstructionMode Table
CREATE PROCEDURE [FinalProject].[LoadInstructionMode]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO Schedule.InstructionMode
       modeOfInstruction,
       UserAuthorizationKey
   SELECT DISTINCT
       rt.[Mode of Instruction],
       @UserAuthorizationKey
   FROM Uploadfile.RevisedTable AS rt
   -- Insert statements for procedure here
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM Schedule.InstructionMode
   PRINT 'Loaded InstructionMode Table'
   EXEC [Process].[usp_TrackWorkFlow] N'Load InstructionMode
Table', @rowcount, @starttime, @endtime, @UserAuthorizationKey
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.LoadInstructionMode

END GO

Uses

[Schedule].[InstructionMode]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Used By

[FinalProject].[LoadInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
-- Author: Jasmine Kim
-- Create date: 11/26/2022
-- Description: Load Instructor Table
CREATE PROCEDURE [FinalProject].[LoadInstructor]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO hr.Instructor
           FirstName,
           LastName,
           UserAuthorizationKey
       )
   SELECT DISTINCT
       rt.InstructorFirstName,
       rt.InstructorLastName,
       @UserAuthorizationKey
   FROM Uploadfile.RevisedTable AS rt
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM [HR].[Instructor]
   PRINT 'Loaded Instructor Table'
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.LoadInstructor

```
EXEC [Process].[usp_TrackWorkFlow] N'Load
Instructors',@rowcount,@starttime,@endtime,@UserAuthorizationKey
END
GO
```

Uses

[HR].[Instructor]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Used By

[FinalProject].[LoadQueensClassSchedule]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

```
CREATE PROCEDURE [FinalProject].[LoadQueensClassSchedule]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   TRUNCATE TABLE Process.WorkflowSteps
   EXEC FinalProject.DropForeignKeys @UserAuthorizationKey
   EXEC FinalProject.TruncateTable @UserAuthorizationKey
   EXEC [FinalProject].[LoadDepartments] @UserAuthorizationKey
   EXEC [FinalProject].[LoadInstructor] @UserAuthorizationKey
   EXEC FinalProject.LoadDepartmentInstructor @UserAuthorizationKey
   EXEC [FinalProject].[LoadInstructionMode] @UserAuthorizationKey
   EXEC [FinalProject].[loadBuilding] @UserAuthorizationKey
   EXEC [FinalProject].[loadRoom] @UserAuthorizationKey
   EXEC [FinalProject].[loadClassDayTime] @UserAuthorizationKey
   EXEC [FinalProject].[loadCourse] @UserAuthorizationKey
   EXEC [FinalProject].[LoadClass]
                                      @UserAuthorizationKey
   EXEC FinalProject.AddForeignKeys @UserAuthorizationKey
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT = 0
   PRINT 'Loaded QueensClassSchedule Database'
```

```
EXEC [Process].[usp_TrackWorkFlow] N'Load QueensClassSchedule
Database',@rowcount,@starttime,@endtime,@UserAuthorizationKey
END
GO
```

Uses

[Process].[WorkflowSteps]

[FinalProject].[AddForeignKeys]

[FinalProject].[DropForeignKeys]

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

[FinalProject].[LoadInstructionMode]

[FinalProject].[LoadInstructor]

[FinalProject].[loadRoom]

[FinalProject].[TruncateTable]

[Process].[usp_TrackWorkFlow]

[UDT].[SurrogateKey]

FinalProject

[FinalProject].[loadRoom]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

SQL Script

```
-- Author: Jasmine Kim
-- Create date: 11/27/2022
-- Description: Load Room Table
CREATE PROCEDURE [FinalProject].[loadRoom]
   @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   INSERT INTO Ground.Room
       buildingId,
       roomNum,
       UserAuthorizationKey
   SELECT DISTINCT
      b.buildingId,
       rt.Room,
       @UserAuthorizationKey
   FROM Uploadfile.RevisedTable AS rt
       INNER JOIN Ground.Building AS b
           ON b.abbreviation = rt.BuildingAcronym
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT
   SELECT @rowcount = COUNT(*) FROM Ground.[Room]
   PRINT 'Loaded DeptInstructor Room Table'
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.loadRoom

```
EXEC [Process].[usp_TrackWorkFlow] N'Load Room
Table',@rowcount,@starttime,@endtime,@UserAuthorizationKey
END
GO
```

Uses

[Ground].[Building]
[Ground].[Room]
[Uploadfile].[RevisedTable]
[Process].[usp_TrackWorkFlow]
[UDT].[SurrogateKey]
FinalProject

Used By

[FinalProject].[LoadQueensClassSchedule]

[FinalProject].[TruncateTable]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

SQL Script

```
-- Author: Jasmine Kim
-- Create date: 12/3/2022
-- Description: Truncate Tables
CREATE PROCEDURE [FinalProject].[TruncateTable]
@UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
   DECLARE @starttime AS DATETIME2(7) = SYSDATETIME()
   SET NOCOUNT ON;
   TRUNCATE TABLE Enrollment.Class
   TRUNCATE TABLE [Enrollment].[Course]
   TRUNCATE TABLE Schedule.InstructionMode
   TRUNCATE TABLE [Schedule].[ClassDayTime]
   TRUNCATE TABLE [HR].[DepartmentInstructor]
   TRUNCATE TABLE [HR].[Department]
   TRUNCATE TABLE [HR].[Instructor]
   TRUNCATE TABLE [Ground].[Room]
   TRUNCATE TABLE [Ground].[Building]
   DECLARE @endtime AS DATETIME2(7) = SYSDATETIME()
   DECLARE @rowcount AS INT = 0
   PRINT 'Trucated Tables'
   EXEC [Process].[usp TrackWorkFlow] N'Truncate
```

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Programmability > Stored Procedures > FinalProject.TruncateTable

```
Tables', @rowcount, @starttime, @endtime, @UserAuthorizationKey
END
GO
```

Uses

[Enrollment].[Class]

[Enrollment].[Course]

[Ground].[Building]

[Ground].[Room]

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

[Process].[usp_TrackWorkFlow]

[UDT].[SurrogateKey]

FinalProject

Used By

[FinalProject].[LoadQueensClassSchedule]

[Process].[usp_ShowWorkFlowSteps]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@UserAuthorizationKey	SurrogateKey	4

SQL Script

Uses

[Process].[WorkflowSteps] [UDT].[SurrogateKey] Process

[Process].[usp_TrackWorkFlow]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@WorkFlowDescription	WFSDescription	40
@WorkFlowStepTableRowCount	WFSRowCount	4
@StartTime	StartTime	8
@EndTime	EndTime	8
@UserAuthorizationKey	SurrogateKey	4

SQL Script

```
-- -----
-- Author: Philip Charles
-- Create date: 11/21/2022
-- Description: Track Work Flow
-- -----
CREATE PROCEDURE [Process].[usp_TrackWorkFlow]
    @WorkFlowDescription [UDT].[WFSDescription]
   , @WorkFlowStepTableRowCount [UDT].[WFSRowCount]
   , @StartTime [UDT].[StartTime]
   , @EndTime [UDT].[EndTime]
   , @UserAuthorizationKey [UDT].[SurrogateKey]
AS
BEGIN
  SET NOCOUNT ON;
   INSERT INTO Process.WorkflowSteps (
     WorkFlowStepDescription
      ,WorkFlowStepTableRowCount
      ,StartingDateTime
      ,EndingDateTime
      ,UserAuthorizationKey
```

Uses

[Process].[WorkflowSteps]

[UDT].[EndTime]

[UDT].[StartTime]

[UDT].[SurrogateKey]

[UDT].[WFSDescription]

[UDT].[WFSRowCount]

Process

Used By

[FinalProject].[AddForeignKeys]

[FinalProject].[DropForeignKeys]

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

[FinalProject].[LoadInstructionMode]

[FinalProject].[LoadInstructor]

[FinalProject].[LoadQueensClassSchedule]

[FinalProject].[loadRoom]

[FinalProject].[TruncateTable]

■ 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

SQL Script

```
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')
   Returns: >
     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
);
GO
```

🖳 [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-
slotal&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
  , Parent ID int
in this 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
          , @array int = 4
          , @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
                    int
         , @ii
         , @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
            , '-'
             , "
             , case @firstchar
                  when '[' then
                      'array'
                  else
                      'object'
              end;
                               = case @firstchar
       select @type
                                      when '[' then
                                          @array
                                      else
                                          @object
            , @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
                                 null
                             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
         , ''
         , 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
```

iii User-Defined Data Types

Objects

Name
UDT.Abbreviation
UDT.BuildingName
UDT.ClassCode
UDT.ClassSection
UDT.ClassTime
UDT.CourseClassDay
UDT.CourseClassTime
UDT.CourseCode
UDT.CourseCredit
UDT.CourseDescription
UDT.CourseHour
UDT.DateAdded
UDT.DateOfLastUpdate
UDT.DepartmentCode
UDT.DepartmentName
UDT.EndTime
UDT.Enrollment
UDT.FirstName
UDT.GroupName
UDT.IndividualProject
UDT.LastName
UDT.MaxEnrollment
UDT.ModeOfInstruction
UDT.RoomNum
UDT.StartTime
UDT.SurrogateKey
UDT.WFSDescription
UDT.WFSRowCount

[UDT].[Abbreviation]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nchar
Length	10

SQL Script

CREATE TYPE [UDT].[Abbreviation] FROM nchar (10) NOT NULL
GO

Uses

UDT

Used By

[Ground].[Building]

[UDT].[BuildingName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [UDT].[BuildingName] FROM nvarchar (20) NOT NULL
GO

Uses

UDT

Used By

[Ground].[Building]

[UDT].[ClassCode]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	5

SQL Script

CREATE TYPE [UDT].[ClassCode] FROM nvarchar (5) NULL
GO

Uses

UDT

Used By

[Enrollment].[Class]

[UDT].[ClassSection]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	4

SQL Script

CREATE TYPE [UDT].[ClassSection] FROM nvarchar (4) NULL
GO

Uses

UDT

Used By

[Enrollment].[Class]

[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].[CourseClassDay]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	10

SQL Script

CREATE TYPE [UDT].[CourseClassDay] FROM nvarchar (10) NULL
GO

Uses

UDT

Used By

[Schedule].[ClassDayTime]

[UDT].[CourseClassTime]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [UDT].[CourseClassTime] FROM nvarchar (20) NULL
GO

Uses

UDT

Used By

[Schedule].[ClassDayTime]

[UDT].[CourseCode]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	10

SQL Script

CREATE TYPE [UDT].[CourseCode] FROM nvarchar (10) NOT NULL
GO

Uses

UDT

Used By

[UDT].[CourseCredit]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	2

SQL Script

CREATE TYPE [UDT].[CourseCredit] FROM nvarchar (2) NULL
GO

Uses

UDT

Used By

[UDT].[CourseDescription]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	40

SQL Script

CREATE TYPE [UDT].[CourseDescription] FROM nvarchar (40) NOT NULL
GO

Uses

UDT

Used By

[UDT].[CourseHour]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	5

SQL Script

CREATE TYPE [UDT].[CourseHour] FROM nvarchar (5) NULL
GO

Uses

UDT

Used By

[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]

[Enrollment].[Class]

[Enrollment].[Course]

[Ground].[Building]

[Ground].[Room]

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Process].[WorkflowSteps]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

[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

[DbSecurity].[UserAuthorization]

[Enrollment].[Class]

[Enrollment].[Course]

[Ground].[Building]

[Ground].[Room]

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Process].[WorkflowSteps]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

[UDT].[DepartmentCode]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	10

SQL Script

CREATE TYPE [UDT].[DepartmentCode] FROM nvarchar (10) NOT NULL
GO

Uses

UDT

Used By

[HR].[Department]

[UDT].[DepartmentName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [UDT].[DepartmentName] FROM nvarchar (50) NOT NULL
GO

Uses

UDT

Used By

[HR].[Department]

" [UDT].[EndTime]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	datetime2
Length	8

SQL Script

CREATE TYPE [UDT].[EndTime] FROM datetime2 NOT NULL
GO

Uses

UDT

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlow]

[UDT].[Enrollment]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [UDT].[Enrollment] FROM int NULL
GO

Uses

UDT

Used By

[Enrollment].[Class]

[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

[DbSecurity].[UserAuthorization] [HR].[Instructor]

[UDT].[GroupName]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	7

SQL Script

CREATE TYPE [UDT].[GroupName] FROM nvarchar (7) 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

[DbSecurity].[UserAuthorization] [HR].[Instructor]

[UDT].[MaxEnrollment]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [UDT].[MaxEnrollment] FROM int NULL
GO

Uses

UDT

Used By

[Enrollment].[Class]

[UDT].[ModeOfInstruction]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	15

SQL Script

CREATE TYPE [UDT].[ModeOfInstruction] FROM nvarchar (15) NULL
GO

Uses

UDT

Used By

[Schedule].[InstructionMode]

iii [UDT].[RoomNum]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	5

SQL Script

CREATE TYPE [UDT].[RoomNum] FROM nvarchar (5) NULL
GO

Uses

UDT

Used By

[Ground].[Room]

[UDT].[StartTime]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	datetime2
Length	8

SQL Script

CREATE TYPE [UDT].[StartTime] FROM datetime2 NOT NULL
GO

Uses

UDT

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlow]

[UDT].[SurrogateKey]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

```
CREATE TYPE [UDT].[SurrogateKey] FROM int NULL
GO
```

Uses

UDT

Used By

[DbSecurity].[UserAuthorization]

[Enrollment].[Class]

[Enrollment].[Course]

[Ground].[Building]

[Ground].[Room]

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

[Process].[WorkflowSteps]

[Schedule].[ClassDayTime]

[Schedule].[InstructionMode]

[FinalProject].[AddForeignKeys]

[FinalProject].[DropForeignKeys]

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

[FinalProject].[LoadInstructionMode]

[FinalProject].[LoadInstructor]

[FinalProject].[LoadQueensClassSchedule]

[FinalProject].[loadRoom]

[FinalProject].[TruncateTable]

[Process].[usp_ShowWorkFlowSteps]

 $\label{local-project} Project > LOCALHOST, 13001 > User\ databases > QueensClassSchedule > Programmability > Types > User-Defined\ Data\ Types > UDT. SurrogateKey$

[Process].[usp_TrackWorkFlow]

[UDT].[WFSDescription]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [UDT].[WFSDescription] FROM nvarchar (20) NOT NULL
GO

Uses

UDT

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlow]

[UDT].[WFSRowCount]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [UDT].[WFSRowCount] FROM int NULL
GO

Uses

UDT

Used By

[Process].[WorkflowSteps]
[Process].[usp_TrackWorkFlow]



Objects

ame	
Student	
0	
C3\thehitman	
est	
udent	



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

Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Security > Roles > Database Roles > 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

nublic 🕰

Properties

Property	Value
Owner	dbo

△ Schemas

Objects

Name
DbSecurity
Enrollment
FinalProject
Ground
GroupNameProject3
HR
Process
Schedule
UDT
Uploadfile
Utils
YourLastName

♣ DbSecurity

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[DbSecurity].[UserAuthorization]

△ Enrollment

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Enrollment].[Class] [Enrollment].[Course]

♣ FinalProject

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[FinalProject].[AddForeignKeys]

[FinalProject].[DropForeignKeys]

[FinalProject].[loadBuilding]

[FinalProject].[LoadClass]

[FinalProject].[loadClassDayTime]

[FinalProject].[loadCourse]

[FinalProject].[LoadDepartmentInstructor]

[FinalProject].[LoadDepartments]

[FinalProject].[LoadInstructionMode]

[FinalProject].[LoadInstructor]

[FinalProject].[LoadQueensClassSchedule]

[FinalProject].[loadRoom]

[Final Project]. [Truncate Table]

△ Ground

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Ground]
AUTHORIZATION [dbo]
GO

Used By

[Ground].[Building] [Ground].[Room] Project > LOCALHOST,13001 > User databases > QueensClassSchedule > Security > Schemas > GroupName-Project3

Properties

Property	Value
Owner	dbo

SQL Script

```
CREATE SCHEMA [GroupNameProject3]
AUTHORIZATION [dbo]
GO
```



Property	Value
Owner	dbo

SQL Script

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

Used By

[HR].[Department]

[HR].[DepartmentInstructor]

[HR].[Instructor]

⚠ Process

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Process].[WorkflowSteps]
[Process].[usp_ShowWorkFlowSteps]
[Process].[usp_TrackWorkFlow]

△ Schedule

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Schedule].[ClassDayTime] [Schedule].[InstructionMode]

∆ UDT

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[UDT].[Abbreviation]

[UDT].[BuildingName]

[UDT].[ClassCode]

[UDT].[ClassSection]

[UDT].[ClassTime]

[UDT].[CourseClassDay]

[UDT].[CourseClassTime]

[UDT].[CourseCode]

[UDT].[CourseCredit]

[UDT].[CourseDescription]

[UDT].[CourseHour]

[UDT].[DateAdded]

[UDT].[DateOfLastUpdate]

[UDT].[DepartmentCode]

[UDT].[DepartmentName]

[UDT].[EndTime]

[UDT].[Enrollment]

[UDT].[FirstName]

[UDT].[GroupName]

[UDT].[IndividualProject]

[UDT].[LastName]

[UDT].[MaxEnrollment]

[UDT].[ModeOfInstruction]

[UDT].[RoomNum]

[UDT].[StartTime]

[UDT].[SurrogateKey]

[UDT].[WFSDescription]

[UDT].[WFSRowCount]

♣ Uploadfile

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Uploadfile].[CurrentSemesterCourseOfferings] [Uploadfile].[RevisedTable]

⚠ Utils

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

 $[Utils]. [uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint] \\$

△ YourLastName

Properties

Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [YourLastName]
AUTHORIZATION [dbo]
GO