127.0.0.1,13001

Group3-EuropeanCarManufacturerSQLServer2019

Server 127.0.0.1,13001

Author StudentCSCl381Erwin

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13.pdf

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Databases (1)

• 🛮 Group3-EuropeanCarManufacturerSQLServer2019

Server Properties

Property	Value
Product	Microsoft SQL Server
Version	15.0.4236.7
Language	English
Platform	NT x64
Edition	Developer Edition (64-bit)
Engine Edition	3 (Enterprise)
Processors	4
OS Version	6.2 (9200)
Physical Memory	10225
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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\Box U	lser	data	bas	es

Databases (1)

Group3-EuropeanCarManufacturerSQLServer2019

Database Properties

Property	Value
SQL Server Version	SqlServer2019
Compatibility Level	SqlServer2019
Last backup time	12/07/2023
Last log backup time	-
Creation date	Dec 7 2023
Users	4
Database Encryption Enabled	False
Database Encryption Algorithm	None
Database size	80.00 MB
Unallocated space	3.19 MB

Database Options

Property	Value
Compatibility Level	150
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	60459b59-fd7a-49e9-bee7-965f7d9c7b49
Service broker enabled	False
Date correlation	False
CDC enabled	False
Encrypted	False
Honor broker priority	False
Default language	English
Default fulltext language LCID	1033
Nested triggers enabled	True
Transform noise words	False
Two-digit year cutoff	2049
Containment	NONE
Target recovery time	60
Database owner	sa

Files

Name	Туре	Size	Maxsize	Autogrowth	File Name
Group3-EuropeanCarManufacturer- SQLServer2019	Data	8.00 MB	unlimited	64.00 MB	/var/opt/mssql/data/G roup3-EuropeanCar- Manufacturer- SQLServer2019.mdf
Group3-EuropeanCarManufacturer- SQLServer2019_log	Log	72.00 MB	2048.00 GB	64.00 MB	/var/opt/mssql/log/Gr oup3-EuropeanCar- Manufacturer-

		SQLServer2019_log.l
		df

■ Tables

Objects

Name

Audit.HumanResourcesStaffHistory

The audit history table for Staff

Audit.LocaleCountryHistory

The audit history table for Country

Audit.ProductionManufacturerModelHistory

The audit history table for ManufacturerModel

Audit.ProductionManufacturerVehicleMakeHistory

The audit history table for ManufacturerVehicleMake

Audit.ProductionManufacturerVehicleStockHistory

The audit history table for ManufacturerVehicleStock

Audit.SalesCustomerHistory

The audit history table for Customer

Audit.SalesSalesOrderVehicleDetailHistory

The audit history table for SalesOrderVehicleDetail

Audit.SalesSalesOrderVehicleHistory

The audit history table for SalesOrderVehicle

DbSecurity.UserAuthorization

The authorization of database actions by a user

HumanResources.Staff

A staff member of the business who sells vehicles to customers

Locale.Country

A country or territory in the world

Production.ManufacturerModel

The model of a particular vehicle created by the manufacturer

Production.ManufacturerVehicleMake

The company responsible for the production of a vehicle

Production.ManufacturerVehicleStock

A produced physical vehicle that a manufacturer has in stock

Sales.Customer

A person who purchases a vehicle from the business

Sales.SalesOrderVehicle

An order for the purchase of a vehicle

Sales.SalesOrderVehicleDetail

The details of a vehicle order

☐ [Audit].[HumanResourcesStaffHistory]

MS_Description

The audit history table for Staff

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:43 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P	Staffld A unique identifier for staff members	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	StaffName The full name of a staff member	[sdNameString].[FullName- String]	120	NOT NULL	
	Department The department name a staff member works in	[sdBusinessComponent- String].[DepartmentString]	30	NULL allowed	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	Managerld The ID of a staff member that supervises an employee	[sdKey].[SurrogateKeyInteger]	4	NULL allowed	
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
<i>></i>	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	

PK	StaffHistoryId A unique identifier for audit entries in HumanResourcesStaffHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Human- Resour cesStaff- History Id])
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Key	Name	Key Columns	Unique
PK	XPKStaffHistory	StaffHistoryId	True
/	XIE1Human_Resources_Staff_History	Staffld, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_Audit_HumanResourcesStaffHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[HumanResourcesStaffHistory]

(
[StaffId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[StaffName] [sdNameString].[FullNameString] NOT NULL,

[Department] [sdBusinessComponentString].[DepartmentString] NULL,

[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[SysStartTime] [sdDateTime].[DateTimestamp] NULL,

[SysEndTime] [sdDateTime].[DateTimestamp] NULL,

[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,

[ManagerId] [sdKey].[SurrogateKeyInteger] NULL,

[Note] [sdLongTextString].[Note] NULL,

[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,

[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
```

```
[StaffHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Audit Human-
ResourcesStaffHistory Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Audit Human-
ResourcesStaffHistory Id]),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Audit Human-
ResourcesStaffHistory_AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Audit].[HumanResourcesStaffHistory] ADD CONSTRAINT [CK Audit Human-
ResourcesStaffHistory DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR
[DBAction]='D'))
ALTER TABLE [Audit].[HumanResourcesStaffHistory] ADD CONSTRAINT [XPKStaffHistory]
PRIMARY KEY NONCLUSTERED ([StaffHistoryId]) ON [PRIMARY]
CREATE CLUSTERED INDEX [XIE1Human Resources Staff History] ON [Audit].[HumanResources-
StaffHistory] ([StaffId], [TransactionNumber] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for Staff',
'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'AuditDateTimeStamp'
GO
{\tt EXEC} \ {\tt sp\_addextended} property \ {\tt N'MS\_Description', \ N'Represents \ the \ type \ of \ action \ that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaff-
History', 'COLUMN', N'DBAction'
EXEC sp_addextendedproperty N'MS_Description', N'The department name a staff member
works in', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'Department'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'FireAuditTrigger'
GO
EXEC sp addextendedproperty N'MS_Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit, 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'IsDeleted'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The ID of a staff member that
supervises an employee', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory',
'COLUMN', N'ManagerId'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'Note'
GO
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN', N'PriorRow-
LevelHashKey'
EXEC sp addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory',
'COLUMN', N'RowLevelHashKey'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for audit entries
```

```
in HumanResourcesStaffHistory', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaff-
History', 'COLUMN', N'StaffHistoryId'
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for staff
members, 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN', N'Staff-
Id'
GO
EXEC sp addextendedproperty N'MS Description', N'The full name of a staff member',
'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN', N'StaffName'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'SysEndTime'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory', 'COLUMN',
N'SysStartTime'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory',
'COLUMN', N'TransactionNumber'
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'HumanResourcesStaffHistory',
'COLUMN', N'UserAuthorizationId'
```

[sdAudit].[DbAction]
[sdBusinessComponentString].[DepartmentString]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdNameString].[FullNameString]
[sdOrdinalNumber].[TransactionNumber]
Audit

Used By

[Audit].[vwFindUniqueTablePkyHumanResourcesStaff] [Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

☐ [Audit].[LocaleCountryHistory]

MS_Description

The audit history table for Country

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:43 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	CountryISO3 The ISO3 format of a country	[sdCountryString- Variant].[CountryISO3]	6	NOT NULL	
	CountryName The name of the country	[sdAddressesString].[Country- String]	100	NOT NULL	
	CountryISO2 The ISO2 format of a country	[sdCountryString- Variant].[CountryISO2]	4	NOT NULL	
	SalesRegion The name of the sales region a coutry belongs to	[sdAddressesString].[Region- String]	40	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
P/P	LocaleCountryHistoryId A unique identifier for audit entries in LocaleCountryHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Locale- Country- History

					ld])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
/	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Key	Name	Key Columns	Unique
PK	PK_CountryHistory	LocaleCountryHistoryId	True
/	XIE1Locale_Country_History	Countryld, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_Audit_LocaleCountryHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[LocaleCountryHistory]

(

[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[CountryISO3] [sdCountryStringVariant].[CountryISO3] NOT NULL,

[CountryName] [sdAddressesString].[CountryString] NOT NULL,

[CountryISO2] [sdCountryStringVariant].[CountryISO2] NOT NULL,

[SalesRegion] [sdAddressesString].[RegionString] NOT NULL,

[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[SysStartTime] [sdDateTime].[DateTimestamp] NULL,

[SysEndTime] [sdDateTime].[DateTimestamp] NULL,

[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,

[LocaleCountryHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF_Audit_-LocaleCountryHistory_Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Audit_Locale-CountryHistory_Id]),
```

```
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Audit Locale-
CountryHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Audit].[LocaleCountryHistory] ADD CONSTRAINT [CK Audit LocaleCountry-
History DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D'))
ALTER TABLE [Audit].[LocaleCountryHistory] ADD CONSTRAINT [PK CountryHistory] PRIMARY
KEY NONCLUSTERED ([LocaleCountryHistoryId]) ON [PRIMARY]
CREATE CLUSTERED INDEX [XIE1Locale Country History] ON [Audit].[LocaleCountryHistory]
([CountryId], [TransactionNumber] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for Country',
'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'Audit-
DateTimeStamp'
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'CountryId'
EXEC sp addextendedproperty N'MS Description', N'The ISO2 format of a country',
'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'CountryISO2'
EXEC sp addextendedproperty N'MS Description', N'The ISO3 format of a country',
'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'CountryISO3
EXEC sp addextendedproperty N'MS Description', N'The name of the country', 'SCHEMA',
N'Audit, 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'CountryName'
EXEC sp addextendedproperty N'MS_Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory',
'COLUMN', N'DBAction'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN',
N'FireAuditTrigger'
EXEC sp addextendedproperty N'MS Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit, 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'Is-
Deleted'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for audit entries in LocaleCountryHistory', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory',
'COLUMN', N'LocaleCountryHistoryId'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
```

```
key', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'PriorRowLevel-
GO
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN',
N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The name of the sales region a coutry
belongs to', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'Sales-
Region'
GO
EXEC sp addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'SysEnd-
GO
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN', N'Sys-
StartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN',
N'TransactionNumber'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'LocaleCountryHistory', 'COLUMN',
N'UserAuthorizationId'
GO
```

[sdAddressesString].[CountryString]
[sdAddressesString].[RegionString]
[sdAudit].[DbAction]
[sdCountryStringVariant].[CountryISO2]
[sdCountryStringVariant].[CountryISO3]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
Audit

Used By

[Audit].[vwFindUniqueTablePkyLocaleCountry]
[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

☐ [Audit].[ProductionManufacturerModelHistory]

MS_Description

The audit history table for ManufacturerModel

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:44 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
/	ManufacturerModelId A unique identifier for vehicle models	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	ManufacturerModelName The name of a vehicle model	[sdVehicleString].[Vehicle- ModelString]	70	NOT NULL	
	ManufacturerModelVariant The name of a vehicle model variant if applicable	[sdVehicleString].[Vehicle-ModelString]	70	NULL allowed	
	ManufacturerVehicleMakeId A unique identifier for vehicle makes	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
PK [®]	ProductionManufacturerModelHistoryId A unique identifier for audit entries in ProductionManufacturerModelHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Producti on- Manufa cturer- Model-

					History Id])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
P	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Key	Name	Key Columns	Unique
PK	XPK_ModelHistory	ProductionManufacturer- ModelHistoryId	True
<i>></i>	XIE1Production_Manufacturer_Model_History	ManufacturerModelld, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_ProductionManufacturerVehicleModelHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[ProductionManufacturerModelHistory]

(
[ManufacturerModelId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[ManufacturerModelName] [sdVehicleString].[VehicleModelString] NOT NULL,
[ManufacturerModelVariant] [sdVehicleString].[VehicleModelString] NULL,
[ManufacturerVehicleMakeId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL,
[SysEndTime] [sdDateTime].[DateTimestamp] NULL,
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[ProductionManufacturerModelHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL
CONSTRAINT [DF_Audit_ProductionManufacturerVehicleModelHistory_Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Audit_ProductionManufacturerModelHistory_Id]),
```

```
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Production-
ManufacturerVehicleModelHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Audit].[ProductionManufacturerModelHistory] ADD CONSTRAINT [CK Production-
ManufacturerVehicleModelHistory DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR
[DBAction] = 'D'))
ALTER TABLE [Audit].[ProductionManufacturerModelHistory] ADD CONSTRAINT [XPK Model-
History] PRIMARY KEY NONCLUSTERED ([ProductionManufacturerModelHistoryId]) ON [PRIMARY]
CREATE CLUSTERED INDEX [XIE1Production Manufacturer Model History] ON
[Audit].[ProductionManufacturerModelHistory] ([ManufacturerModelId], [Transaction-
Number] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for
ManufacturerModel', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
NULL, NULL
GO
EXEC sp_addextendedproperty N'MS_Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'AuditDateTimeStamp'
EXEC sp addextendedproperty N'MS Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModel-
History', 'COLUMN', N'DBAction'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'FireAuditTrigger'
EXEC sp addextendedproperty N'MS Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit, 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'IsDeleted'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for vehicle
models', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory', 'COLUMN',
N'ManufacturerModelId'
EXEC sp addextendedproperty N'MS Description', N'The name of a vehicle model',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory', 'COLUMN',
N'ManufacturerModelName'
EXEC sp addextendedproperty N'MS Description', N'The name of a vehicle model variant if
applicable', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'ManufacturerModelVariant'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for vehicle
makes', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory', 'COLUMN',
N'ManufacturerVehicleMakeId'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
```

```
'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory', 'COLUMN',
N'PriorRowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for audit entries
in ProductionManufacturerModelHistory', 'SCHEMA', N'Audit', 'TABLE', N'Production-
ManufacturerModelHistory', 'COLUMN', N'ProductionManufacturerModelHistoryId'
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'RowLevelHashKey'
EXEC sp_addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'SysEndTime'
GO
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModel-
History', 'COLUMN', N'TransactionNumber'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerModelHistory',
'COLUMN', N'UserAuthorizationId'
```

[sdAudit].[DbAction]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleModelString]
Audit

Used By

[Audit].[vwFindUniqueTablePkyProductionManufacturerModel]
[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[ProductionManufacturerVehicleMakeHistory]

MS_Description

The audit history table for ManufacturerVehicleMake

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:44 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
/	ManufacturerVehicleMakeld A unique identifier for vehicle makes	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	ManufacturerVehicleMakeName The name of a vehicles make	[sdVehicleString].[VehicleMake-String]	60	NOT NULL	
	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
PK	ProductionManufacturerVehicleMake-HistoryId A unique identifier for audit entries in ProductionManufacturerVehicleMake-History	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Producti on- Manufa cturer- Vehicle- Make- History Id])

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Audit.ProductionManufacturerVehicleMakeHistory

	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
<i>P</i>	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
■	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	
	MarketingType The marketing type of a vehicle make	[sdVehicleString].[Vehicle- ManufacturerMarketingType]	50	NULL allowed	

Key	Name	Key Columns	Unique
PK	XPK_MakeHistory	Production- ManufacturerVehicle- MakeHistoryId	True
<i>></i>	XIE1Production_Manufacturer_Vehicle_Make_History	ManufacturerVehicle- Makeld, Transaction- Number DESC	

Check Constraints

Name	On Column	Constraint
CK_Audit_ProductionManufacturerVehicleHistory_AuditDateTimeStamp	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[ProductionManufacturerVehicleMakeHistory]

(
[ManufacturerVehicleMakeId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[ManufacturerVehicleMakeName] [sdVehicleString].[VehicleMakeString] NOT NULL,

[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[SysStartTime] [sdDateTime].[DateTimestamp] NULL,

[SysEndTime] [sdDateTime].[DateTimestamp] NULL,

[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,

[ProductionManufacturerVehicleMakeHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL
```

```
CONSTRAINT [DF Audit ProductionManufacturerVehicleMakeHistory Id] DEFAULT (NEXT VALUE
FOR [SequenceIdInsert].[Audit ProductionManufacturerVehicleMakeHistory Id]),
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Production-
ManufacturerVehicleMakeHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL,
[MarketingType] [sdVehicleString].[VehicleManufacturerMarketingType] NULL
) ON [PRIMARY]
GO
ALTER TABLE [Audit].[ProductionManufacturerVehicleMakeHistory] ADD CONSTRAINT [CK -
Audit ProductionManufacturerVehicleHistory AuditDateTimeStamp] CHECK (([DBAction]='U'
OR [DBAction]='I' OR [DBAction]='D'))
ALTER TABLE [Audit].[ProductionManufacturerVehicleMakeHistory] ADD CONSTRAINT [XPK Make-
History] PRIMARY KEY NONCLUSTERED ([ProductionManufacturerVehicleMakeHistoryId]) ON
[PRIMARY]
GO
CREATE CLUSTERED INDEX [XIE1Production Manufacturer_Vehicle_Make_History] ON
[Audit].[ProductionManufacturerVehicleMakeHistory] ([ManufacturerVehicleMakeId],
[TransactionNumber] DESC) ON [PRIMARY]
EXEC sp_addextendedproperty N'MS_Description', N'The audit history table for ManufacturerVehicleMake', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicle-
MakeHistory', NULL, NULL
GO
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMake-
History', 'COLUMN', N'AuditDateTimeStamp'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA, N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory', 'COLUMN',
N'CountryId'
GO
EXEC sp addextendedproperty N'MS Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturer-VehicleMakeHistory', 'COLUMN', N'DBAction'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMake-
History', 'COLUMN', N'FireAuditTrigger'
{\tt EXEC} \  \, {\tt sp} \  \, {\tt addextended} property \  \, {\tt N'MS\_Description'}, \  \, {\tt N'Flag} \  \, {\tt used} \  \, {\tt to} \  \, {\tt check} \  \, {\tt if} \  \, {\tt an} \  \, {\tt entry} \  \, {\tt has}
been deleted', 'SCHEMA', N'Audit, 'TABLE', N'ProductionManufacturerVehicleMake-
History', 'COLUMN', N'IsDeleted'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for vehicle
makes', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory', 'COLUMN', N'ManufacturerVehicleMakeId'
EXEC sp addextendedproperty N'MS Description', N'The name of a vehicles make',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory', 'COLUMN',
N'ManufacturerVehicleMakeName'
EXEC sp addextendedproperty N'MS Description', N'The marketing type of a vehicle make',
'SCHEMA, N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory', 'COLUMN',
```

```
N'MarketingType'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory',
'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory',
'COLUMN', N'PriorRowLevelHashKey'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for audit entries
in ProductionManufacturerVehicleMakeHistory', 'SCHEMA', N'Audit', 'TABLE', N'Production-
ManufacturerVehicleMakeHistory', 'COLUMN', N'ProductionManufacturerVehicleMakeHistory-
GO
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMake-
History', 'COLUMN', N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory',
'COLUMN', N'SysEndTime
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMakeHistory',
'COLUMN', N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicle-MakeHistory', 'COLUMN', N'TransactionNumber'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleMake-
History', 'COLUMN', N'UserAuthorizationId'
GO
```

[sdAudit].[DbAction]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleManufacturerMarketingType]
Audit

Used By

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleMake] [Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[ProductionManufacturerVehicleStockHistory]

MS_Description

The audit history table for ManufacturerVehicleStock

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:44 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
<i>P</i>	ManufacturerVehicleStockId A unique identifier for manfacturer vehicle stock	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	StockCode The stock code of a vehicle	[sdShortTextString].[Stock-Code]	100	NOT NULL	
	Cost The cost of a vehicle from the manufacturer	[sdNumber].[Currency]	9	NOT NULL	
	RepairsCharge The charge for repairs on a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	PartsCharge The charge for parts on a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	DeliveryCharge The charge for delivery of a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	IsPremiumRoadHandlingPackage A flag to determine if a vehicle has a premium road handling package	[sdFlag].[FlagBit]	4	NOT NULL	
	VehicleColor The color of the vehicle	[sdVehicleString].[Vehicle-Color]	40	NOT NULL	
	CustomerComment A comment added by a customer	[sdLongTextString].[Customer-Comments]	400	NULL allowed	
	Modelld A unique identifier for vehicle models	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	PurchaseDate The date of purchase	[sdDate].[DateYYYYMMDD]	3	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	

	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
PK9	ProductionManufacturerVehicleStock-HistoryId A unique identifier for audit entries in ProductionManufacturerVehicleStock-History	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Producti on- Manufa cturer- Vehicle- Stock- History Id])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
/	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
■	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Key	Name	Key Columns	Unique
PK	XPK_StockHistory	Production- ManufacturerVehicle- StockHistoryId	True
/	XIE1Production_Manufacturer_Vehicle_Stock_History	ManufacturerVehicle- StockId, Transaction- Number DESC	

Check Constraints

CK_ProductionManufacturerVehicleStockHistory_DBAction DB	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')
--	----------	--

```
CREATE TABLE [Audit].[ProductionManufacturerVehicleStockHistory]
[ManufacturerVehicleStockId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[StockCode] [sdShortTextString].[StockCode] NOT NULL,
[Cost] [sdNumber].[Currency] NOT NULL,
[RepairsCharge] [sdNumber].[Currency] NOT NULL,
[PartsCharge] [sdNumber].[Currency] NOT NULL,
[DeliveryCharge] [sdNumber].[Currency] NOT NULL,
[IsPremiumRoadHandlingPackage] [sdFlag].[FlagBit] NOT NULL,
[VehicleColor] [sdVehicleString].[VehicleColor] NOT NULL,
[CustomerComment] [sdLongTextString].[CustomerComments] NULL,
[ModelId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[PurchaseDate] [sdDate].[DateYYYYMMDD] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL,
[SysEndTime] [sdDateTime].[DateTimestamp] NULL,
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[ProductionManufacturerVehicleStockHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL
CONSTRAINT [DF Audit ProductionManufacturerVehicleStockHistory Id] DEFAULT (NEXT VALUE
FOR [SequenceIdInsert].[Audit ProductionManufacturerVehicleStockHistory Id]),
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Production-
ManufacturerVehicleStockHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL
ON [PRIMARY]
ALTER TABLE [Audit].[ProductionManufacturerVehicleStockHistory] ADD CONSTRAINT [CK -
ProductionManufacturerVehicleStockHistory DBAction] CHECK (([DBAction]='U' OR
[DBAction]='I' OR [DBAction]='D'))
ALTER TABLE [Audit].[ProductionManufacturerVehicleStockHistory] ADD CONSTRAINT [XPK -
StockHistory] PRIMARY KEY NONCLUSTERED ([ProductionManufacturerVehicleStockHistoryId])
ON [PRIMARY]
CREATE CLUSTERED INDEX [XIE1Production Manufacturer Vehicle Stock History] ON
[Audit].[ProductionManufacturerVehicleStockHistory] ([ManufacturerVehicleStockId],
[TransactionNumber] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for
ManufacturerVehicleStock', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicle-
StockHistory', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'AuditDateTimeStamp'
```

```
EXEC sp_addextendedproperty N'MS_Description', N'The cost of a vehicle from the
manufacturer', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'Cost'
GO
EXEC sp addextendedproperty N'MS Description', N'A comment added by a customer',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN',
N'CustomerComment'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Represents the type of action that took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturer-
VehicleStockHistory', 'COLUMN', N'DBAction'
GO
EXEC sp addextendedproperty N'MS Description', N'The charge for delivery of a vehicle',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN',
N'DeliveryCharge'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger should be fired', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-History', 'COLUMN', N'FireAuditTrigger'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'IsDeleted'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A flag to determine if a vehicle has a premium road handling package', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturer-VehicleStockHistory', 'COLUMN', N'IsPremiumRoadHandlingPackage'
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for manfacturer
vehicle stock', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'ManufacturerVehicleStockId'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for vehicle
models', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN', N'ModelId'
GO
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-History', 'COLUMN', N'Note'
GO
EXEC sp addextendedproperty N'MS Description', N'The charge for parts on a vehicle',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN',
N'PartsCharge'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory',
'COLUMN', N'PriorRowLevelHashKey'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for audit entries
in ProductionManufacturerVehicleStockHistory', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN', N'ProductionManufacturerVehicle-
StockHistoryId'
EXEC sp addextendedproperty N'MS Description', N'The date of purchase', 'SCHEMA',
N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN', N'Purchase-
Date'
GO
EXEC sp addextendedproperty N'MS Description', N'The charge for repairs on a vehicle',
'SCHEMA, N'Audit, 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN',
N'RepairsCharge'
GO
```

```
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The stock code of a vehicle',
'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStockHistory', 'COLUMN',
N'StockCode'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'SysEndTime'
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-
History', 'COLUMN', N'SysStartTime'
GO
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicle-StockHistory', 'COLUMN', N'TransactionNumber'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'ProductionManufacturerVehicleStock-History', 'COLUMN', N'UserAuthorizationId'
EXEC sp addextendedproperty N'MS Description', N'The color of the vehicle', 'SCHEMA',
N'Audit, 'TABLE, N'ProductionManufacturerVehicleStockHistory, 'COLUMN', N'Vehicle-
Color'
GΟ
```

[sdAudit].[DbAction]
[sdDate].[DateYYYYMMDD]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[CustomerComments]
[sdLongTextString].[Note]
[sdNumber].[Currency]
[sdOrdinalNumber].[TransactionNumber]
[sdShortTextString].[StockCode]
[sdVehicleString].[VehicleColor]
Audit

Used By

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock]
[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[SalesCustomerHistory]

MS_Description

The audit history table for Customer

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:45 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
/	CustomerId A unique identifier for customers	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	CustomerName The full name of a customer	[sdNameString].[Customer- Name]	130	NOT NULL	
	CustomerAddress1 The street address of a customer	[sdAddressesString].[Address- String]	120	NOT NULL	
	CustomerAddress2 The extended street address of a customer	[sdAddressesString].[Address- String]	120	NULL allowed	
	CustomerTown The town or city a customer resides in	[sdAddressesString].[Town-String]	60	NOT NULL	
	CustomerPostalCode The postal code of a customer if applicable	[sdAddressesString].[Postal-CodeString]	18	NULL allowed	
	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	IsCustomerReseller Flag to determine if a customer is a reseller	[sdFlag].[FlagBit]	4	NOT NULL	
	IsCustomerCreditRisk Flag to determine if customer is a credit risk	[sdFlag].[FlagBit]	4	NOT NULL	
	SpendCapacity The spend capacity of a customer	[sdMarketingText- String].[CustomerSpend- Capacity]	30	NULL allowed	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime	[sdDateTime].[Date-	8	NULL	

 $\label{lem:project} Project > 127.0.0.1, 13001 > User\ databases > Group 3-European Car Manufacturer SQL Server 2019 > Tables > Audit. Sales Customer History$

	The start time for a system transaction	Timestamp]		allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
PK	SalesCustomerHistoryId A unique identifier for audit entries in SalesCustomerHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Sales- Custom er- History Id])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
/	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
■	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK	XPK_CustomerHistory	SalesCustomerHistoryId	True
/	XIE1Sales_Customer_History	CustomerId, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_Audit_SalesSalesCustomerHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[SalesCustomerHistory]
[CustomerId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[CustomerName] [sdNameString].[CustomerName] NOT NULL,
[CustomerAddress1] [sdAddressesString].[AddressString] NOT NULL,
[CustomerAddress2] [sdAddressesString].[AddressString] NULL,
[CustomerTown] [sdAddressesString].[TownString] NOT NULL,
[CustomerPostalCode] [sdAddressesString].[PostalCodeString] NULL,
[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[IsCustomerReseller] [sdFlag].[FlagBit] NOT NULL,
[IsCustomerCreditRisk] [sdFlag].[FlagBit] NOT NULL,
[SpendCapacity] [sdMarketingTextString].[CustomerSpendCapacity] NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL,
[SysEndTime] [sdDateTime].[DateTimestamp] NULL,
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[SalesCustomerHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Audit -
SalesCustomerHistory Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Audit Sales-
CustomerHistory Id]),
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF Audit Sales-
SalesCustomerHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL
) ON [PRIMARY]
ALTER TABLE [Audit].[SalesCustomerHistory] ADD CONSTRAINT [CK Audit SalesSalesCustomer-
History DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D'))
ALTER TABLE [Audit].[SalesCustomerHistory] ADD CONSTRAINT [XPK CustomerHistory] PRIMARY
KEY NONCLUSTERED ([SalesCustomerHistoryId]) ON [PRIMARY]
CREATE CLUSTERED INDEX [XIE1Sales Customer History] ON [Audit].[SalesCustomerHistory]
([CustomerId], [TransactionNumber] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for Customer',
'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Audit-
DateTimeStamp'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'CountryId'
EXEC sp addextendedproperty N'MS Description', N'The street address of a customer',
'SCHEMA, N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'CustomerAddress1'
EXEC sp addextendedproperty N'MS Description', N'The extended street address of a
customer', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Customer-
```

```
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for customers',
'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'CustomerId'
EXEC sp addextendedproperty N'MS Description', N'The full name of a customer',
'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'CustomerName'
EXEC sp addextendedproperty N'MS Description', N'The postal code of a customer if
applicable', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Customer-
EXEC sp_addextendedproperty N'MS_Description', N'The town or city a customer resides
in', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'CustomerTown'
EXEC sp addextendedproperty N'MS Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory',
'COLUMN', N'DBAction'
EXEC sp addextendedproperty N'MS Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN',
N'FireAuditTrigger'
EXEC sp_addextendedproperty N'MS_Description', N'Flag to determine if customer is a
credit risk', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Is-
CustomerCreditRisk'
EXEC sp addextendedproperty N'MS Description', N'Flag to determine if a customer is a
reseller', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'IsCustomer-
Reseller'
EXEC sp addextendedproperty N'MS Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit, 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Is-
Deleted'
EXEC sp_addextendedproperty N'MS_Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'PriorRowLevel-
HashKey'
GO
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN',
N'RowLevelHashKey
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for audit entries
in SalesCustomerHistory', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory',
'COLUMN', N'SalesCustomerHistoryId'
GO
EXEC sp addextendedproperty N'MS_Description', N'The spend capacity of a customer',
'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'SpendCapacity'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'SysEnd-
Time'
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'Sys-
StartTime'
GO
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Audit.SalesCustomerHistory

```
EXEC sp_addextendedproperty N'MS_Description', N'The transaction number in a series of database transactions', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'TransactionNumber'

GO

EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'SalesCustomerHistory', 'COLUMN', N'UserAuthorizationId'

GO
```

Uses

[sdAddressesString].[AddressString]
[sdAddressesString].[PostalCodeString]
[sdAddressesString].[TownString]
[sdAudit].[DbAction]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdMarketingTextString].[CustomerSpendCapacity]
[sdNameString].[CustomerName]
[sdOrdinalNumber].[TransactionNumber]
Audit

Used By

[Audit].[vwFindUniqueTablePkySalesCustomer] [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[SalesSalesOrderVehicleDetailHistory]

MS_Description

The audit history table for SalesOrderVehicleDetail

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:45 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
/	SalesOrderVehicleDetailId A unique identifier for SalesSalesOrder- VehicleDetailHistory Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SalesOrderVehicleId A unique identifier for a purchase	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	LineItemNumber The line item number on the invoice	[sdSequenceNumber].[Line- ItemNumber]	4	NOT NULL	
	SalePrice The sale price of a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	LineItemDiscount The discount of the line item number	[sdNumber].[Currency]	9	NOT NULL	
	ManufacturerVehicleStockId A unique identifier for manfacturer vehicle stock	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
₽ <mark>≯</mark>	SalesSalesOrderVehicleDetailHistoryId A unique identifier for audit entries in SalesSalesOrderVehicleDetailHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[

					Audit Sales- Sales- Order- Vehicle- Detail- History Id])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
<i>P</i>	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	DerivedDiscountedSalePrice The derived discounted sale price of a vehicle	[sdNumber].[Currency]	9	NULL allowed	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PK	XPK_SalesDetailsHistory	SalesSalesOrderVehicle- DetailHistoryId	True
<i>P</i>	XIE1Sales_Sales_Order_Vehicle_Detail_History	SalesOrderVehicleDetail- ld, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_SalesSalesOrderVehicleDetailHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[SalesSalesOrderVehicleDetailHistory]

(

[SalesOrderVehicleDetailId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[SalesOrderVehicleId] [sdKey].[SurrogateKeyInteger] NOT NULL,
```

```
[LineItemNumber] [sdSequenceNumber].[LineItemNumber] NOT NULL,
[SalePrice] [sdNumber].[Currency] NOT NULL,
[LineItemDiscount] [sdNumber].[Currency] NOT NULL,
[ManufacturerVehicleStockId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL,
[SysEndTime] [sdDateTime].[DateTimestamp] NULL,
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[SalesSalesOrderVehicleDetailHistoryId] [sdKey].[SurrogateKeyInteger] NOT NULL
CONSTRAINT [DF_Audit_SalesSalesOrderVehicleDetailHistory_Id] DEFAULT (NEXT VALUE FOR
[SequenceIdInsert].[Audit SalesSalesOrderVehicleDetailHistory Id]),
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[DerivedDiscountedSalePrice] [sdNumber].[Currency] NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF SalesSales-
[DBAction] [sdAudit].[DbAction] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [Audit].[SalesSalesOrderVehicleDetailHistory] ADD CONSTRAINT [CK SalesSales-
OrderVehicleDetailHistory DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR
[DBAction]='D'))
GO
ALTER TABLE [Audit].[SalesSalesOrderVehicleDetailHistory] ADD CONSTRAINT [XPK Sales-
DetailsHistory] PRIMARY KEY NONCLUSTERED ([SalesSalesOrderVehicleDetailHistoryId]) ON
[PRTMARY]
GO
CREATE CLUSTERED INDEX [XIE1Sales Sales Order Vehicle Detail History] ON [Audit].[Sales-
SalesOrderVehicleDetailHistory] ([SalesOrderVehicleDetailId], [TransactionNumber] DESC)
ON [PRIMARY]
GO
EXEC sp addextendedproperty N'MS Description', N'The audit history table for SalesOrder-
VehicleDetail', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
NULL, NULL
GO
EXEC sp_addextendedproperty N'MS_Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit, 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'AuditDateTimeStamp'
EXEC sp_addextendedproperty N'MS_Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicle-DetailHistory', 'COLUMN', N'DBAction'
EXEC sp addextendedproperty N'MS Description', N'The derived discounted sale price of a
vehicle', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'DerivedDiscountedSalePrice'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'FireAuditTrigger'
EXEC sp_addextendedproperty N'MS_Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'IsDeleted'
```

```
EXEC sp addextendedproperty N'MS Description', N'The discount of the line item number',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory', 'COLUMN', N'Line-
TtemDiscount!
GO
EXEC sp addextendedproperty N'MS Description', N'The line item number on the invoice',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory', 'COLUMN', N'Line-
ItemNumber'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for manfacturer
vehicle stock', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'ManufacturerVehicleStockId'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'Note'
GO
{\tt EXEC} \  \, {\tt sp\_addextended property} \  \, {\tt N'MS\_Description'}, \  \, {\tt N'The} \  \, {\tt prior} \  \, {\tt transaction} \  \, {\tt row} \  \, {\tt level} \  \, {\tt hash}
key', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory', 'COLUMN',
N'PriorRowLevelHashKey'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'RowLevelHashKey'
GO
EXEC sp addextendedproperty N'MS Description', N'The sale price of a vehicle',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory', 'COLUMN', N'Sale-
Price'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for SalesSales-OrderVenicleDetailHistory Ids', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVenicle-
DetailHistory', 'COLUMN', N'SalesOrderVehicleDetailId'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for a purchase',
'SCHEMA, N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory', 'COLUMN', N'Sales-
OrderVehicleId'
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for audit entries
in SalesSalesOrderVehicleDetailHistory', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrder-
VehicleDetailHistory', 'COLUMN', N'SalesSalesOrderVehicleDetailHistoryId'
GO
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'SysEndTime'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'SysStartTime'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetail-History', 'COLUMN', N'TransactionNumber'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleDetailHistory',
'COLUMN', N'UserAuthorizationId'
GO
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Audit.SalesSalesOrderVehicleDetailHistory

Uses

[sdAudit].[DbAction]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdNumber].[Currency]
[sdOrdinalNumber].[TransactionNumber]
[sdSequenceNumber].[LineItemNumber]
Audit

Used By

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicleDetail] [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

☐ [Audit].[SalesSalesOrderVehicleHistory]

MS_Description

The audit history table for SalesOrderVehicle

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	0
Created	8:25:46 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P	SalesOrderVehicleId A unique identifier for a purchase	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	Customerld A unique identifier for customers	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	Staffld A unique identifier for staff members	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	InvoiceNumber The invoice number of an order	[sdShortTextString].[Invoice- Number]	8	NOT NULL	
	TotalSalePrice The total sale price of an order	[sdNumber].[Currency]	9	NOT NULL	
	SaleDate The date an order was made	[sdDate].[DateYYYYMMDD]	3	NOT NULL	
	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
P /	SalesSalesOrderVehicleHistoryId A unique identifier for audit entries in SalesSalesOrderVehicleHistory	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Audit Sales-

					Sales- Order- Vehicle- History Id])
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	
	IsDeleted Flag used to check if an entry has been deleted	[sdFlag].[FlagYesNoString]	1	NOT NULL	
<i>P</i>	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	
	AuditDateTimeStamp A timestamp to record audit transactions	[sdDateTime].[Date- Timestamp]	8	NOT NULL	(sysdat etime())
	DBAction Represents the type of action that took place in the database	[sdAudit].[DbAction]	1	NOT NULL	
	CategoryDescription	[sdMarketingText- String].[VehicleSalesThreshold- Category]	40	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP	XPKSalesOrderVehicleHistory	SalesSalesOrderVehicle- HistoryId	True
/	XIE1Sales_Sales_Order_Vehicle_History	SalesOrderVehicleId, TransactionNumber DESC	

Check Constraints

Name	On Column	Constraint
CK_SalesSalesOrderVehicleHistory_DBAction	DBAction	([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D')

```
CREATE TABLE [Audit].[SalesSalesOrderVehicleHistory]

(
[SalesOrderVehicleId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[CustomerId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[StaffId] [sdKey].[SurrogateKeyInteger] NOT NULL,

[InvoiceNumber] [sdShortTextString].[InvoiceNumber] NOT NULL,

[TotalSalePrice] [sdNumber].[Currency] NOT NULL,
```

```
[SaleDate] [sdDate].[DateYYYYMMDD] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL,
[SysEndTime] [sdDateTime].[DateTimestamp] NULL,
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[SalesOrderVehicleHistoryId] [sdKey].[SurroqateKeyInteger] NOT NULL CONSTRAINT
[DF Audit SalesSalesOrderVehicleHistory Id] DEFAULT (NEXT VALUE FOR [SequenceId-
Insert].[Audit SalesSalesOrderVehicleHistory Id]),
[Note] [sdLongTextString].[Note] NULL,
[IsDeleted] [sdFlag].[FlagYesNoString] NOT NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL,
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL,
[AuditDateTimeStamp] [sdDateTime].[DateTimestamp] NOT NULL CONSTRAINT [DF SalesSales-
OrderVehicleHistory AuditDateTimeStamp] DEFAULT (sysdatetime()),
[DBAction] [sdAudit].[DbAction] NOT NULL,
[CategoryDescription] [sdMarketingTextString].[VehicleSalesThresholdCategory] NULL
) ON [PRIMARY]
ALTER TABLE [Audit].[SalesSalesOrderVehicleHistory] ADD CONSTRAINT [CK SalesSalesOrder-
VehicleHistory DBAction] CHECK (([DBAction]='U' OR [DBAction]='I' OR [DBAction]='D'))
ALTER TABLE [Audit].[SalesSalesOrderVehicleHistory] ADD CONSTRAINT [XPKSalesOrder-
VehicleHistory] PRIMARY KEY NONCLUSTERED ([SalesSalesOrderVehicleHistoryId]) ON
[PRTMARY]
CREATE CLUSTERED INDEX [XIE1Sales Sales Order Vehicle History] ON [Audit].[SalesSales-
OrderVehicleHistory] ([SalesOrderVehicleId], [TransactionNumber] DESC) ON [PRIMARY]
EXEC sp addextendedproperty N'MS Description', N'The audit history table for SalesOrder-
Vehicle, 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A timestamp to record audit
transactions', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN',
N'AuditDateTimeStamp'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for customers',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'CustomerId'
EXEC sp addextendedproperty N'MS Description', N'Represents the type of action that
took place in the database', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicle-
History', 'COLUMN', N'DBAction'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory',
'COLUMN', N'FireAuditTrigger'
EXEC sp addextendedproperty N'MS Description', N'The invoice number of an order',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'Invoice-
EXEC sp addextendedproperty N'MS Description', N'Flag used to check if an entry has
been deleted', 'SCHEMA', N'Audit , 'TABLE', N'SalesSalesOrderVehicleHistory', COLUMN',
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN',
```

```
GO
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'Prior-
RowLevelHashKey'
EXEC sp_addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory',
'COLUMN', N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The date an order was made', 'SCHEMA',
N'Audit, 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'SaleDate'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for a purchase',
'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'SalesOrder-
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for audit entries
in SalesSalesOrderVehicleHistory, 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrder-
VehicleHistory', 'COLUMN', N'SalesSalesOrderVehicleHistoryId'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for staff
members, 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN',
N'StaffId'
GO
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN',
N'SysEndTime'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The start time for a system
transaction', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN',
N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The total sale price of an order',
'SCHEMA, N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory', 'COLUMN', N'TotalSale-
Price!
GO
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory',
'COLUMN', N'TransactionNumber'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Audit', 'TABLE', N'SalesSalesOrderVehicleHistory',
'COLUMN', N'UserAuthorizationId'
```

Uses

[sdAudit].[DbAction]
[sdDate].[DateYYYYMMDD]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdMarketingTextString].[VehicleSalesThresholdCategory]
[sdNumber].[Currency]

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Audit.SalesSalesOrderVehicleHistory

[sdOrdinalNumber].[TransactionNumber] [sdShortTextString].[InvoiceNumber] Audit

Used By

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle] [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[DbSecurity].[UserAuthorization]

MS_Description

The authorization of database actions by a user

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	7
Created	8:25:46 AM Thursday, December 7, 2023
Last Modified	8:25:48 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P C	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Db- Security _User- Authoriz ation Id])
	ClassTime The class time for CSCl381 Data Modeling	[sdTimeString].[ClassTime- String]	10	NULL allowed	('10:45')
	IndividualProject The name of the individual project	[sdProjectString].[Individual- ProjectNameString]	120	NULL allowed	('CSCI3 81 Final Project')
.	GroupMemberLastName The group members last name	[sdNameString].[LastName- String]	70	NOT NULL	
.	GroupMemberFirstName The group members first name	[sdNameString].[FirstName- String]	50	NOT NULL	
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	GroupName The name of the group	[sdProjectString].[Groupl- ProjectNameString]	40	NOT NULL	('Group 3')

Indexes

Key	Name	Key Columns	Unique
PKP C	XPKUser_Authorization	UserAuthorizationId	True
	XIE1User_Authorization	GroupMemberLastName, Group- MemberFirstName	

Check Constraints

Name	On Column	Constraint
CK_DbSecurity_UserAuthorization_ClassTime	ClassTime	([ClassTime] like '[0-1][0-9]:[0-5][0-9]' OR [ClassTime] like '[0-2][0-4]:[0-5][0-9]')
CK_DbSecurity_UserAuthorization_SysEndTime		([SysEndTime]>=[SysStartTime])
CK_DbSecurity_UserAuthorization_SysStartTime		([SysEndTime]>=[SysStartTime])

```
CREATE TABLE [DbSecurity].[UserAuthorization]
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF DbSecurity -
UserAuthorization Id 903797191] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[DbSecurity
UserAuthorization Id]),
[ClassTime] [sdTimeString].[ClassTimeString] NULL CONSTRAINT [DF DbSecurity User-
Authorization ClassTime] DEFAULT ('10:45'),
[IndividualProject] [sdProjectString].[IndividualProjectNameString] NULL CONSTRAINT
[DF DbSecurity UserAuthorization IndividualProject] DEFAULT ('CSCI381 Final Project'),
[GroupMemberLastName] [sdNameString].[LastNameString] NOT NULL,
[GroupMemberFirstName] [sdNameString].[FirstNameString] NOT NULL,
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF_DbSecurity_User-
Authorization SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF DbSecurity User-
Authorization SysEndTime] DEFAULT ('99991231 23:59:59.99999999'),
[GroupName] [sdProjectString].[GrouplProjectNameString] NOT NULL CONSTRAINT [DF Db-
Security UserAuthorization GroupName] DEFAULT ('Group 3')
) ON [PRIMARY]
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [CK DbSecurity User-
Authorization ClassTime] CHECK (([ClassTime] like '[0-1][0-9]:[0-5][0-9]' OR [Class-
Time] like '[0-2][0-4]:[0-5][0-9]'))
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [CK DbSecurity User-
Authorization SysEndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [CK DbSecurity User-
Authorization SysStartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [DbSecurity].[UserAuthorization] ADD CONSTRAINT [XPKUser Authorization]
PRIMARY KEY CLUSTERED ([UserAuthorizationId]) ON [PRIMARY]
CREATE NONCLUSTERED INDEX [XIE1User Authorization] ON [DbSecurity].[UserAuthorization]
```

```
([GroupMemberLastName], [GroupMemberFirstName]) ON [PRIMARY]
EXEC sp_addextendedproperty N'MS_Description', N'The authorization of database actions
by a user', 'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'The class time for CSCI381 Data
Modeling', 'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'Class-
EXEC sp addextendedproperty N'MS Description', N'The group members first name',
'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'GroupMemberFirst-
EXEC sp_addextendedproperty N'MS_Description', N'The group members last name',
'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'GroupMemberLast-
EXEC sp addextendedproperty N'MS Description', N'The name of the group', 'SCHEMA', N'Db-
Security', 'TABLE', N'UserAuthorization', 'COLUMN', N'GroupName'
EXEC sp_addextendedproperty N'MS_Description', N'The name of the individual project',
'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'IndividualProject'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'Sys-
EndTime'
GO
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN', N'Sys-
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'DbSecurity', 'TABLE', N'UserAuthorization', 'COLUMN',
N'UserAuthorizationId'
GO
```

Uses

[sdDateTime].[DateTimestamp]
[sdKey].[SurrogateKeyInteger]
[sdNameString].[FirstNameString]
[sdNameString].[LastNameString]
[sdProjectString].[GroupIProjectNameString]
[sdProjectString].[IndividualProjectNameString]
[sdTimeString].[ClassTimeString]
DbSecurity

Used By

[HumanResources].[Staff]
[Locale].[Country]
[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]

 $\label{local-project} Project > 127.0.0.1, 13001 > User\ databases > Group 3-European Car Manufacturer SQL Server 2019 > Tables > Db-Security. User Authorization$

[Sales].[SalesOrderVehicle] [Sales].[SalesOrderVehicleDetail]

[HumanResources].[Staff]

MS_Description

A staff member of the business who sells vehicles to customers

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	13
Created	8:25:46 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
PK C	Staffld A unique identifier for staff members	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Human- Resour ces Staff Id])
F	Managerld The ID of a staff member that supervises an employee	[sdKey].[SurrogateKeyInteger]	4	NULL allowed	
#	StaffName The full name of a staff member	[sdNameString].[FullName- String]	120	NOT NULL	
	Department The department name a staff member works in	[sdBusinessComponent- String].[DepartmentString]	30	NULL allowed	
FK	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > HumanResources.Staff

TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))
Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')

Indexes

Key	Name	Key Columns	Unique
PK C	XPKStaff	Staffld	True
	XIE1Staff	StaffName	

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_Staff	True	True	After Delete
uTi_Staff	True	True	After Insert
uTu_Staff	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_HumanResources_Staff_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [FireAudit-Trigger]='N')
CK_HumanResources_Staff_SysStartTime		([SysEndTime]>=[SysStartTime])

Foreign Keys

Name	Columns
FK_Staff_Staff	ManagerId->[HumanResources].[Staff].[StaffId]
FK_Staff_UserAuthorization	UserAuthorizationId->[DbSecurity].[UserAuthorization].[UserAuthorizationId]

```
CREATE TABLE [HumanResources].[Staff]

(
[StaffId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF_HumanResources_Staff_-
Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[HumanResources_Staff_Id]),
```

```
[ManagerId] [sdKey].[SurrogateKeyInteger] NULL,
[StaffName] [sdNameString].[FullNameString] NOT NULL,
[Department] [sdBusinessComponentString].[DepartmentString] NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Human-
Resources_Staff_UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF HumanResources Staff -
SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF HumanResources Staff Sys-
EndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey] . [RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF Human-
Resources Staff TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF_HumanResources_Staff_Note] DEFAULT
('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF HumanResources -
Staff FireAuditTrigger] DEFAULT ('N')
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: HumanResources.uTd_Staff on HumanResources.Staff
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [HumanResources].[uTd Staff] on [HumanResources].[Staff]
WITH
 EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit"."HumanResourcesStaffHistory"
"d"."StaffId", "d"."StaffName", "d"."ManagerId", "d"."Department", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."FireAuditTrigger", "d"."Audit-
DateTimeStamp", "d"."DBAction", "d"."isDeleted"
)
SELECT
  "d". "StaffId", "d". "StaffName", "d". "ManagerId", "d". "Department",
  "d"."TransactionNumber",
```

```
'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message Transaction Number: ', "d"."TransactionNumber")),
  "d"."UserAuthorizationId",
 "d"."SysStartTime",
 @NowTimeStamp, -- AS SysEndTime
  "d" . "RowLevelHashKey",
 "d"."PriorRowLevelHashKey",
  "d" ."FireAuditTrigger",
 @NowTimeStamp,
 @DBAction,
 @isDeleted
FROM deleted as "d"
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: HumanResources.uTi Staff on HumanResources.Staff
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [HumanResources].[uTi Staff] on [HumanResources].[Staff]
 EXECUTE AS CALLER AFTER INSERT
AS
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputHumanResources-
Staff"("i"."StaffId"),
      "ut"."PriorRowLevelHashKey" = null,
      "ut"."Note" = 'Row Inserted',
      "ut"."FireAuditTrigger" = 'N'
 FROM "HumanResources". "Staff" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i". "StaffId" = "ut". "StaffId"
      AND "i". "TransactionNumber" = 1;
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: HumanResources.uTu Staff on HumanResources.Staff
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [HumanResources].[uTu Staff] on [HumanResources].[Staff]
```

```
WTTH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.9999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
    ON "i". "StaffId" = "d". "StaffId"
   AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
 BEGIN
   -- Insert record into audit table
   INSERT INTO "Audit"."HumanResourcesStaffHistory"
      "d". "StaffId", "d". "StaffName", "d". "ManagerId", "d". "Department", "d". "Transaction-
Number", "d". "Note", "d". "UserAuthorizationId", "d". "SysStartTime", "d". "SysEnd-
Time","d"."RowLevelHashKey","d"."PriorRowLevelHashKey","d"."FireAuditTrigger",
"d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
   )
   SELECT
       "d"."StaffId", "d"."StaffName", "d"."ManagerId", "d"."Department",
       "d"."TransactionNumber",
       coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
      "d"."UserAuthorizationId",
      "d"."SysStartTime",
      @NowTimeStamp,
      "d". "RowLevelHashKey",
       "d"."PriorRowLevelHashKey",
       "d". "FireAuditTrigger",
      @NowTimeStamp,
      @DBAction,
      @isDeleted
     FROM deleted AS "d"
    INNER JOIN inserted AS "i"
    ON "i". "StaffId" = "d". "StaffId"
       AND "i"."TransactionNumber" = "d"."TransactionNumber";
    UPDATE "ut"
    SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputHumanResources-
Staff"("i"."StaffId"),
         "ut"."PriorRowLevelHashKey" = "d"."RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
```

```
"ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut" "Note" = "i" "Note",
         "ut"."FireAuditTrigger" = 'N'
     FROM "HumanResources". "Staff" as "ut"
      INNER JOIN inserted as "i"
        ON "i". "StaffId" = "ut". "StaffId"
          AND "i"."TransactionNumber" = "ut"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
      INNER JOIN deleted as "d"
        ON "i". "StaffId" = "d". "StaffId"
          AND "i". "TransactionNumber" = "d". "TransactionNumber"
         AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END;
GO
ALTER TABLE [HumanResources].[Staff] ADD CONSTRAINT [CK HumanResources Staff FireAudit-
Trigger] CHECK (([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N'))
ALTER TABLE [HumanResources].[Staff] ADD CONSTRAINT [CK HumanResources Staff SysStart-
Time] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [HumanResources].[Staff] ADD CONSTRAINT [XPKStaff] PRIMARY KEY CLUSTERED
([StaffId]) ON [PRIMARY]
CREATE NONCLUSTERED INDEX [XIE1Staff] ON [HumanResources].[Staff] ([StaffName]) ON
[PRIMARY]
GO
ALTER TABLE [HumanResources].[Staff] ADD CONSTRAINT [FK Staff Staff] FOREIGN KEY
([ManagerId]) REFERENCES [HumanResources].[Staff] ([StaffId])
ALTER TABLE [HumanResources].[Staff] ADD CONSTRAINT [FK Staff UserAuthorization]
FOREIGN KEY ([UserAuthorizationId]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'A staff member of the business who
sells vehicles to customers', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', NULL,
NUTIT
EXEC sp addextendedproperty N'MS Description', N'The department name a staff member
works in', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'Department'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'FireAudit-
Trigger'
GO
EXEC sp addextendedproperty N'MS Description', N'The ID of a staff member that
supervises an employee', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN',
N'ManagerId'
GO
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'PriorRowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'RowLevel-
```

```
HashKey'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for staff
members, 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'Staffid'
EXEC sp_addextendedproperty N'MS_Description', N'The full name of a staff member',
'SCHEMA, N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'StaffName'
EXEC sp addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'SysEndTime'
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN',
N'TransactionNumber'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'HumanResources', 'TABLE', N'Staff', 'COLUMN', N'User-
AuthorizationId'
GO
```

Uses

[DbSecurity].[UserAuthorization]
[sdBusinessComponentString].[DepartmentString]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdNameString].[FullNameString]
[sdOrdinalNumber].[TransactionNumber]
HumanResources

Used Bv

[Sales].[SalesOrderVehicle]

[Audit].[vwFindUniqueTablePkyHumanResourcesStaff]

[CustomViews].[uvw_ChuanStaffDiscountGiven]

[CustomViews].[uvw_ChuanStaffSales]

[CustomViews].[uvw RalphEmployeeManager]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Hashing].[CreateSha256KeyFromJsonInputHumanResourcesStaff]

■ [Locale].[Country]

MS_Description

A country or territory in the world

Properties

Property	Value	
Collation	SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	10	
Created	8:25:42 AM Thursday, December 7, 2023	
Last Modified	8:28:31 AM Thursday, December 7, 2023	

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P <mark>/</mark> C	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Locale Country _ld])
	CountryISO3 The ISO3 format of a country	[sdCountryString- Variant].[CountryISO3]	6	NOT NULL	
	CountryName The name of the country	[sdAddressesString].[Country-String]	100	NOT NULL	
	CountryISO2 The ISO2 format of a country	[sdCountryString- Variant].[CountryISO2]	4	NOT NULL	
	SalesRegion The name of the sales region a coutry belongs to	[sdAddressesString].[Region-String]	40	NOT NULL	
F	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	

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TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))
Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')

Indexes

Key	Name	Key Columns	Unique
PK2 C	PK_Country	Countryld	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_Country	True	True	After Delete
uTi_Country	True	True	After Insert
uTu_Country	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Locale_Country_CountryISO2	CountryISO2	([CountryISO2] like '[A-Z][A-Z]')
CK_Locale_Country_CountryISO3	CountryISO3	([CountryISO3] like '[A-Z][A-Z][A-Z]')
CK_Locale_Country_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N')
CK_Locale_Country_SysEndTime		([SysEndTime]>=[SysStartTime])
CK_Locale_Country_SysStartTime		([SysEndTime]>=[SysStartTime])

Foreign Keys

Name	Columns
FK_Country_UserAuthorization	UserAuthorizationId->[DbSecurity].[UserAuthorization].[UserAuthorizationId]

```
CREATE TABLE [Locale].[Country]

(
[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF_Locale_Country_Id]
```

```
DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Locale_Country_Id]),
[CountryISO3] [sdCountryStringVariant].[CountryISO3] NOT NULL,
[CountryName] [sdAddressesString].[CountryString] NOT NULL,
[CountryISO2] [sdCountryStringVariant].[CountryISO2] NOT NULL,
[SalesRegion] [sdAddressesString].[RegionString] NOT NULL,
[UserAuthorizationId] [sdKey].[SurroqateKeyInteger] NOT NULL CONSTRAINT [DF Locale -
Country UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Locale Country SysStart-
Time] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Locale Country SysEnd-
Time] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Locale_Country_TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Locale Country Note] DEFAULT ('Row
was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Locale Country -
FireAuditTrigger] DEFAULT ('N')
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Locale.uTd_Country on Locale.Country
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Locale].[uTd Country] on [Locale].[Country]
WITH
 EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit"."LocaleCountryHistory"
"d"."CountryId", "d"."CountryISO3", "d"."CountryName", "d"."CountryISO2", "d"."Sales-Region", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStart-Time", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."Fire-AuditTrigger", "d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
SELECT
```

```
"d"."CountryId", "d"."CountryISO3", "d"."CountryName", "d"."CountryISO2", "d"."Sales-
Region",
 "d"."TransactionNumber",
 'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d"."TransactionNumber")),
 "d"."UserAuthorizationId",
 "d"."SysStartTime",
 @NowTimeStamp, -- AS SysEndTime
 "d". "RowLevelHashKey",
 "d"."PriorRowLevelHashKey",
 "d"."FireAuditTrigger",
 @NowTimeStamp,
 @DBAction,
 @isDeleted
FROM deleted as "d"
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Locale.uTi Country on Locale.Country
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Locale].[uTi Country] on [Locale].[Country]
 EXECUTE AS CALLER AFTER INSERT
AS
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut"."RowLevelHashKey" = "Hashing"."CreateSha256KeyFromJsonInputLocale-
Country"("i"."CountryId"),
     "ut". "PriorRowLevelHashKey" = null,
     "ut"."Note" = 'Row Inserted',
      "ut"."FireAuditTrigger" = 'N'
 FROM "Locale". "Country" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."CountryId" = "ut"."CountryId"
      AND "i". "TransactionNumber" = 1;
END;
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Locale.uTu Country on Locale.Country
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
```

```
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Locale].[uTu Country] on [Locale].[Country]
WITH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.9999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
     ON "i". "CountryId" = "d". "CountryId"
   AND "i". "TransactionNumber" = "d". "TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
 BEGIN
    -- Insert record into audit table
   INSERT INTO "Audit". "LocaleCountryHistory"
     "d"."CountryId","d"."CountryISO3","d"."CountryName","d"."CountryISO2","d"."Sales-
Region", "d". "TransactionNumber", "d". "Note", "d". "UserAuthorizationId", "d". "SysStart-
Time", "d". "SysEndTime", "d". "RowLevelHashKey", "d". "PriorRowLevelHashKey", "d". "FireAudit-
Trigger", "d". "AuditDateTimeStamp", "d". "DBAction", "d". "isDeleted"
   )
   SELECT
      "d". "CountryId", "d". "CountryISO3", "d". "CountryName", "d". "CountryISO2",
"d". "SalesRegion",
       "d"."TransactionNumber",
       coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
       "d"."UserAuthorizationId",
      "d"."SysStartTime",
      @NowTimeStamp,
       "d". "RowLevelHashKey",
      "d"."PriorRowLevelHashKey",
      "d"."FireAuditTrigger",
      @NowTimeStamp,
      @DBAction,
      @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
     ON "i"."CountryId" = "d"."CountryId"
       AND "i". "TransactionNumber" = "d". "TransactionNumber";
     UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputLocale-
```

```
Country"("i"."CountryId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut" "Note" = "i" "Note".
         "ut"."FireAuditTrigger" = 'N'
     FROM "Locale". "Country" as "ut"
       INNER JOIN inserted as "i"
        ON "i"."CountryId" = "ut"."CountryId"
          AND "i"."TransactionNumber" = "ut"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
      INNER JOIN deleted as "d"
         ON "i"."CountryId" = "d"."CountryId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
         AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END:
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [CK Locale Country CountryISO2] CHECK
(([CountryISO2] like '[A-Z][A-Z]'))
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [CK Locale Country CountryISO3] CHECK
(([CountryISO3] like '[A-Z][A-Z][A-Z]'))
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [CK_Locale_Country_FireAuditTrigger]
CHECK (([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N'))
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [CK Locale Country SysEndTime] CHECK
(([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [CK Locale Country SysStartTime] CHECK
(([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [PK Country] PRIMARY KEY CLUSTERED
([CountryId]) ON [PRIMARY]
ALTER TABLE [Locale].[Country] ADD CONSTRAINT [FK Country UserAuthorization] FOREIGN
KEY ([UserAuthorizationId]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'A country or territory in the world',
'SCHEMA', N'Locale', 'TABLE', N'Country', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'CountryId'
EXEC sp addextendedproperty N'MS Description', N'The ISO2 format of a country',
'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'CountryISO2'
EXEC sp addextendedproperty N'MS Description', N'The ISO3 format of a country',
'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'CountryISO3'
EXEC sp addextendedproperty N'MS Description', N'The name of the country', 'SCHEMA',
N'Locale', 'TABLE', N'Country', 'COLUMN', N'CountryName'
```

```
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'FireAudit-
GO
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Locale, 'TABLE', N'Country', 'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'PriorRowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'RowLevelHash-
Key'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The name of the sales region a coutry
belongs to', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'SalesRegion'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Locale, 'TABLE', N'Country', 'COLUMN', N'SysEndTime'
EXEC sp_addextendedproperty N'MS_Description', N'The start time for a system
transaction', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN',
N'TransactionNumber'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Locale', 'TABLE', N'Country', 'COLUMN', N'User-
AuthorizationId'
GO
```

Uses

[DbSecurity].[UserAuthorization]
[sdAddressesString].[CountryString]
[sdAddressesString].[RegionString]
[sdCountryStringVariant].[CountryISO2]
[sdCountryStringVariant].[CountryISO3]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
Locale

Used By

[Production].[ManufacturerVehicleMake]
[Sales].[Customer]
[Audit].[vwFindUniqueTablePkyLocaleCountry]
[CustomViews].[uvw_ChuanCustomerCountry]
[CustomViews].[uvw_ChuanMakeCountry]

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[Sales].[uvw_Sales2018]
[Sales].[uvw_SalesByCountry]
[Sales].[uvw_SalesText]
[Sales].[uvw_YearlySales]
[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]
[Hashing].[CreateSha256KeyFromJsonInputLocaleCountry]

[Production].[ManufacturerModel]

MS_Description

The model of a particular vehicle created by the manufacturer

Properties

Property	Value	
Collation	SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	100	
Created	8:25:43 AM Thursday, December 7, 2023	
Last Modified	8:28:31 AM Thursday, December 7, 2023	

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
PKC C	ManufacturerModelld A unique identifier for vehicle models	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Producti on Manufa cturer- Model Id])
	ManufacturerModelName The name of a vehicle model	[sdVehicleString].[Vehicle-ModelString]	70	NOT NULL	
	ManufacturerModelVariant The name of a vehicle model variant if applicable	[sdVehicleString].[Vehicle-ModelString]	70	NULL allowed	
FK	ManufacturerVehicleMakeld A unique identifier for vehicle makes	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
F	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	

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TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))
Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')

Indexes

Key	Name	Key Columns	Unique
PK2 C	PK_Model_1	ManufacturerModelId	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_ManufacturerModel	True	True	After Delete
uTi_ManufacturerModel	True	True	After Insert
uTu_ManufacturerModel	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Production_ManufacturerModel_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [Fire- AuditTrigger]='N')
CK_Production_ManufacturerModel_SysEndTime		([SysEndTime]>=[SysStartTime])
CK_Production_ManufacturerModel_SysStartTime		([SysEndTime]>=[SysStartTime])

Foreign Keys

Name	Columns	
FK_ManufacturerModel_ManufacturerVehicleMake	ManufacturerVehicleMakeId->[Production].[Manufacturer-VehicleMake].[ManufacturerVehicleMakeId]	
FK_ManufacturerModel_UserAuthorization	UserAuthorizationId->[DbSecurity].[User- Authorization].[UserAuthorizationId]	

```
CREATE TABLE [Production].[ManufacturerModel]
```

```
[ManufacturerModelId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF_Production_-
ManufacturerModel Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Production -
ManufacturerModel_Id]),
[ManufacturerModelName] [sdVehicleString].[VehicleModelString] NOT NULL,
[ManufacturerModelVariant] [sdVehicleString].[VehicleModelString] NULL,
[ManufacturerVehicleMakeId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Production -
ManufacturerModel UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Production Manufacturer-
Model SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Production Manufacturer-
Model SysEndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Production ManufacturerModel TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Production ManufacturerModel Note]
DEFAULT ('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Production -
ManufacturerModel FireAuditTrigger] DEFAULT ('N')
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTd ManufacturerModel on Production.ManufacturerModel
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Production].[uTd ManufacturerModel] on [Production].[ManufacturerModel]
 EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit". "ProductionManufacturerModelHistory"
 "d"."ManufacturerModelId", "d"."ManufacturerVehicleMakeId", "d"."ManufacturerModel-
Name", "d"."ManufacturerModelVariant", "d"."TransactionNumber", "d"."Note", "d"."User-AuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."FireAuditTrigger", "d"."AuditDateTimeStamp",
"d"."DBAction", "d"."isDeleted"
```

```
SELECT
 "d". "ManufacturerModelId", "d". "ManufacturerVehicleMakeId", "d". "ManufacturerModel-
Name", "d". "ManufacturerModelVariant",
 "d". "TransactionNumber",
 'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d". "TransactionNumber")),
 "d"."UserAuthorizationId",
  "d". "SysStartTime",
 @NowTimeStamp, -- AS SysEndTime
  "d" . "RowLevelHashKey",
  "d"."PriorRowLevelHashKey",
 "d"."FireAuditTrigger",
 @NowTimeStamp,
 @DBAction,
 @isDeleted
FROM deleted as "d"
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTi ManufacturerModel on Production.ManufacturerModel
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTi ManufacturerModel] on [Production].[ManufacturerModel]
 EXECUTE AS CALLER AFTER INSERT
AS
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputProduction-
ManufacturerModel"("i"."ManufacturerModelId"),
      "ut"."PriorRowLevelHashKey" = null,
      "ut". "Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Production". "ManufacturerModel" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."ManufacturerModelId" = "ut"."ManufacturerModelId"
     AND "i"."TransactionNumber" = 1;
END:
GΟ
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTu ManufacturerModel on Production.ManufacturerModel
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
```

```
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTu ManufacturerModel] on [Production].[ManufacturerModel]
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.99999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
    ON "i". "ManufacturerModelId" = "d". "ManufacturerModelId"
   AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
 BEGIN
   -- Insert record into audit table
   INSERT INTO "Audit". "ProductionManufacturerModelHistory"
      "d"."ManufacturerModelId","d"."ManufacturerVehicleMakeId","d"."ManufacturerModel-
Name","d"."ManufacturerModelVariant","d"."TransactionNumber","d"."Note","d"."User-
AuthorizationId","d"."SysStartTime","d"."SysEndTime","d"."RowLevelHashKey","d"."Prior-
RowLevelHashKey", "d". "FireAuditTrigger", "d". "AuditDateTimeStamp", "d". "DBAction",
"d"."isDeleted"
   )
   SELECT
      "d"."ManufacturerModelId", "d"."ManufacturerVehicleMakeId", "d"."Manufacturer-
ModelName", "d". "ManufacturerModelVariant",
       "d"."TransactionNumber",
       coalesce("d"."Note", concat('No Message Transaction Number: ', "d"."Transaction-
Number")),
       "d"."UserAuthorizationId",
      "d"."SysStartTime",
      @NowTimeStamp,
       "d". "RowLevelHashKey",
       "d"."PriorRowLevelHashKey",
       "d"."FireAuditTrigger",
       @NowTimeStamp,
      @DBAction,
      @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
    ON "i"."ManufacturerModelId" = "d"."ManufacturerModelId"
       AND "i". "TransactionNumber" = "d". "TransactionNumber";
```

```
UPDATE "ut."
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputProduction-
ManufacturerModel"("i"."ManufacturerModelId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut". "SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut" "Note" = "i" "Note",
         "ut"."FireAuditTrigger" = 'N'
     FROM "Production". "ManufacturerModel" as "ut"
       INNER JOIN inserted as "i"
        ON "i"."ManufacturerModelId" = "ut"."ManufacturerModelId"
          AND "i"."TransactionNumber" = "ut"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
      INNER JOIN deleted as "d"
         ON "i"."ManufacturerModelId" = "d"."ManufacturerModelId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
         AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END;
ALTER TABLE [Production]. [ManufacturerModel] ADD CONSTRAINT [CK Production Manufacturer-
Model FireAuditTrigger] CHECK (([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N'))
ALTER TABLE [Production].[ManufacturerModel] ADD CONSTRAINT [CK Production Manufacturer-
Model SysEndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production].[ManufacturerModel] ADD CONSTRAINT [CK Production Manufacturer-
Model SysStartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production].[ManufacturerModel] ADD CONSTRAINT [PK Model 1] PRIMARY KEY
CLUSTERED ([ManufacturerModelId]) ON [PRIMARY]
ALTER TABLE [Production].[ManufacturerModel] ADD CONSTRAINT [FK ManufacturerModel -
ManufacturerVehicleMake] FOREIGN KEY ([ManufacturerVehicleMakeId]) REFERENCES
[Production].[ManufacturerVehicleMake] ([ManufacturerVehicleMakeId])
ALTER TABLE [Production].[ManufacturerModel] ADD CONSTRAINT [FK ManufacturerModel User-
Authorization] FOREIGN KEY ([UserAuthorizationId]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'The model of a particular vehicle
created by the manufacturer', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel',
NULL, NULL
GO
EXEC sp addextendedproperty N'MS Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'FireAuditTrigger'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for vehicle
models', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'ManufacturerModelId'
EXEC sp addextendedproperty N'MS Description', N'The name of a vehicle model',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN', N'ManufacturerModel-
Name'
GO
```

```
EXEC sp_addextendedproperty N'MS_Description', N'The name of a vehicle model variant if
applicable', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'ManufacturerModelVariant'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for vehicle
makes', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'ManufacturerVehicleMakeId'
EXEC sp addextendedproperty N'MS_Description', N'A note regarding the database
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN', N'Note'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN', N'PriorRowLevel-
HashKey'
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN', N'Sys-
EndTime'
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN', N'Sys-
StartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel',
'COLUMN', N'TransactionNumber'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerModel', 'COLUMN',
N'UserAuthorizationId'
GO
```

[DbSecurity].[UserAuthorization]
[Production].[ManufacturerVehicleMake]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleModelString]
Production

Used By

[Production].[ManufacturerVehicleStock]
[Audit].[vwFindUniqueTablePkyProductionManufacturerModel]
[CustomViews].[uvw_ChuanModelMake]
[CustomViews].[uvw_MehrshadVehicleCost]

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Production.ManufacturerModel

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[CustomViews].[uvw_RalphMakeModelPartsCost]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_StockPrices]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerModel]

[Production].[ManufacturerVehicleMake]

MS_Description

The company responsible for the production of a vehicle

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	26
Created	8:25:43 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
PK C	ManufacturerVehicleMakeld A unique identifier for vehicle makes	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Producti on Manufa cturer- Vehicle- Make Id])
	ManufacturerVehicleMakeName The name of a vehicle make	[sdVehicleString].[VehicleMake-String]	60	NOT NULL	
FK	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
F	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	TransactionNumber The transaction number in a series of	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Production.ManufacturerVehicleMake

database transactions				
Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')
MarketingType The marketing type of a vehicle make	[sdVehicleString].[Vehicle-ManufacturerMarketingType]	50	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PK	PK_Make	ManufacturerVehicleMakeId	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_ManufacturerVehicleMake	True	True	After Delete
uTi_ManufacturerVehicleMake	True	True	After Insert
uTu_ManufacturerVehicleMake	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Production_ManufacturerVehicleMake_SysEndTime		([SysEndTime]>=[SysStart-Time])
CK_Production_ManufacturerVehicleMake_SysStartTime		([SysEndTime]>=[SysStart-Time])
CK_Production_ManufacturerVehicleMakel_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N')

Foreign Keys

Name	Columns
FK_ManufacturerVehicleMake_Country	CountryId->[Locale].[Country].[CountryId]
FK_ManufacturerVehicleMake_UserAuthorization	UserAuthorizationId->[DbSecurity].[UserAuthorization].[User-AuthorizationId]

SQL Script

CREATE TABLE [Production].[ManufacturerVehicleMake]

```
[ManufacturerVehicleMakeId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF -
Production ManufacturerVehicleMake Id] DEFAULT (NEXT VALUE FOR [SequenceId-
Insert].[Production ManufacturerVehicleMake Id]),
[ManufacturerVehicleMakeName] [sdVehicleString].[VehicleMakeString] NOT NULL,
[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Production -
ManufacturerVehicleMake UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Production Manufacturer-
VehicleMake SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Production Manufacturer-
VehicleMake SysEndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Production ManufacturerVehicleMake TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Production ManufacturerVehicle-
Make Note] DEFAULT ('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Production -
ManufacturerVehicleMakel FireAuditTrigger] DEFAULT ('N'),
[MarketingType] [sdVehicleString].[VehicleManufacturerMarketingType] NULL
ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTd ManufacturerVehicleMake on Production.Manufacturer-
VehicleMake
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSOL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Production].[uTd ManufacturerVehicleMake] on [Production].[Manufacturer-
VehicleMakel
 EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit". "ProductionManufacturerVehicleMakeHistory"
 "d". "ManufacturerVehicleMakeId", "d". "ManufacturerVehicleMakeName", "d". "CountryId",
"d"."MarketingType", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
```

```
Key", "d"."FireAuditTrigger", "d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
SELECT
 "d"."ManufacturerVehicleMakeId", "d"."ManufacturerVehicleMakeName", "d"."CountryId",
"d"."MarketingType",
  "d". "TransactionNumber",
 'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d"."TransactionNumber")),
 "d"."UserAuthorizationId",
 "d". "SysStartTime",
 @NowTimeStamp, -- AS SysEndTime
 "d"."RowLevelHashKey",
 "d". "PriorRowLevelHashKey",
 "d"."FireAuditTrigger",
 @NowTimeStamp,
 @DBAction,
 @isDeleted
FROM deleted as "d"
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTi ManufacturerVehicleMake on Production.Manufacturer-
VehicleMake
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTi ManufacturerVehicleMake] on [Production].[Manufacturer-
VehicleMake]
WTTH
 EXECUTE AS CALLER AFTER INSERT
AS
BEGIN
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputProduction-
ManufacturerVehicleMake"("i"."ManufacturerVehicleMakeId"),
      "ut"."PriorRowLevelHashKey" = null,
      "ut". "Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Production". "ManufacturerVehicleMake" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i". "ManufacturerVehicleMakeId" = "ut". "ManufacturerVehicleMakeId"
      AND "i". "TransactionNumber" = 1;
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
```

```
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTu ManufacturerVehicleMake on Production.Manufacturer-
VehicleMake
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTu ManufacturerVehicleMake] on [Production].[Manufacturer-
VehicleMake]
WITH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
  @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.99999999',
 @FireAuditTrigger char(1) = 'N',
  @DBAction char(1) = 'U',
  @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
     ON "i". "ManufacturerVehicleMakeId" = "d". "ManufacturerVehicleMakeId"
   AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
    -- Insert record into audit table
    INSERT INTO "Audit"."ProductionManufacturerVehicleMakeHistory"
      "d". "ManufacturerVehicleMakeId", "d". "ManufacturerVehicleMakeName", "d". "Country-
Id","d"."MarketingType","d"."TransactionNumber","d"."Note","d"."UserAuthorization-
Id", "d". "SysStartTime", "d". "SysEndTime", "d". "RowLevelHashKey", "d". "PriorRowLevelHash-Key", "d". "FireAuditTrigger", "d". "AuditDateTimeStamp", "d". "DBAction", "d". "isDeleted"
    SELECT
      "d"."ManufacturerVehicleMakeId", "d"."ManufacturerVehicleMakeName", "d"."Country-
Id", "d"."MarketingType",
       "d"."TransactionNumber",
       coalesce("d"."Note", concat('No Message Transaction Number: ', "d"."Transaction-
Number")),
       "d"."UserAuthorizationId",
       "d". "SysStartTime",
       @NowTimeStamp,
       "d". "RowLevelHashKey",
       "d". "PriorRowLevelHashKey",
       "d". "FireAuditTrigger",
       @NowTimeStamp,
       @DBAction,
       @isDeleted
     FROM deleted AS "d"
```

```
INNER JOIN inserted AS "i"
    ON "i"."ManufacturerVehicleMakeId" = "d"."ManufacturerVehicleMakeId"
       AND "i"."TransactionNumber" = "d"."TransactionNumber";
    UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputProduction-
ManufacturerVehicleMake"("i"."ManufacturerVehicleMakeId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut"."Note" = "i"."Note",
         "ut". "FireAuditTrigger" = 'N'
     FROM "Production". "ManufacturerVehicleMake" as "ut"
       INNER JOIN inserted as "i"
         ON "i"."ManufacturerVehicleMakeId" = "ut"."ManufacturerVehicleMakeId"
          AND "i"."TransactionNumber" = "ut"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
      INNER JOIN deleted as "d"
         ON "i"."ManufacturerVehicleMakeId" = "d"."ManufacturerVehicleMakeId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
         AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END:
GO
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [CK Production -
ManufacturerVehicleMake SysEndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [CK Production -
ManufacturerVehicleMake SysStartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [CK Production -
ManufacturerVehicleMakel FireAuditTrigger] CHECK (([FireAuditTrigger]='Y' OR [FireAudit-
Trigger] = 'N'))
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [PK Make] PRIMARY KEY
CLUSTERED ([ManufacturerVehicleMakeId]) ON [PRIMARY]
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [FK Manufacturer-
VehicleMake Country] FOREIGN KEY ([CountryId]) REFERENCES [Locale].[Country] ([Country-
Id])
GO
ALTER TABLE [Production].[ManufacturerVehicleMake] ADD CONSTRAINT [FK Manufacturer-
VehicleMake_UserAuthorization] FOREIGN KEY ([UserAuthorizationId]) REFERENCES [Db-
Security].[UserAuthorization] ([UserAuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'The company responsible for the
production of a vehicle', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake',
NULL, NULL
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN', N'CountryId'
EXEC sp addextendedproperty N'MS Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake',
'COLUMN', N'FireAuditTrigger'
GO
```

```
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for vehicle
makes', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN',
N'ManufacturerVehicleMakeId'
EXEC sp addextendedproperty N'MS Description', N'The name of a vehicle make', 'SCHEMA',
N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN', N'ManufacturerVehicleMake-
Name'
GO
EXEC sp_addextendedproperty N'MS_Description', N'The marketing type of a vehicle make',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN', N'Marketing-
GO
{\tt EXEC} \ {\tt sp\_addextended} property \ {\tt N'MS\_Description'}, \ {\tt N'A} \ {\tt note} \ {\tt regarding} \ {\tt the} \ {\tt database}
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN',
N'Note'
GO
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN', N'Prior-
RowLevelHashKey'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake',
'COLUMN', N'RowLevelHashKey'
EXEC sp_addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN',
N'SysEndTime'
GO
{\tt EXEC} \  \, {\tt sp} \  \, {\tt addextended} property \  \, {\tt N'MS\_Description'}, \  \, {\tt N'The} \  \, {\tt start} \  \, {\tt time} \  \, {\tt for} \  \, {\tt a} \  \, {\tt system}
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake', 'COLUMN',
N'SysStartTime'
GO
{\tt EXEC} \ {\tt sp\_addextended property} \ {\tt N'MS\_Description'}, \ {\tt N'The} \ {\tt transaction} \ {\tt number} \ {\tt in} \ {\tt a} \ {\tt series} \ {\tt of}
database transactions', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake',
'COLUMN', N'TransactionNumber'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleMake',
'COLUMN', N'UserAuthorizationId'
GΩ
```

[DbSecurity].[UserAuthorization]
[Locale].[Country]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleManufacturerMarketingType]
Production

Used By

[Production].[ManufacturerModel]

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleMake]

[CustomViews].[uvw_ChuanMakeCountry]

[CustomViews].[uvw_ChuanModelMake]

[CustomViews].[uvw_MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[CustomViews].[uvw RalphMakeModelPartsCost]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_StockPrices]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

MS_Description

A produced physical vehicle that a manufacturer has in stock

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	394
Created	8:25:43 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
P	ManufacturerVehicleStockId A unique identifier for manfacturer vehicle stock	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Producti on Manufa cturer- Vehicle- Stock Id])
±.	StockCode The stock code of a vehicle	[sdShortTextString].[Stock-Code]	100	NOT NULL	
	Cost The cost of a vehicle from the manufacturer	[sdNumber].[Currency]	9	NOT NULL	
	RepairsCharge The charge for repairs on a vehicle	[sdNumber].[Currency]	9	NOT NULL	
≣≣	PartsCharge The charge for parts on a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	DeliveryCharge The charge for delivery of a vehicle	[sdNumber].[Currency]	9	NOT NULL	
	IsPremiumRoadHandlingPackage A flag to determine if a vehicle has a premium road handling package	[sdFlag].[FlagBit]	4	NOT NULL	((0))
	VehicleColor The color of the vehicle	[sdVehicleString].[Vehicle-Color]	40	NOT NULL	
	CustomerComment A comment added by a customer	[sdLongTextString].[Customer-Comments]	400	NULL allowed	

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Production.ManufacturerVehicleStock

FK	Modelld A unique identifier for vehicle models	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
	PurchaseDate The date of purchase	[sdDate].[DateYYYYMMDD]	3	NOT NULL	(sysdat etime())
F	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger] 4		NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
■	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')

Indexes

Key	Name	Key Columns	Unique
PK G	PK_Stock	ManufacturerVehicleStockId	True
	XAK1Manufacturer_Vehicle_Stock	StockCode	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_ManufacturerVehicleStock	True	True	After Delete
uTi_ManufacturerVehicleStock	True	True	After Insert
uTu_ManufacturerVehicleStock	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Production_ManfuacturerVehicleStock_FireAuditTrigger	FireAuditTrigger	([FireAudit- Trigger]='Y' OR [FireAudit-

		Trigger]='N')	
CK_Production_ManufacturerVehicleStock_Cost	Cost	([Cost]>=(0))	
CK_Production_ManufacturerVehicleStock_DeliveryCharge	DeliveryCharge	([Delivery- Charge]>=(0))	
CK_Production_ManufacturerVehicleStock_IsPremiumRoadHandlingPackage	IsPremiumRoad- Handling- Package	- RoadHandling-	
CK_Production_ManufacturerVehicleStock_PartsCharge	PartsCharge	([Parts- Charge]>=(0))	
CK_Production_ManufacturerVehicleStock_RepairsCharge	RepairsCharge	([Repairs- Charge]>=(0))	
CK_Production_ManufacturerVehicleStock_SysEndTime		([SysEnd- Time]>=[Sys- StartTime])	
CK_Production_ManufacturerVehicleStock_SysStartTime		([SysEnd- Time]>=[Sys- StartTime])	

Foreign Keys

Name	Columns
FK_ManufacturerVehicleStock_ManufacturerModel	ModelId->[Production].[ManufacturerModel].[Manufacturer-ModelId]
FK_ManufacturerVehicleStock_UserAuthorization	UserAuthorizationId->[DbSecurity].[User-Authorization].[UserAuthorizationId]

SQL Script

```
CREATE TABLE [Production].[ManufacturerVehicleStock]
[ManufacturerVehicleStockId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF -
Production ManufacturerVehicleStock Id] DEFAULT (NEXT VALUE FOR [SequenceId-
Insert].[Production_ManufacturerVehicleStock Id]),
[StockCode] [sdShortTextString].[StockCode] NOT NULL,
[Cost] [sdNumber].[Currency] NOT NULL,
[RepairsCharge] [sdNumber].[Currency] NOT NULL,
[PartsCharge] [sdNumber].[Currency] NOT NULL,
[DeliveryCharge] [sdNumber].[Currency] NOT NULL,
[IsPremiumRoadHandlingPackage] [sdFlag].[FlagBit] NOT NULL CONSTRAINT [DF Production -
ManufacturerVehicleStock IsPremiumRoadHandlingPackage] DEFAULT ((0)),
[VehicleColor] [sdVehicleString].[VehicleColor] NOT NULL,
[CustomerComment] [sdLongTextString].[CustomerComments] NULL,
[ModelId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[PurchaseDate] [sdDate].[DateYYYYMMDD] NOT NULL CONSTRAINT [DF_Production_Manufacturer-
VehicleStock PurchaseDate] DEFAULT (sysdatetime()),
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF_Production_-
ManufacturerVehicleStock UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF_Production_Manufacturer-
VehicleStock SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF_Production Manufacturer-
```

```
VehicleStock SysEndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [CK -
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Production ManufacturerVehicle-
Stock Note] DEFAULT ('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlaq].[FlaqYesNoString] NOT NULL CONSTRAINT [DF Production -
ManfuacturerVehicleStock FireAuditTrigger] DEFAULT ('N')
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
  - Trigger Name: Production.uTd ManufacturerVehicleStock on Production.Manufacturer-
VehicleStock
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Production].[uTd ManufacturerVehicleStock] on
[Production].[ManufacturerVehicleStock]
  EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit". "ProductionManufacturerVehicleStockHistory"
  "d". "ManufacturerVehicleStockId", "d". "StockCode", "d". "ModelId", "d". "Cost",
"d"."ModelId", "d"."Cost",
"d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."IsPremiumRoad-
HandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."PurchaseDate",
"d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime",
"d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
Trigger", "d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
)
SELECT
  "d". "ManufacturerVehicleStockId", "d". "StockCode", "d". "ModelId", "d". "Cost",
"d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."IsPremiumRoad-HandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."PurchaseDate",
   "d"."TransactionNumber",
  'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d"."TransactionNumber")),
  "d"."UserAuthorizationId",
```

```
"d"."SysStartTime",
 @NowTimeStamp, -- AS SysEndTime
  "d". "RowLevelHashKey",
  "d"."PriorRowLevelHashKey",
 "d". "FireAuditTrigger",
 @NowTimeStamp,
 @DBAction,
 @isDeleted
FROM deleted as "d"
END:
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTi ManufacturerVehicleStock on Production.Manufacturer-
VehicleStock
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTi ManufacturerVehicleStock] on
[Production].[ManufacturerVehicleStock]
 EXECUTE AS CALLER AFTER INSERT
AS
BEGIN
  -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut"."RowLevelHashKey" = "Hashing"."CreateSha256KeyFromJsonInputProduction-
ManufacturerVehicleStock" ("i". "ManufacturerVehicleStockId"),
     "ut"."PriorRowLevelHashKey" = null,
     "ut"."Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Production". "ManufacturerVehicleStock" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."ManufacturerVehicleStockId" = "ut"."ManufacturerVehicleStockId"
      AND "i"."TransactionNumber" = 1;
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Production.uTu ManufacturerVehicleStock on Production.Manufacturer-
VehicleStock
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Production].[uTu ManufacturerVehicleStock] on
```

```
[Production].[ManufacturerVehicleStock]
  EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
  DECLARE
  @NowTimeStamp datetime2(7) = sysdatetime(),
  @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.9999999',
  @FireAuditTrigger char(1) = 'N',
  @DBAction char(1) = 'U',
  @isDeleted char(1) = 'N';
  SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
  FROM deleted as "d"
   INNER JOIN inserted as "i"
      ON "i"."ManufacturerVehicleStockId" = "d"."ManufacturerVehicleStockId"
    AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
  IF (@FireAuditTrigger = 'Y')
  BEGIN
    -- Insert record into audit table
    INSERT INTO "Audit". "ProductionManufacturerVehicleStockHistory"
"d"."ManufacturerVehicleStockId","d"."StockCode","d"."Model-Id","d"."Cost","d"."RepairsCharge","d"."PartsCharge","d"."DeliveryCharge","d"."Is-
PremiumRoadHandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."Purchase-
Date", "d". "TransactionNumber", "d". "Note", "d". "UserAuthorizationId", "d". "SysStart-
Time","d"."SysEndTime","d"."RowLevelHashKey","d"."PriorRowLevelHashKey","d"."FireAudit-
Trigger", "d". "AuditDateTimeStamp", "d". "DBAction", "d". "isDeleted"
    )
    SELECT
"d"."ManufacturerVehicleStockId", "d"."StockCode", "d"."ModelId", "d"."Cost", "d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."IsPremiumRoad-HandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."PurchaseDate",
        "d"."TransactionNumber",
        coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
        "d"."UserAuthorizationId",
        "d". "SysStartTime",
       @NowTimeStamp,
        "d". "RowLevelHashKey",
        "d". "PriorRowLevelHashKey",
        "d"."FireAuditTrigger",
       @NowTimeStamp,
       @DBAction.
        @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
     ON "i"."ManufacturerVehicleStockId" = "d"."ManufacturerVehicleStockId"
         AND "i"."TransactionNumber" = "d"."TransactionNumber";
     UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputProduction-
```

```
ManufacturerVehicleStock"("i"."ManufacturerVehicleStockId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut" "Note" = "i" "Note".
         "ut"."FireAuditTrigger" = 'N'
     FROM "Production". "ManufacturerVehicleStock" as "ut"
       INNER JOIN inserted as "i"
         ON "i". "ManufacturerVehicleStockId" = "ut". "ManufacturerVehicleStockId"
           AND "i"."TransactionNumber" = "ut"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
       INNER JOIN deleted as "d"
         ON "i"."ManufacturerVehicleStockId" = "d"."ManufacturerVehicleStockId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END:
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManfuacturerVehicleStock FireAuditTrigger] CHECK (([FireAuditTrigger]='Y' OR [FireAudit-
Trigger] = 'N'))
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock Cost] CHECK (([Cost]>=(0)))
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock DeliveryCharge] CHECK (([DeliveryCharge]>=(0)))
ALTER TABLE [Production]. [ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock IsPremiumRoadHandlingPackage] CHECK (([IsPremiumRoadHandling-
Package] = (0) OR [IsPremiumRoadHandlingPackage] = (1)))
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock PartsCharge] CHECK (([PartsCharge]>=(0)))
ALTER TABLE [Production]. [ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock RepairsCharge] CHECK (([RepairsCharge]>=(0)))
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock SysEndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [CK Production -
ManufacturerVehicleStock SysStartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Production]. [ManufacturerVehicleStock] ADD CONSTRAINT [PK Stock] PRIMARY
KEY CLUSTERED ([ManufacturerVehicleStockId]) ON [PRIMARY]
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [XAK1Manufacturer -
Vehicle Stock] UNIQUE NONCLUSTERED ([StockCode]) ON [PRIMARY]
ALTER TABLE [Production].[ManufacturerVehicleStock] ADD CONSTRAINT [FK Manufacturer-
VehicleStock ManufacturerModel] FOREIGN KEY ([ModelId]) REFERENCES
[Production].[ManufacturerModel] ([ManufacturerModelId])
ALTER TABLE [Production]. [ManufacturerVehicleStock] ADD CONSTRAINT [FK Manufacturer-
VehicleStock UserAuthorization] FOREIGN KEY ([UserAuthorizationId]) REFERENCES [Db-
```

```
Security].[UserAuthorization] ([UserAuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'A produced physical vehicle that a
manufacturer has in stock', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicle-
Stock', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'The cost of a vehicle from the
manufacturer', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN',
N'Cost.'
GO
EXEC sp addextendedproperty N'MS Description', N'A comment added by a customer',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'Customer-
GO
EXEC sp addextendedproperty N'MS Description', N'The charge for delivery of a vehicle',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'Delivery-
GO
EXEC sp addextendedproperty N'MS Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock',
'COLUMN', N'FireAuditTrigger'
EXEC sp addextendedproperty N'MS Description', N'A flag to determine if a vehicle has a
premium road handling package', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicle-
Stock', 'COLUMN', N'IsPremiumRoadHandlingPackage'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for manfacturer
vehicle stock', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock',
'COLUMN', N'ManufacturerVehicleStockId'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for vehicle
models', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN',
N'ModelId'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A note regarding the database
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN',
N'Note'
EXEC sp addextendedproperty N'MS Description', N'The charge for parts on a vehicle',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'PartsCharge'
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'Prior-
RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The date of purchase', 'SCHEMA',
N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'PurchaseDate'
EXEC sp addextendedproperty N'MS Description', N'The charge for repairs on a vehicle',
'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'Repairs-
Charge'
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock',
'COLUMN', N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The stock code of a vehicle',
'SCHEMA, N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'StockCode'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
```

```
transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'SysEndTime'

GO

EXEC sp_addextendedproperty N'MS_Description', N'The start time for a system transaction', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'SysStartTime'

GO

EXEC sp_addextendedproperty N'MS_Description', N'The transaction number in a series of database transactions', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'TransactionNumber'

GO

EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-AuthorizationIds', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'UserAuthorizationId'

GO

EXEC sp_addextendedproperty N'MS_Description', N'The color of the vehicle', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'VehicleColor'

GO

EXEC sp_addextendedproperty N'MS_Description', N'The color of the vehicle', 'SCHEMA', N'Production', 'TABLE', N'ManufacturerVehicleStock', 'COLUMN', N'VehicleColor'

GO
```

[DbSecurity].[UserAuthorization]
[Production].[ManufacturerModel]
[sdDate].[DateYYYYMMDD]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[CustomerComments]
[sdLongTextString].[Note]
[sdNumber].[Currency]
[sdOrdinalNumber].[TransactionNumber]
[sdShortTextString].[StockCode]
[sdVehicleString].[VehicleColor]

Used By

Production

[Sales].[SalesOrderVehicleDetail]
[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock]
[CustomViews].[uvw_MehrshadVehicleCost]
[CustomViews].[uvw_MehrshadYearlySalesProfits]
[CustomViews].[uvw_RalphMakeModelPartsCost]
[Sales].[uvw_PivotTable]
[Sales].[uvw_Sales2018]
[Sales].[uvw_SalesByCountry]
[Sales].[uvw_SalesText]
[Sales].[uvw_StockPrices]
[Sales].[uvw_YearlySales]
[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]
[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicleStock]

I [Sales].[Customer]

MS_Description

A person who purchases a vehicle from the business

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	88
Created	8:25:42 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Key	Name	Data Type	Max Length (Bytes)	Nullabil ity	Default
PK C	CustomerId A unique identifier for customers	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Sales Custom er_Id])
#	CustomerName The full name of a customer	[sdNameString].[Customer- Name]	130	NOT NULL	
	CustomerAddress1 The street address of a customer	[sdAddressesString].[Address-String]	120	NOT NULL	
	CustomerAddress2 The extended street address of a customer	[sdAddressesString].[Address- String]	120	NULL allowed	
	CustomerTown The town or city a customer resides in	[sdAddressesString].[Town-String]	60	NOT NULL	
	CustomerPostalCode The postal code of a customer if applicable	[sdAddressesString].[Postal-CodeString]	18	NULL allowed	
FK	Countryld A unique identifier for countries	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	
■	IsCustomerReseller Flag to determine if a customer is a reseller	[sdFlag].[FlagBit]	4	NOT NULL	
	IsCustomerCreditRisk Flag to determine if customer is a credit risk	[sdFlag].[FlagBit]	4	NOT NULL	
	SpendCapacity	[sdMarketingText- String].[CustomerSpend-	30	NULL	

 $\label{thm:continuous} Project > 127.0.0.1,13001 > User \ databases > Group3-European Car Manufacturer SQL Server 2019 > Tables > Sales. Customer$

	The spend capacity of a customer	Capacity]		allowed	
F	UserAuthorizationId A unique identifier for UserAuthorization- Ids	[sdKey].[SurrogateKeyInteger]	4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	(sysdat etime())
	SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]	8	NULL allowed	('99991 231 23:59:5 9.99999 99')
	RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
	TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[TransactionNumber]	4	NOT NULL	((1))
	Note A note regarding the database transaction	[sdLongTextString].[Note]	200	NULL allowed	('Row was inserted ')
	PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevelHash- Key]	32	NULL allowed	
■	FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNoString]	1	NOT NULL	('N')

Indexes

Key	Name	Key Columns	Unique
PK C	PK_Customer	CustomerId	True
	XIE1Customer	CustomerName	

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_Customer	True	True	After Delete
uTi_Customer	True	True	After Insert
uTu_Customer	True	True	After Update

Check Constraints

Name	On Column	Constraint
BCK_TemplateTable_ValidBit_161407054	IsCustomerCreditRisk	([IsCustomerCreditRisk]=(0) OR [Is- CustomerCreditRisk]=(1))
CK_Sales_Customer_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [FireAudit-Trigger]='N')
CK_Sales_Customer_IsCustomerReseller	IsCustomerReseller	([IsCustomerReseller]=(0) OR [Is- CustomerReseller]=(1))

CK_Sales_Customer_SysEndTime	([SysEndTime]>=[SysStartTime])
CK_Sales_Customer_SysStartTime	([SysEndTime]>=[SysStartTime])

Foreign Keys

Name	Columns
FK_Customer_Country	CountryId->[Locale].[Country].[CountryId]
FK_Customer_UserAuthorization	UserAuthorizationId->[DbSecurity].[UserAuthorization].[UserAuthorizationId]

SQL Script

```
CREATE TABLE [Sales].[Customer]
[CustomerId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Sales Customer Id]
DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Sales Customer Id]),
[CustomerName] [sdNameString].[CustomerName] NOT NULL,
[CustomerAddress1] [sdAddressesString].[AddressString] NOT NULL,
[CustomerAddress2] [sdAddressesString].[AddressString] NULL,
[CustomerTown] [sdAddressesString].[TownString] NOT NULL,
[CustomerPostalCode] [sdAddressesString].[PostalCodeString] NULL,
[CountryId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[IsCustomerReseller] [sdFlag].[FlagBit] NOT NULL,
[IsCustomerCreditRisk] [sdFlag].[FlagBit] NOT NULL,
[SpendCapacity] [sdMarketingTextString].[CustomerSpendCapacity] NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Sales -
Customer UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales Customer SysStart-
Time] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales Customer SysEnd-
Time] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Sales Customer_TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Sales Customer Note] DEFAULT ('Row
was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Sales Customer -
FireAuditTrigger] DEFAULT ('N')
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTd_Customer on Sales.Customer
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Sales].[uTd Customer] on [Sales].[Customer]
```

```
WTTH
  EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit"."SalesCustomerHistory"
 "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."CustomerAddress2",
"d"."CustomerTown", "d"."CustomerPostalCode", "d"."CountryId", "d"."IsCustomer-Reseller", "d"."IsCustomerCreditRisk", "d"."SpendCapacity", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."Row-
LevelHashKey", "d". "PriorRowLevelHashKey", "d". "FireAuditTrigger", "d". "AuditDateTime-Stamp", "d". "DBAction", "d". "isDeleted"
)
SELECT
"d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."CustomerAddress2", "d"."CustomerTown", "d"."CustomerPostalCode", "d"."CountryId", "d"."IsCustomer-
Reseller", "d"."IsCustomerCreditRisk", "d"."SpendCapacity",
  "d"."TransactionNumber",
  'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d"."TransactionNumber")),
  "d"."UserAuthorizationId",
  "d"."SysStartTime",
  @NowTimeStamp, -- AS SysEndTime
  "d". "RowLevelHashKey",
  "d". "PriorRowLevelHashKey",
  "d". "FireAuditTrigger",
  @NowTimeStamp,
  @DBAction,
  @isDeleted
FROM deleted as "d"
END;
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTi_Customer on Sales.Customer
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTi Customer] on [Sales].[Customer]
WITH
```

```
EXECUTE AS CALLER AFTER INSERT
AS
BEGIN
  -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputSales-
Customer"("i"."CustomerId"),
     "ut"."PriorRowLevelHashKey" = null,
     "ut". "Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Sales"."Customer" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."CustomerId" = "ut"."CustomerId"
      AND "i"."TransactionNumber" = 1;
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTu Customer on Sales.Customer
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTu Customer] on [Sales].[Customer]
WITH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.9999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
    ON "i"."CustomerId" = "d"."CustomerId"
   AND "i". "TransactionNumber" = "d". "TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
 BEGIN
    -- Insert record into audit table
   INSERT INTO "Audit". "SalesCustomerHistory"
      "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."Customer-
Address2","d"."CustomerTown","d"."CustomerPostalCode","d"."CountryId","d"."IsCustomer-
```

```
Reseller", "d". "IsCustomerCreditRisk", "d". "SpendCapacity", "d". "Transaction-
Number","d"."Note","d"."UserAuthorizationId","d"."SysStartTime","d"."SysEnd-
Time", "d". "RowLevelHashKey", "d". "PriorRowLevelHashKey", "d". "FireAuditTrigger", "d". "AuditDateTimeStamp", "d". "DBAction", "d". "isDeleted"
   )
    SELECT
       "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."Customer-
Address2", "d". "CustomerTown", "d". "CustomerPostalCode", "d". "CountryId", "d". "Is-
CustomerReseller", "d". "IsCustomerCreditRisk", "d". "SpendCapacity",
       "d". "TransactionNumber",
       coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
       "d"."UserAuthorizationId",
       "d"."SysStartTime",
       @NowTimeStamp,
       "d". "RowLevelHashKey",
       "d". "PriorRowLevelHashKey",
       "d". "FireAuditTrigger",
       @NowTimeStamp,
       @DBAction.
       @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
     ON "i"."CustomerId" = "d"."CustomerId"
        AND "i"."TransactionNumber" = "d"."TransactionNumber";
     UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputSales-
Customer"("i"."CustomerId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut". "SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut" ."Note" = "i" ."Note",
         "ut"."FireAuditTrigger" = 'N'
     FROM "Sales". "Customer" as "ut"
       INNER JOIN inserted as "i"
         ON "i"."CustomerId" = "ut"."CustomerId"
           AND "i"."TransactionNumber" = "ut"."TransactionNumber"
           AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
       INNER JOIN deleted as "d"
         ON "i"."CustomerId" = "d"."CustomerId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END:
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [BCK TemplateTable ValidBit 161407054]
CHECK (([IsCustomerCreditRisk]=(0) OR [IsCustomerCreditRisk]=(1)))
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [CK Sales Customer FireAuditTrigger]
CHECK (([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N'))
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [CK Sales Customer IsCustomerReseller]
CHECK (([IsCustomerReseller]=(0) OR [IsCustomerReseller]=(1)))
```

```
GO
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [CK Sales Customer SysEndTime] CHECK
(([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [CK Sales Customer SysStartTime] CHECK
(([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [PK Customer] PRIMARY KEY CLUSTERED
([CustomerId]) ON [PRIMARY]
CREATE NONCLUSTERED INDEX [XIE1Customer] ON [Sales].[Customer] ([CustomerName]) ON
[PRTMARY]
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [FK Customer Country] FOREIGN KEY
([CountryId]) REFERENCES [Locale].[Country] ([CountryId])
ALTER TABLE [Sales].[Customer] ADD CONSTRAINT [FK Customer UserAuthorization] FOREIGN
KEY ([UserAuthorizationId]) REFERENCES [DbSecurity].[UserAuthorization] ([User-
AuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'A person who purchases a vehicle from
the business', 'SCHEMA', N'Sales', 'TABLE', N'Customer', NULL, NULL
EXEC sp_addextendedproperty N'MS Description', N'A unique identifier for countries',
'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CountryId'
EXEC sp addextendedproperty N'MS Description', N'The street address of a customer',
'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerAddress1'
EXEC sp addextendedproperty N'MS Description', N'The extended street address of a
customer', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerAddress2'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for customers',
'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerId'
EXEC sp addextendedproperty N'MS Description', N'The full name of a customer',
'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerName'
EXEC sp addextendedproperty N'MS Description', N'The postal code of a customer if
applicable', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerPostalCode'
EXEC sp addextendedproperty N'MS Description', N'The town or city a customer resides
in', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'CustomerTown'
GO
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'FireAudit-
Trigger'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Flag to determine if customer is a
credit risk', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'IsCustomerCredit-
Risk'
GO
EXEC sp addextendedproperty N'MS Description', N'Flag to determine if a customer is a
reseller', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'IsCustomerReseller'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'Note'
```

```
EXEC sp_addextendedproperty N'MS_Description', N'The prior transaction row level hash
      SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'PriorRowLevelHashKey
GO
EXEC sp addextendedproperty N'MS Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'RowLevelHash-
Kev'
GO
EXEC sp addextendedproperty N'MS Description', N'The spend capacity of a customer',
'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'SpendCapacity'
EXEC sp addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'SysEndTime'
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'SysStartTime'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN',
N'TransactionNumber'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Sales', 'TABLE', N'Customer', 'COLUMN', N'User-
AuthorizationId'
```

[DbSecurity].[UserAuthorization]
[Locale].[Country]
[sdAddressesString].[AddressString]
[sdAddressesString].[PostalCodeString]
[sdAddressesString].[TownString]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdMarketingTextString].[CustomerSpendCapacity]
[sdNameString].[CustomerName]
[sdOrdinalNumber].[TransactionNumber]

Used By

Sales

[Sales].[SalesOrderVehicle]
[Audit].[vwFindUniqueTablePkySalesCustomer]
[CustomViews].[uvw_ChuanCustomerCountry]
[CustomViews].[uvw_MehrshadVehicleCost]
[CustomViews].[uvw_MehrshadYearlyCustomerSales]
[CustomViews].[uvw_MehrshadYearlySalesProfits]
[Sales].[uvw_Sales2018]
[Sales].[uvw_SalesByCountry]
[Sales].[uvw_SalesText]

Author: StudentCSCI381Erwin

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Sales.Customer

[Sales].[uvw_YearlySales]
[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]
[Hashing].[CreateSha256KeyFromJsonInputSalesCustomer]

[Sales].[SalesOrderVehicle]

MS_Description

An order for the purchase of a vehicle

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	324
Created	8:25:45 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Key	Name	Data Type	Persist ed	Compu ted	Max Length (Bytes)	Nullabi lity	Default
PK C	SalesOrderVehicleId A unique identifier for a purchase	[sdKey].[SurrogateKey-Integer]			4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Sales Sales- Order- Vehicle _ld])
F	CustomerId A unique identifier for customers	[sdKey].[SurrogateKey- Integer]			4	NOT NULL	
F	Staffld A unique identifier for staff members	[sdKey].[SurrogateKey- Integer]			4	NOT NULL	
	InvoiceNumber The invoice number of an order	[sdShortText- String].[InvoiceNumber]			8	NOT NULL	
	TotalSalePrice The total sale price of an order	[sdNumber].[Currency]			9	NOT NULL	((0))
	SaleDate The date an order was made	[sdDate].[Date- YYYYMMDD]			3	NOT NULL	(sysdat etime())
FK	UserAuthorizationId A unique identifier for User- AuthorizationIds	[sdKey].[SurrogateKey-Integer]			4	NOT NULL	((1))
	SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]			8	NULL allowed	(sysdat etime())

SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]			8	NULL allowed	('99991 231 23:59:5 9.9999 999')
RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[RowLevel- HashKey]			32	NULL allowed	
TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[Transaction- Number]			4	NOT NULL	((1))
Note A note regarding the database transaction	[sdLongText- String].[Note]			200	NULL allowed	('Row was inserte d')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[RowLevel- HashKey]			32	NULL allowed	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNo- String]			1	NOT NULL	('N')
CategoryDescription The category description a vehicle sales threshold	varchar(11)	True	True	11	NOT NULL	

Computed columns

Name	Column definition
CategoryDescription	(case when [TotalSalePrice]>=(100001.00) then 'Very High' when [TotalSale-Price]>=(75001.00) AND [TotalSalePrice]<=(100000.00) then 'High' when [TotalSale-Price]>=(50001.00) AND [TotalSalePrice]<=(75000.00) then 'Medium' when [TotalSale-Price]>=(25001.00) AND [TotalSalePrice]<=(50000.00) then 'Low' when [TotalSale-Price]>=(150001.00) AND [TotalSalePrice]<=(250000.00) then 'Exceptional' when [TotalSale-Price]>=(100001.00) AND [TotalSalePrice]<=(150000.00) then 'Very High' when [TotalSale-Price]>=(100.00) AND [TotalSalePrice]<=(25000.00) then 'Very Low' else 'Unknown' end COLLATE SQL_Latin1_General_CP1_CI_AS)

Indexes

Key	Name	Key Columns	Unique
PK2 C	XPKSales_Order_Vehicle	SalesOrderVehicleId	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_SalesOrderVehicle	True	True	After Delete
uTi_SalesOrderVehicle	True	True	After Insert
uTu_SalesOrderVehicle	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Sales_SalesOrderVehicle_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [FireAudit-Trigger]='N')
CK_Sales_SalesOrderVehicle_SysEndTime		([SysEndTime]>=[SysStartTime])
CK_Sales_SalesOrderVehicle_SysStartTime		([SysEndTime]>=[SysStartTime])
CK_Sales_SalesOrderVehicle_TotalSalePrice	TotalSalePrice	([TotalSalePrice]>=(0))

Foreign Keys

Name	Columns
FK_SalesOrderVehicle_Customer	CustomerId->[Sales].[Customer].[CustomerId]
FK_SalesOrderVehicle_Staff	StaffId->[HumanResources].[Staff].[StaffId]
FK_SalesOrderVehicle_UserAuthorization	UserAuthorizationId->[DbSecurity].[UserAuthorization].[User-AuthorizationId]

SQL Script

Author: StudentCSCI381Erwin

```
CREATE TABLE [Sales].[SalesOrderVehicle]
[SalesOrderVehicleId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Sales Sales-
OrderVehicle Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Sales SalesOrderVehicle -
[CustomerId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[StaffId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[InvoiceNumber] [sdShortTextString].[InvoiceNumber] NOT NULL,
[TotalSalePrice] [sdNumber].[Currency] NOT NULL CONSTRAINT [DF Sales SalesOrderVehicle -
TotalSalePrice] DEFAULT ((0)),
[SaleDate] [SdDate].[DateYYYYMMDD] NOT NULL CONSTRAINT [DF Sales SalesOrderVehicle Sale-
Date] DEFAULT (sysdatetime()),
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Sales Sales-
OrderVehicle UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales SalesOrder-
Vehicle SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales SalesOrderVehicle -
SysEndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Sales SalesOrderVehicle TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Sales SalesOrderVehicle Note]
DEFAULT ('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Sales SalesOrder-
Vehicle FireAuditTrigger] DEFAULT ('N'),
[CategoryDescription] AS (case when [TotalSalePrice] >= (100001.00) then 'Very High'
when [TotalSalePrice]>=(75001.00) AND [TotalSalePrice]<=(100000.00) then 'High' when
[TotalSalePrice] >= (50001.00) AND [TotalSalePrice] <= (75000.00) then 'Medium' when [Total-
\label{eq:salePrice} {\tt SalePrice]} \verb|>= (25001.00) & {\tt AND} & [{\tt TotalSalePrice}] \verb|<= (50000.00) & {\tt then 'Low' when [TotalSalePrice]} \verb|>= (25001.00) & {\tt NND} & [{\tt TotalSalePrice}] \verb|<= (50000.00) & {\tt then 'Low' when [TotalSalePrice]} \verb|>= (25001.00) & {\tt NND} & [{\tt TotalSalePrice}] \verb|<= (50000.00) & {\tt then 'Low' when [TotalSalePrice]} \verb|>= (250000.00) & {\tt then 'Low' when [TotalSalePrice]} \|>= (250000.00)
Price]>=(150001.00) AND [TotalSalePrice]<=(250000.00) then 'Exceptional' when [Total-
SalePrice]>=(100001.00) AND [TotalSalePrice]<=(150000.00) then 'Very High' when [Total-
SalePrice]>=(100.00) AND [TotalSalePrice]<=(25000.00) then 'Very Low' else 'Unknown'
end COLLATE SQL Latin1 General CP1 CI AS) PERSISTED NOT NULL
```

```
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTd SalesOrderVehicle on Sales.SalesOrderVehicle
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Sales].[uTd_SalesOrderVehicle] on [Sales].[SalesOrderVehicle]
WITH
  EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit"."SalesSalesOrderVehicleHistory"
  "d"."SalesOrderVehicleId", "d"."CustomerId", "d"."StaffId", "d"."InvoiceNumber",
"d"."TotalSalePrice", "d"."SaleDate", "d"."CategoryDescription", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger", "d"."Audit-DateTimeStamp", "d"."DBAction", "d"."isDeleted"
)
SELECT
  "d". "SalesOrderVehicleId", "d". "CustomerId", "d". "StaffId", "d". "InvoiceNumber",
"d"."TotalSalePrice", "d"."SaleDate", "d"."CategoryDescription",
  "d". "TransactionNumber",
  'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message
Transaction Number: ', "d". "TransactionNumber")),
  "d"."UserAuthorizationId",
  "d". "SysStartTime",
  @NowTimeStamp, -- AS SysEndTime
  "d" . "RowLevelHashKey",
  "d"."PriorRowLevelHashKey",
  "d" ."FireAuditTrigger",
  @NowTimeStamp,
  @DBAction,
  @isDeleted
FROM deleted as "d"
END;
GO
```

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTi SalesOrderVehicle on Sales.SalesOrderVehicle
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTi SalesOrderVehicle] on [Sales].[SalesOrderVehicle]
 EXECUTE AS CALLER AFTER INSERT
AS
BEGIN
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut"."RowLevelHashKey" = "Hashing"."CreateSha256KeyFromJsonInputSalesSalesOrder-
Vehicle"("i"."SalesOrderVehicleId"),
     "ut"."PriorRowLevelHashKey" = null,
      "ut". "Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Sales". "SalesOrderVehicle" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."SalesOrderVehicleId" = "ut"."SalesOrderVehicleId"
     AND "i". "TransactionNumber" = 1;
END:
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTu_SalesOrderVehicle on Sales.SalesOrderVehicle
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTu_SalesOrderVehicle] on [Sales].[SalesOrderVehicle]
WITH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.9999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
 SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
```

```
FROM deleted as "d"
   INNER JOIN inserted as "i"
     ON "i"."SalesOrderVehicleId" = "d"."SalesOrderVehicleId"
   AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
  IF (@FireAuditTrigger = 'Y')
 BEGIN
   -- Insert record into audit table
   INSERT INTO "Audit"."SalesSalesOrderVehicleHistory"
     "d"."SalesOrderVehicleId","d"."CustomerId","d"."StaffId","d"."Invoice-
Number", "d". "TotalSalePrice", "d". "SaleDate", "d". "CategoryDescription", "d". "Transaction-
Number", "d". "Note", "d". "UserAuthorizationId", "d". "SysStartTime", "d". "SysEnd-
Time","d"."RowLevelHashKey","d"."PriorRowLevelHashKey","d"."FireAuditTrigger",
"d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
   SELECT
      "d". "SalesOrderVehicleId", "d". "CustomerId", "d". "StaffId", "d". "InvoiceNumber",
"d"."TotalSalePrice", "d"."SaleDate", "d"."CategoryDescription",
       "d". "TransactionNumber",
       coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
       "d"."UserAuthorizationId",
       "d"."SysStartTime",
       @NowTimeStamp,
       "d". "RowLevelHashKey",
       "d". "PriorRowLevelHashKey",
       "d"."FireAuditTrigger",
       @NowTimeStamp,
      @DBAction,
      @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
     ON "i"."SalesOrderVehicleId" = "d"."SalesOrderVehicleId"
       AND "i"."TransactionNumber" = "d"."TransactionNumber";
    UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputSalesSales-
OrderVehicle" ("i". "SalesOrderVehicleId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut"."Note" = "i"."Note",
         "ut"."FireAuditTrigger" = 'N'
     FROM "Sales". "SalesOrderVehicle" as "ut"
       INNER JOIN inserted as "i"
         ON "i"."SalesOrderVehicleId" = "ut"."SalesOrderVehicleId"
           AND "i"."TransactionNumber" = "ut"."TransactionNumber"
           AND "i". "RowLevelHashKey" = "ut". "RowLevelHashKey"
       INNER JOIN deleted as "d"
         ON "i"."SalesOrderVehicleId" = "d"."SalesOrderVehicleId"
           AND "i"."TransactionNumber" = "d"."TransactionNumber"
          AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
```

```
END:
END:
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [CK Sales SalesOrderVehicle Fire-
AuditTrigger] CHECK (([FireAuditTrigger]='Y' OR [FireAuditTrigger]='N'))
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [CK Sales SalesOrderVehicle Sys-
EndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [CK Sales SalesOrderVehicle Sys-
StartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [CK Sales SalesOrderVehicle -
TotalSalePrice] CHECK (([TotalSalePrice]>=(0)))
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [XPKSales Order Vehicle] PRIMARY
KEY CLUSTERED ([SalesOrderVehicleId]) ON [PRIMARY]
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [FK SalesOrderVehicle Customer]
FOREIGN KEY ([CustomerId]) REFERENCES [Sales].[Customer] ([CustomerId])
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [FK SalesOrderVehicle Staff]
FOREIGN KEY ([StaffId]) REFERENCES [HumanResources].[Staff] ([StaffId])
ALTER TABLE [Sales].[SalesOrderVehicle] ADD CONSTRAINT [FK SalesOrderVehicle User-
Authorization] FOREIGN KEY ([UserAuthorizationId]) REFERENCES [DbSecurity].[User-
Authorization] ([UserAuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'An order for the purchase of a
vehicle', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'The category description a vehicle
sales threshold', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN',
N'CategoryDescription'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for customers',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'CustomerId'
EXEC sp_addextendedproperty N'MS_Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'Fire-
AuditTrigger'
GO
EXEC sp_addextendedproperty N'MS Description', N'The invoice number of an order',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'InvoiceNumber'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'Note'
GO
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'PriorRowLevelHash-
Key'
GO
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'Row-
LevelHashKey'
GO
EXEC sp addextendedproperty N'MS Description', N'The date an order was made', 'SCHEMA',
N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'SaleDate'
```

```
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for a purchase',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'SalesOrderVehicleId'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for staff
members, 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'StaffId'
EXEC sp_addextendedproperty N'MS Description', N'The end time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'SysEnd-
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'SysStart-
EXEC sp addextendedproperty N'MS Description', N'The total sale price of an order',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'TotalSalePrice'
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN',
N'TransactionNumber'
EXEC sp_addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicle', 'COLUMN', N'User-
AuthorizationId'
GΩ
```

Uses

[DbSecurity].[UserAuthorization] [HumanResources].[Staff]

[Sales].[Customer]

[sdDate].[DateYYYYMMDD]

[sdDateTime].[DateTimestamp]

[sdFlag].[FlagYesNoString]

[sdHashKey].[RowLevelHashKey]

[sdKey].[SurrogateKeyInteger]

[sdLongTextString].[Note]

[sdNumber].[Currency]

[sdOrdinalNumber].[TransactionNumber]

[sdShortTextString].[InvoiceNumber]

Sales

Used Bv

[Sales].[SalesOrderVehicleDetail]

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle]

[CustomViews].[uvw_ChuanStaffDiscountGiven]

[CustomViews].[uvw_ChuanStaffSales]

[CustomViews].[uvw MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw MehrshadYearlySalesProfits]

[Sales].[uvw_PivotTable]

[Sales].[uvw Sales2018]

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Sales.SalesOrderVehicle

[Sales].[uvw_SalesByCountry]
[Sales].[uvw_SalesText]
[Sales].[uvw_YearlySales]
[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]
[Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

MS_Description

The details of a vehicle order

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	351
Created	8:25:45 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Columns

Key	Name	Data Type	Persist ed	Comp uted	Max Length (Bytes)	Nullabi lity	Defaul t
PK <mark>P</mark> C	SalesOrderVehicleDetailId A unique identifier for Sales- OrderVehicleDetail Ids	[sdKey].[SurrogateKey-Integer]			4	NOT NULL	(NEXT VALUE FOR [Seque nceld- Insert].[Sales Sales- Order- Vehicle- Detail Id])
F P	SalesOrderVehicleId A unique identifier for a purchase	[sdKey].[SurrogateKey- Integer]			4	NOT NULL	
	LineItemNumber The line item number on the invoice	[sdSequence- Number].[LineItem- Number]			4	NOT NULL	((1))
	SalePrice The sale price of a vehicle	[sdNumber].[Currency]			9	NOT NULL	((0))
	LineItemDiscount The discount of the line item number	[sdNumber].[Currency]			9	NOT NULL	((0))
	DerivedDiscountedSalePrice The derived discounted sale price of a vehicle	numeric(19,2)	True	True	9	NOT NULL	
r F	ManufacturerVehicleStockId A unique identifier for manfacturer vehicle stock	[sdKey].[SurrogateKey- Integer]			4	NOT NULL	
F	UserAuthorizationId A unique identifier for User-	[sdKey].[SurrogateKey- Integer]			4	NOT NULL	((1))

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Sales.SalesOrderVehicleDetail

AuthorizationIds					
SysStartTime The start time for a system transaction	[sdDateTime].[Date- Timestamp]		8	NULL allowe d	(sysdat etime())
SysEndTime The end time for a system transaction	[sdDateTime].[Date- Timestamp]		8	NULL allowe d	('99991 231 23:59:5 9.9999 999')
RowLevelHashKey Current row hash key representing all combined columns	[sdHashKey].[Row- LevelHashKey]		32	NULL allowe d	
TransactionNumber The transaction number in a series of database transactions	[sdOrdinal- Number].[Transaction- Number]		4	NOT NULL	((1))
Note A note regarding the database transaction	[sdLongText- String].[Note]		200	NULL allowe d	('Row was inserte d')
PriorRowLevelHashKey The prior transaction row level hash key	[sdHashKey].[Row- LevelHashKey]		32	NULL allowe d	
FireAuditTrigger A flag to indicate if an audit trigger should be fired	[sdFlag].[FlagYesNo- String]		1	NOT NULL	('N')

Computed columns

Name	Column definition
DerivedDiscountedSalePrice	([SalePrice]-[LineItemDiscount])

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_SalesDetails	SalesOrderVehicleDetailId	True
	XAK1Sales_Order_Vehicle_Detail	SalesOrderVehicleId, ManufacturerVehicleStockId	True

Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
uTd_SalesOrderVehicleDetail	True	True	After Delete
uTi_SalesOrderVehicleDetail	True	True	After Insert
uTu_SalesOrderVehicleDetail	True	True	After Update

Check Constraints

Name	On Column	Constraint
CK_Sales_SalesOrderVehicleDetail_FireAuditTrigger	FireAuditTrigger	([FireAuditTrigger]='Y' OR [Fire- AuditTrigger]='N')
CK_Sales_SalesOrderVehicleDetail_LineItemDiscount	LineItemDiscount	([LineItemDiscount]>=(0))
CK_Sales_SalesOrderVehicleDetail_SalePrice	SalePrice	([SalePrice]>=(0))
CK_Sales_SalesOrderVehicleDetail_SysEndTime		([SysEndTime]>=[SysStart- Time])
CK_Sales_SalesOrderVehicleDetail_SysStartTime		([SysEndTime]>=[SysStart- Time])

Foreign Keys

Name	Columns
FK_SalesOrderVehicleDetail_ManufacturerVehicleStock	ManufacturerVehicleStockId->[Production].[Manufacturer-VehicleStock].[ManufacturerVehicleStockId]
FK_SalesOrderVehicleDetail_SalesOrderVehicle	SalesOrderVehicleId->[Sales].[SalesOrderVehicle].[Sales-OrderVehicleId]
FK_SalesOrderVehicleDetail_UserAuthorization	UserAuthorizationId->[DbSecurity].[User-Authorization].[UserAuthorizationId]

SQL Script

```
CREATE TABLE [Sales].[SalesOrderVehicleDetail]
[SalesOrderVehicleDetailId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF -
Sales SalesOrderVehicleDetail Id] DEFAULT (NEXT VALUE FOR [SequenceIdInsert].[Sales -
SalesOrderVehicleDetail Id]),
[SalesOrderVehicleId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[LineItemNumber] [sdSequenceNumber].[LineItemNumber] NOT NULL CONSTRAINT [DF Sales -
SalesOrderVehicleDetail LineItemNumber] DEFAULT ((1)),
[SalePrice] [sdNumber].[Currency] NOT NULL CONSTRAINT [DF Sales SalesOrderVehicle-
Detail SalePrice] DEFAULT ((0)),
[LineItemDiscount] [sdNumber].[Currency] NOT NULL CONSTRAINT [DF Sales SalesOrder-
VehicleDetail_LineItemDiscount] DEFAULT ((0)),
[DerivedDiscountedSalePrice] AS ([SalePrice]-[LineItemDiscount]) PERSISTED NOT NULL,
[ManufacturerVehicleStockId] [sdKey].[SurrogateKeyInteger] NOT NULL,
[UserAuthorizationId] [sdKey].[SurrogateKeyInteger] NOT NULL CONSTRAINT [DF Sales Sales-
OrderVehicleDetail UserAuthorizationId] DEFAULT ((1)),
[SysStartTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales SalesOrderVehicle-
Detail SysStartTime] DEFAULT (sysdatetime()),
[SysEndTime] [sdDateTime].[DateTimestamp] NULL CONSTRAINT [DF Sales SalesOrderVehicle-
Detail SysEndTime] DEFAULT ('99991231 23:59:59.9999999'),
[RowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[TransactionNumber] [sdOrdinalNumber].[TransactionNumber] NOT NULL CONSTRAINT [DF -
Sales SalesOrderVehicleDetail TransactionNumber] DEFAULT ((1)),
[Note] [sdLongTextString].[Note] NULL CONSTRAINT [DF Sales SalesOrderVehicleDetail -
Note] DEFAULT ('Row was inserted'),
[PriorRowLevelHashKey] [sdHashKey].[RowLevelHashKey] NULL,
[FireAuditTrigger] [sdFlag].[FlagYesNoString] NOT NULL CONSTRAINT [DF Sales SalesOrder-
VehicleDetail FireAuditTrigger] DEFAULT ('N')
```

```
) ON [PRIMARY]
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTd SalesOrderVehicleDetail on Sales.SalesOrderVehicleDetail
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER DELETE
-- Description: TSQL-AuditDeleteTrigger Templated Code
CREATE TRIGGER [Sales].[uTd_SalesOrderVehicleDetail] on [Sales].[SalesOrderVehicle-
Detail]
WITH
  EXECUTE AS CALLER AFTER DELETE
AS
BEGIN
DECLARE
@NowTimestamp datetime = sysdatetime(),
@DBAction char(1) = 'D',
@isDeleted char(1) = 'Y'
-- Trigger Code
INSERT into "Audit". "SalesSalesOrderVehicleDetailHistory"
"d"."SalesOrderVehicleDetailId", "d"."SalesOrderVehicleId", "d"."LineItemNumber",
"d"."ManufacturerVehicleStockId", "d"."SalePrice", "d"."LineItemDiscount", "d"."Derived-
DiscountedSalePrice", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId",
"d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d"."FireAuditTrigger", "d"."AuditDateTimeStamp", "d"."DBAction", "d"."isDeleted"
SELECT
  "d"."SalesOrderVehicleDetailId", "d"."SalesOrderVehicleId", "d"."LineItemNumber",
"d"."SalePrice", "d"."LineItemDiscount", "d"."DerivedDiscountedSalePrice",
"d". "ManufacturerVehicleStockId",
   "d". "TransactionNumber",
'Last Transaction prior to deletion: ' + coalesce("d"."Note", concat('No Message Transaction Number: ', "d"."TransactionNumber")),
   "d"."UserAuthorizationId",
  "d"."SysStartTime",
  @NowTimeStamp, -- AS SysEndTime
   "d"."RowLevelHashKey",
  "d" . "PriorRowLevelHashKey",
   "d". "FireAuditTrigger",
   @NowTimeStamp,
  @DBAction.
  @isDeleted
FROM deleted as "d"
END:
```

```
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTi SalesOrderVehicleDetail on Sales.SalesOrderVehicleDetail
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER INSERT
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTi SalesOrderVehicleDetail] on [Sales].[SalesOrderVehicle-
Detail]
WITH
 EXECUTE AS CALLER AFTER INSERT
AS
BEGIN
 -- Update the current record hash keys and the temporal range of the transaction of
factually being true
 UPDATE "ut"
 SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputSalesSalesOrder-
VehicleDetail"("i"."SalesOrderVehicleDetailId"),
      "ut"."PriorRowLevelHashKey" = null,
      "ut". "Note" = 'Row Inserted',
     "ut"."FireAuditTrigger" = 'N'
 FROM "Sales". "SalesOrderVehicleDetail" as "ut" --updateTable
   INNER JOIN inserted as "i"
   ON "i"."SalesOrderVehicleDetailId" = "ut"."SalesOrderVehicleDetailId"
      AND "i". "TransactionNumber" = 1;
END;
GO
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Trigger Name: Sales.uTu SalesOrderVehicleDetail on Sales.SalesOrderVehicleDetail
-- Trigger Type: After WITH EXECUTE AS CALLER AFTER UPDATE
-- Description: TSQL-AuditInsertTrigger Templated Code
CREATE TRIGGER [Sales].[uTu SalesOrderVehicleDetail] on [Sales].[SalesOrderVehicle-
Detail]
WTTH
 EXECUTE AS CALLER AFTER UPDATE
AS
BEGIN
 DECLARE
 @NowTimeStamp datetime2(7) = sysdatetime(),
 @OpenEndedSysEndTime datetime2(7) = '99991231 23:59:59.99999999',
 @FireAuditTrigger char(1) = 'N',
 @DBAction char(1) = 'U',
 @isDeleted char(1) = 'N';
```

```
SELECT @FireAuditTrigger = "i"."FireAuditTrigger"
 FROM deleted as "d"
   INNER JOIN inserted as "i"
     ON "i". "SalesOrderVehicleDetailId" = "d". "SalesOrderVehicleDetailId"
   AND "i"."TransactionNumber" = "d"."TransactionNumber";
  -- Audit only if @FireAuditTrigger = 'Y'
 IF (@FireAuditTrigger = 'Y')
 BEGIN
    -- Insert record into audit table
   INSERT INTO "Audit"."SalesSalesOrderVehicleDetailHistory"
      "d". "SalesOrderVehicleDetailId", "d". "SalesOrderVehicleId", "d". "LineItem-
Number","d"."ManufacturerVehicleStockId","d"."SalePrice","d"."LineItem-
Discount", "d". "DerivedDiscountedSalePrice", "d". "TransactionNumber", "d". "Note", "d". "User-
AuthorizationId", "d". "SysStartTime", "d". "SysEndTime", "d". "RowLevelHashKey", "d". "Prior-
RowLevelHashKey", "d". "FireAuditTrigger", "d". "AuditDateTimeStamp", "d". "DBAction",
"d"."isDeleted"
   SELECT
      "d". "SalesOrderVehicleDetailId", "d". "SalesOrderVehicleId", "d". "LineItem-
Number", "d". "SalePrice", "d". "LineItemDiscount", "d". "DerivedDiscountedSalePrice",
"d". "ManufacturerVehicleStockId",
       "d" ."TransactionNumber",
      coalesce ("d". "Note", concat ('No Message Transaction Number: ', "d". "Transaction-
Number")),
       "d" . "UserAuthorizationId",
       "d". "SysStartTime",
       @NowTimeStamp,
       "d". "RowLevelHashKey",
       "d"."PriorRowLevelHashKey",
       "d"."FireAuditTrigger",
       @NowTimeStamp,
       @DBAction,
      @isDeleted
     FROM deleted AS "d"
     INNER JOIN inserted AS "i"
     ON "i"."SalesOrderVehicleDetailId" = "d"."SalesOrderVehicleDetailId"
        AND "i"."TransactionNumber" = "d"."TransactionNumber";
    UPDATE "ut"
     SET "ut". "RowLevelHashKey" = "Hashing". "CreateSha256KeyFromJsonInputSalesSales-
OrderVehicleDetail"("i"."SalesOrderVehicleDetailId"),
         "ut". "PriorRowLevelHashKey" = "d". "RowLevelHashKey",
         "ut"."TransactionNumber" = "d"."TransactionNumber" + 1,
         "ut"."SysStartTime" = @NowTimeStamp,
         "ut"."SysEndTime" = @OpenEndedSysEndTime,
         "ut"."Note" = "i"."Note",
         "ut"."FireAuditTrigger" = 'N'
     FROM "Sales". "SalesOrderVehicleDetail" as "ut"
       INNER JOIN inserted as "i"
         ON "i"."SalesOrderVehicleDetailId" = "ut"."SalesOrderVehicleDetailId"
           AND "i"."TransactionNumber" = "ut"."TransactionNumber"
           AND "i"."RowLevelHashKey" = "ut"."RowLevelHashKey"
```

```
INNER JOIN deleted as "d"
         ON "i"."SalesOrderVehicleDetailId" = "d"."SalesOrderVehicleDetailId"
          AND "i"."TransactionNumber" = "d"."TransactionNumber"
         AND "i". "RowLevelHashKey" = "d". "RowLevelHashKey";
 END:
END:
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [CK Sales SalesOrder-
VehicleDetail FireAuditTrigger] CHECK (([FireAuditTrigger]='Y' OR [FireAudit-
Trigger] = 'N'))
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [CK Sales SalesOrder-
VehicleDetail LineItemDiscount] CHECK (([LineItemDiscount]>=(0)))
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [CK Sales SalesOrder-
VehicleDetail SalePrice] CHECK (([SalePrice]>=(0)))
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [CK Sales SalesOrder-
VehicleDetail SysEndTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [CK Sales SalesOrder-
VehicleDetail SysStartTime] CHECK (([SysEndTime]>=[SysStartTime]))
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [PK SalesDetails] PRIMARY
KEY CLUSTERED ([SalesOrderVehicleDetailId]) ON [PRIMARY]
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [XAK1Sales Order Vehicle -
Detail] UNIQUE NONCLUSTERED ([SalesOrderVehicleId], [ManufacturerVehicleStockId]) ON
GO
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [FK SalesOrderVehicle-
Detail ManufacturerVehicleStock] FOREIGN KEY ([ManufacturerVehicleStockId]) REFERENCES
[Production].[ManufacturerVehicleStock] ([ManufacturerVehicleStockId])
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [FK SalesOrderVehicle-
Detail SalesOrderVehicle] FOREIGN KEY ([SalesOrderVehicleId]) REFERENCES [Sales].[Sales-
OrderVehicle] ([SalesOrderVehicleId])
ALTER TABLE [Sales].[SalesOrderVehicleDetail] ADD CONSTRAINT [FK SalesOrderVehicle-
Detail UserAuthorization] FOREIGN KEY ([UserAuthorizationId]) REFERENCES [Db-
Security].[UserAuthorization] ([UserAuthorizationId])
EXEC sp addextendedproperty N'MS Description', N'The details of a vehicle order',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', NULL, NULL
EXEC sp addextendedproperty N'MS Description', N'The derived discounted sale price of a
vehicle', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'Derived-
DiscountedSalePrice'
EXEC sp addextendedproperty N'MS Description', N'A flag to indicate if an audit trigger
should be fired', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'FireAuditTrigger'
EXEC sp addextendedproperty N'MS Description', N'The discount of the line item number',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'LineItemDiscount'
EXEC sp_addextendedproperty N'MS_Description', N'The line item number on the invoice',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'LineItemNumber'
```

```
GO
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for manfacturer
vehicle stock', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'ManufacturerVehicleStockId'
EXEC sp addextendedproperty N'MS Description', N'A note regarding the database
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'Note'
GO
EXEC sp addextendedproperty N'MS Description', N'The prior transaction row level hash
key', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'PriorRow-
LevelHashKey'
EXEC sp_addextendedproperty N'MS_Description', N'Current row hash key representing all
combined columns', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'RowLevelHashKey'
EXEC sp addextendedproperty N'MS Description', N'The sale price of a vehicle',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'SalePrice'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for SalesOrder-
VehicleDetail Ids', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'SalesOrderVehicleDetailId'
EXEC sp addextendedproperty N'MS Description', N'A unique identifier for a purchase',
'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'SalesOrderVehicle-
GO
EXEC sp_addextendedproperty N'MS_Description', N'The end time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'Sys-
EndTime!
GO
EXEC sp addextendedproperty N'MS Description', N'The start time for a system
transaction', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN', N'Sys-
StartTime!
GO
EXEC sp addextendedproperty N'MS Description', N'The transaction number in a series of
database transactions', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail',
'COLUMN', N'TransactionNumber'
EXEC sp addextendedproperty N'MS_Description', N'A unique identifier for User-
AuthorizationIds', 'SCHEMA', N'Sales', 'TABLE', N'SalesOrderVehicleDetail', 'COLUMN',
N'UserAuthorizationId'
```

Uses

[DbSecurity].[UserAuthorization]
[Production].[ManufacturerVehicleStock]
[Sales].[SalesOrderVehicle]
[sdDateTime].[DateTimestamp]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdNumber].[Currency]

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Tables > Sales.SalesOrderVehicleDetail

[sdOrdinalNumber].[TransactionNumber] [sdSequenceNumber].[LineItemNumber] Sales

Used By

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicleDetail]

[CustomViews].[uvw_ChuanStaffDiscountGiven]

[CustomViews].[uvw_MehrshadVehicleCost]

 $[Custom Views]. [uvw_Mehrshad Yearly Customer Sales]$

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[Sales].[uvw PivotTable]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_YearlySales]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

[Hashing]. [CreateSha256 KeyFromJsonInputSalesSalesOrderVehicleDetail]

■ Views

Objects

Name
Audit.vwFindUniqueTablePkyHumanResourcesStaff
Audit.vwFindUniqueTablePkyLocaleCountry
Audit.vwFindUniqueTablePkyProductionManufacturerModel
Audit.vwFindUniqueTablePkyProductionManufacturerVehicleMake
Audit.vwFindUniqueTablePkyProductionManufacturerVehicleStock
Audit.vwFindUniqueTablePkySalesCustomer
Audit.vwFindUniqueTablePkySalesSalesOrderVehicle
Audit.vwFindUniqueTablePkySalesSalesOrderVehicleDetail
CustomViews.uvw_ChuanCustomerCountry
CustomViews.uvw_ChuanMakeCountry
CustomViews.uvw_ChuanModelMake
CustomViews.uvw_ChuanStaffDiscountGiven
CustomViews.uvw_ChuanStaffSales
CustomViews.uvw_MehrshadVehicleCost
CustomViews.uvw_MehrshadYearlyCustomerSales
CustomViews.uvw_MehrshadYearlySalesProfits
CustomViews.uvw_RalphEmployeeManager
CustomViews.uvw_RalphMakeModelPartsCost
Sales.uvw_PivotTable
Sales.uvw_Sales2018
Sales.uvw_SalesByCountry
Sales.uvw_SalesText
Sales.uvw_StockPrices
Sales.uvw_YearlySales
Utils.uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint

[Audit].[vwFindUniqueTablePkyHumanResourcesStaff]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:31 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
StaffId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkyHumanResourcesStaff"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus HumanResourcesStaff

CREATE VIEW [Audit].[vwFindUniqueTablePkyHumanResourcesStaff] AS

SELECT "CurrentTable"."StaffId"
FROM "HumanResources"."Staff" AS "CurrentTable"
UNION
SELECT "AuditHistory"."StaffId"
FROM "Audit"."HumanResourcesStaffHistory"
AS "AuditHistory"

GO
```

Uses

[Audit].[HumanResourcesStaffHistory] [HumanResources].[Staff] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkyLocaleCountry]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:31 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
Countryld	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkyLocaleCountry"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus LocaleCountry

CREATE VIEW [Audit].[vwFindUniqueTablePkyLocaleCountry] AS

SELECT "CurrentTable"."CountryId"
FROM "Locale"."Country" AS "CurrentTable"
UNION
SELECT "AuditHistory"."CountryId"
FROM "Audit"."LocaleCountryHistory"
AS "AuditHistory"

GO
```

Uses

[Audit].[LocaleCountryHistory] [Locale].[Country] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkyProductionManufacturerModel]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:31 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
ManufacturerModelId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkyProductionManufacturerModel"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus Production-ManufacturerModel

CREATE VIEW [Audit].[vwFindUniqueTablePkyProductionManufacturerModel] AS

SELECT "CurrentTable"."ManufacturerModelId"
FROM "Production"."ManufacturerModel" AS "CurrentTable"
UNION
SELECT "AuditHistory"."ManufacturerModelId"
FROM "Audit"."ProductionManufacturerModelHistory"
AS "AuditHistory"
GO
```

Uses

[Audit].[ProductionManufacturerModelHistory] [Production].[ManufacturerModel] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleMake]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:31 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
ManufacturerVehicleMakeId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkyProductionManufacturerVehicleMake"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus Production-
ManufacturerVehicleMake

CREATE VIEW [Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleMake] AS

SELECT "CurrentTable"."ManufacturerVehicleMakeId"
FROM "Production"."ManufacturerVehicleMake" AS "CurrentTable"
UNION
SELECT "AuditHistory"."ManufacturerVehicleMakeId"
FROM "Audit"."ProductionManufacturerVehicleMakeHistory"
AS "AuditHistory"
GO
```

Uses

[Audit].[ProductionManufacturerVehicleMakeHistory] [Production].[ManufacturerVehicleMake] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:31 AM Thursday, December 7, 2023
Last Modified	8:28:31 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
ManufacturerVehicleStockId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkyProductionManufacturerVehicleStock"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus Production-ManufacturerVehicleStock

CREATE VIEW [Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock] AS

SELECT "CurrentTable"."ManufacturerVehicleStockId"
FROM "Production"."ManufacturerVehicleStock" AS "CurrentTable"
UNION
SELECT "AuditHistory"."ManufacturerVehicleStockId"
FROM "Audit"."ProductionManufacturerVehicleStockHistory"
AS "AuditHistory"
GO
```

Uses

[Audit].[ProductionManufacturerVehicleStockHistory] [Production].[ManufacturerVehicleStock] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkySalesCustomer]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:32 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
CustomerId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkySalesCustomer"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus SalesCustomer

CREATE VIEW [Audit].[vwFindUniqueTablePkySalesCustomer] AS

SELECT "CurrentTable"."CustomerId"
FROM "Sales"."Customer" AS "CurrentTable"
UNION
SELECT "AuditHistory"."CustomerId"
FROM "Audit"."SalesCustomerHistory"
AS "AuditHistory"
GO
```

Uses

[Audit].[SalesCustomerHistory] [Sales].[Customer] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:32 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
SalesOrderVehicleId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkySalesSalesOrderVehicle"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus SalesSalesOrder-Vehicle

CREATE VIEW [Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle] AS

SELECT "CurrentTable"."SalesOrderVehicleId"
FROM "Sales"."SalesOrderVehicle" AS "CurrentTable"
UNION
SELECT "AuditHistory"."SalesOrderVehicleId"
FROM "Audit"."SalesSalesOrderVehicleHistory"
AS "AuditHistory"
```

Uses

[Audit].[SalesSalesOrderVehicleHistory] [Sales].[SalesOrderVehicle] [sdKey].[SurrogateKeyInteger] Audit

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicleDetail]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:28:32 AM Thursday, December 7, 2023
Last Modified	8:28:32 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
SalesOrderVehicleDetailId	[sdKey].[SurrogateKeyInteger]	4

SQL Script

```
-- View Name: "Audit"."FindUniqueTablePkySalesSalesOrderVehicleDetail"
-- Description: TSQL-vwFindUniqueTablePkyView Templated Code plus SalesSalesOrder-VehicleDetail

CREATE VIEW [Audit].[vwFindUniqueTablePkySalesSalesOrderVehicleDetail] AS

SELECT "CurrentTable"."SalesOrderVehicleDetailId"
FROM "Sales"."SalesOrderVehicleDetail" AS "CurrentTable"
UNION
SELECT "AuditHistory"."SalesOrderVehicleDetailId"
FROM "Audit"."SalesSalesOrderVehicleDetailHistory"
AS "AuditHistory"
GO
```

Uses

[Audit].[SalesSalesOrderVehicleDetailHistory] [Sales].[SalesOrderVehicleDetail] [sdKey].[SurrogateKeyInteger] Audit

[CustomViews].[uvw_ChuanCustomerCountry]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
CustomerName	[sdNameString].[CustomerName]	130
CountryName	[sdAddressesString].[CountryString]	100

SQL Script

```
CREATE VIEW [CustomViews].[uvw_ChuanCustomerCountry] as
select SC.CustomerName, LC.CountryName from Sales.Customer as SC INNER JOIN
Locale.Country as LC on LC.CountryId = SC.CountryId;
GO
```

Uses

[Locale].[Country]
[Sales].[Customer]
[sdAddressesString].[CountryString]
[sdNameString].[CustomerName]
CustomViews

[CustomViews].[uvw_ChuanMakeCountry]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
Country	[sdAddressesString].[CountryString]	100
Make	[sdVehicleString].[VehicleMakeString]	60

SQL Script

```
CREATE VIEW [CustomViews].[uvw_ChuanMakeCountry] as
select LC.CountryName as Country, PMVM.ManufacturerVehicleMakeName as Make from
Production.ManufacturerVehicleMake as PMVM
INNER JOIN Locale.Country as LC on PMVM.CountryId = LC.CountryId;
GO
```

Uses

[Locale].[Country]
[Production].[ManufacturerVehicleMake]
[sdAddressesString].[CountryString]
[sdVehicleString].[VehicleMakeString]
CustomViews

[CustomViews].[uvw_ChuanModelMake]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
Model	[sdVehicleString].[VehicleModelString]	70
Make	[sdVehicleString].[VehicleMakeString]	60

SQL Script

```
CREATE VIEW [CustomViews].[uvw_ChuanModelMake] as
select PMM.ManufacturerModelName as Model, PMVM.ManufacturerVehicleMakeName as Make
from Production.ManufacturerModel as PMM
INNER JOIN Production.ManufacturerVehicleMake as PMVM on PMM.ManufacturerVehicleMakeId
= PMVM.ManufacturerVehicleMakeId
GO
```

Uses

[Production].[ManufacturerModel] [Production].[ManufacturerVehicleMake] [sdVehicleString].[VehicleMakeString] [sdVehicleString].[VehicleModelString] CustomViews

[CustomViews].[uvw_ChuanStaffDiscountGiven]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
StaffName	[sdNameString].[FullNameString]	120
DiscountGiven	nvarchar(4000)	8000

SQL Script

```
CREATE VIEW [CustomViews].[uvw_ChuanStaffDiscountGiven] as
select HRS.StaffName, FORMAT(SUM(SSOVD.LineItemDiscount), 'C', 'en-US') as Discount-
Given from HumanResources.Staff as HRS
INNER JOIN Sales.SalesOrderVehicle as SSOV on HRS.StaffId = SSOV.StaffId
INNER JOIN Sales.SalesOrderVehicleDetail as SSOVD on SSOV.SalesOrderVehicleId =
SSOVD.SalesOrderVehicleId group by StaffName;
GO
```

Uses

[HumanResources].[Staff]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdNameString].[FullNameString]
CustomViews

[CustomViews].[uvw_ChuanStaffSales]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
StaffName	[sdNameString].[FullNameString]	120
TotalSales	nvarchar(4000)	8000

SQL Script

```
CREATE VIEW [CustomViews].[uvw_ChuanStaffSales] as
select HRS.StaffName, FORMAT(SUM(SSOV.TotalSalePrice), 'C', 'en-US') as TotalSales from
HumanResources.Staff as HRS
INNER JOIN Sales.SalesOrderVehicle as SSOV on HRS.StaffId = SSOV.StaffId group by Staff-Name;
GO
```

Uses

[HumanResources].[Staff] [Sales].[SalesOrderVehicle] [sdNameString].[FullNameString] CustomViews

[CustomViews].[uvw_MehrshadVehicleCost]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
ManufacturerVehicleMakeName	[sdVehicleString].[VehicleMakeString]	60
ManufacturerModelName [sdVehicleString].[VehicleModelString]		70
Cost	[sdNumber].[Currency]	9

SQL Script

```
CREATE VIEW [CustomViews].[uvw_MehrshadVehicleCost]
SELECT
        "Production". "ManufacturerVehicleMake". "ManufacturerVehicleMakeName",
        "Production"."ManufacturerModel"."ManufacturerModelName"
        "Production". "ManufacturerVehicleStock". "Cost"
FROM
        "Sales"."SalesOrderVehicleDetail"
INNER JOIN
       "Sales"."SalesOrderVehicle"
ON
       "Sales". "SalesOrderVehicleDetail". "SalesOrderVehicleId" = "Sales". "SalesOrder-
Vehicle"."SalesOrderVehicleId"
INNER JOIN
        "Sales"."Customer"
        "Sales". "SalesOrderVehicle". "CustomerId" = "Sales". "Customer". "CustomerId"
INNER JOIN
        "Production"."ManufacturerVehicleStock"
       "Sales"."SalesOrderVehicleDetail"."ManufacturerVehicleStockId" =
"Production". "ManufacturerVehicleStock". "ManufacturerVehicleStockId"
INNER JOIN
        "Production"."ManufacturerModel"
```

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Uses

CustomViews

[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdNumber].[Currency]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
SaleDate	[sdDate].[DateYYYYMMDD]	3
CustomerName	[sdNameString].[CustomerName]	130
ManufacturerVehicleMakeName	[sdVehicleString].[VehicleMakeString]	60
ManufacturerModelName	[sdVehicleString].[VehicleModelString]	70
SalePrice	[sdNumber].[Currency]	9

SQL Script

```
CREATE VIEW [CustomViews].[uvw_MehrshadYearlyCustomerSales]
SELECT
        "Sales"."SalesOrderVehicle"."SaleDate"
       "Sales"."Customer"."CustomerName"
        "Production". "ManufacturerVehicleMake". "ManufacturerVehicleMakeName",
        "Production"."ManufacturerModel"."ManufacturerModelName"
        "Sales"."SalesOrderVehicleDetail"."SalePrice"
FROM
       "Sales". "SalesOrderVehicleDetail"
INNER JOIN
       "Sales"."SalesOrderVehicle"
ON
        "Sales". "SalesOrderVehicleDetail". "SalesOrderVehicleId" = "Sales". "SalesOrder-
Vehicle"."SalesOrderVehicleId"
INNER JOIN
       "Sales"."Customer"
       "Sales". "SalesOrderVehicle". "CustomerId" = "Sales". "Customer". "CustomerId"
CROSS JOIN
       "Production"."ManufacturerModel"
```

Uses

[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdDate].[DateYYYYMMDD]
[sdNameString].[CustomerName]
[sdNumber].[Currency]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]
CustomViews

[CustomViews].[uvw_MehrshadYearlySalesProfits]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
SalesYear	int	4
MakeName	[sdVehicleString].[VehicleMakeString]	60
ModelName	[sdVehicleString].[VehicleModelString]	70
CustomerName	[sdNameString].[CustomerName]	130
Cost	[sdNumber].[Currency]	9
RepairsCharge	[sdNumber].[Currency]	9
PartsCost	[sdNumber].[Currency]	9
TransportInCost	[sdNumber].[Currency]	9
SalePrice	[sdNumber].[Currency]	9
SaleDate	[sdDate].[DateYYYYMMDD]	3
Profit	numeric(22,2)	13

SQL Script

```
CREATE VIEW [CustomViews].[uvw_MehrshadYearlySalesProfits]
as

SELECT

YEAR("Sales"."SalesOrderVehicle"."SaleDate") AS "SalesYear",

"Production"."ManufacturerVehicleMake"."ManufacturerVehicleMakeName" AS "MakeName",

"Production"."ManufacturerModel"."ManufacturerModelName" AS "ModelName",

"Sales"."Customer"."CustomerName",

"Production"."ManufacturerVehicleStock"."Cost",

"Production"."ManufacturerVehicleStock"."RepairsCharge",

"Production"."ManufacturerVehicleStock"."PartsCharge" AS "PartsCost",

"Production"."ManufacturerVehicleStock"."DeliveryCharge" AS "TransportInCost",

"Sales"."SalesOrderVehicleDetail"."SalePrice",

"Sales"."SalesOrderVehicle"."SaleDate",
```

```
("Sales". "SalesOrderVehicleDetail". "SalePrice" - "Production". "ManufacturerVehicle-
Stock"."Cost" - "Production"."ManufacturerVehicleStock"."RepairsCharge" -
    "Production". "ManufacturerVehicleStock". "PartsCharge" - "Production". "Manufacturer-
VehicleStock"."DeliveryCharge") AS "Profit"
FROM
    "Sales"."Customer"
INNER JOIN
    "Sales". "SalesOrderVehicle"
ON
    "Sales"."Customer"."CustomerId" = "Sales"."SalesOrderVehicle"."CustomerId"
INNER JOIN
    "Sales"."SalesOrderVehicleDetail"
ON
    "Sales"."SalesOrderVehicle"."SalesOrderVehicleId" = "Sales"."SalesOrderVehicle-
Detail"."SalesOrderVehicleId"
TNNER JOIN
    "Production". "ManufacturerVehicleStock"
ON
    "Sales". "SalesOrderVehicleDetail". "ManufacturerVehicleStockId" =
"Production". "ManufacturerVehicleStock". "ManufacturerVehicleStockId"
    "Production". "ManufacturerModel"
ON
    "Production". "ManufacturerModel". "ManufacturerModelId" = "Production". "Manufacturer-
VehicleStock". "ModelId"
INNER JOIN
    "Production"."ManufacturerVehicleMake"
ON
    "Production". "ManufacturerModel". "ManufacturerVehicleMakeId" =
"Production". "ManufacturerVehicleMake". "ManufacturerVehicleMakeId";
GO
```

Uses

[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdDate].[DateYYYYMMDD]
[sdNameString].[CustomerName]
[sdNumber].[Currency]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]
CustomViews

[CustomViews].[uvw_RalphEmployeeManager]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
Employee Name	[sdNameString].[FullNameString]	120
Employee Department	[sdBusinessComponentString].[DepartmentString]	30
Manager Name	[sdNameString].[FullNameString]	120
Manager Department	[sdBusinessComponentString].[DepartmentString]	30

SQL Script

```
CREATE VIEW [CustomViews].[uvw_RalphEmployeeManager]
as
SELECT
    "emp"."StaffName" as "Employee Name",
    "emp"."Department" as "Employee Department",
    "mgr"."StaffName" as "Manager Name",
    "mgr"."Department" as "Manager Department"
FROM
"HumanResources"."Staff" AS "emp"
INNER JOIN
"HumanResources"."Staff" AS "mgr"
ON "emp"."ManagerId" = "mgr"."StaffId";
GO
```

Uses

[HumanResources].[Staff]
[sdBusinessComponentString].[DepartmentString]
[sdNameString].[FullNameString]
CustomViews

[CustomViews].[uvw_RalphMakeModelPartsCost]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
Make	[sdVehicleString].[VehicleMakeString]	60
Model	[sdVehicleString].[VehicleModelString]	70
Parts Cost	[sdNumber].[Currency]	9

SQL Script

```
CREATE VIEW [CustomViews].[uvw_RalphMakeModelPartsCost] AS

SELECT

"mvm"."ManufacturerVehicleMakeName" AS "Make",

"mm"."ManufacturerModelName" AS "Model",

"mvs"."PartsCharge" AS "Parts Cost"

FROM

"Production"."ManufacturerVehicleStock" as "mvs"

INNER JOIN

"Production"."ManufacturerModel" as "mm"

ON "mm"."ManufacturerModelId" = "mvs"."ModelId"

INNER JOIN "Production"."ManufacturerVehicleMake" as "mvm"

ON "mm"."ManufacturerVehicleMakeId" = "mvm"."ManufacturerVehicleMakeId";

GO
```

Uses

[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[sdNumber].[Currency]
[sdVehicleString].[VehicleMakeString]

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[sdVehicleString].[VehicleModelString] CustomViews

[Sales].[uvw_PivotTable]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
VehicleColor	[sdVehicleString].[VehicleColor]	40
CY2015	int	4
CY2016	int	4
CY2017	int	4
CY2018	int	4

```
CREATE VIEW [Sales].[uvw PivotTable] AS
SELECT
    "VehicleColor",
   CAST (SUM (CASE WHEN YEAR ("SaleDate") = 2015 THEN "TotalSalePrice" ELSE 0 END) AS
INT) AS "CY2015",
   CAST (SUM (CASE WHEN YEAR ("SaleDate") = 2016 THEN "TotalSalePrice" ELSE 0 END) AS
INT) AS "CY2016",
   CAST (SUM (CASE WHEN YEAR ("SaleDate") = 2017 THEN "TotalSalePrice" ELSE 0 END) AS
INT) AS "CY2017",
   CAST (SUM (CASE WHEN YEAR ("SaleDate") = 2018 THEN "TotalSalePrice" ELSE 0 END) AS
INT) AS "CY2018"
FROM
   "Sales". "SalesOrderVehicle"
   "Sales". "SalesOrderVehicleDetail" ON "Sales". "SalesOrderVehicle". "SalesOrderVehicle"
Id" = "Sales"."SalesOrderVehicleDetail"."SalesOrderVehicleId"
   "Production"."ManufacturerVehicleStock" ON "Sales"."SalesOrderVehicle-
Detail". "ManufacturerVehicleStockId" = "Production". "ManufacturerVehicle-
Stock". "ManufacturerVehicleStockId"
    "VehicleColor";
```

GO

Uses

[Production].[ManufacturerVehicleStock]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdVehicleString].[VehicleColor]
Sales

[Sales].[uvw_Sales2018]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
SalesYear	int	4
MakeName	[sdVehicleString].[VehicleMakeString]	60
ModelName	[sdVehicleString].[VehicleModelString]	70
CustomerName	[sdNameString].[CustomerName]	130
CountryName	[sdAddressesString].[CountryString]	100
Cost	nvarchar(4000)	8000
RepairCost	nvarchar(4000)	8000
PartsCost	nvarchar(4000)	8000
TransportInCost	nvarchar(4000)	8000
SalePrice	int	4
SaleDate	varchar(30)	30

```
CREATE VIEW [Sales].[uvw_Sales2018] AS

SELECT

YEAR("Sales"."SalesOrderVehicle"."SaleDate") AS "SalesYear",

"Production"."ManufacturerVehicleMake"."ManufacturerVehicleMakeName" AS "MakeName",

"Production"."ManufacturerModel"."ManufacturerModelName" AS "ModelName",

"Sales"."Customer"."CustomerName",

"Locale"."Country"."CountryName",

FORMAT("Production"."ManufacturerVehicleStock"."Cost", 'C', 'en-US') as "Cost",

FORMAT("Production"."ManufacturerVehicleStock"."RepairsCharge", 'C', 'en-US') as RepairCost,

FORMAT("Production"."ManufacturerVehicleStock"."PartsCharge", 'C', 'en-US') AS "PartsCost",

FORMAT("Production"."ManufacturerVehicleStock"."DeliveryCharge", 'C', 'en-US') AS
```

```
"TransportInCost",
    CAST ("Sales". "SalesOrderVehicleDetail". "SalePrice" as INT) as "SalePrice",
    TRY CONVERT (VARCHAR, "Sales". "Sales Order Vehicle". "SaleDate", 101) as SaleDate
FROM
   "Sales"."Customer"
TNNER JOIN
    "Sales". "SalesOrderVehicle"
ON
    "Sales"."Customer"."CustomerId" = "Sales"."SalesOrderVehicle"."CustomerId"
INNER JOIN
    "Locale". "Country"
ON
    "Sales"."Customer"."CountryId" = "Locale"."Country"."CountryId"
INNER JOIN
    "Sales". "SalesOrderVehicleDetail"
ON
    "Sales"."SalesOrderVehicle"."SalesOrderVehicleId" = "Sales"."SalesOrderVehicle-
Detail". "SalesOrderVehicleId"
INNER JOIN
    "Production". "ManufacturerVehicleStock"
ON
   "Sales". "SalesOrderVehicleDetail". "ManufacturerVehicleStockId" =
"Production". "ManufacturerVehicleStock". "ManufacturerVehicleStockId"
    "Production"."ManufacturerModel"
ON
    "Production". "ManufacturerModel". "ManufacturerModelId" = "Production". "Manufacturer-
VehicleStock"."ModelId"
INNER JOIN
    "Production". "ManufacturerVehicleMake"
ON
   "Production"."ManufacturerModel"."ManufacturerVehicleMakeId" =
"Production". "ManufacturerVehicleMake". "ManufacturerVehicleMakeId" where
YEAR("Sales"."SalesOrderVehicle"."SaleDate") = 2018;
GO
```

Uses

```
[Locale].[Country]
[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdAddressesString].[CountryString]
[sdNameString].[CustomerName]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]
Sales
```

[Sales].[uvw_SalesByCountry]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
CountryName	[sdAddressesString].[CountryString]	100
MakeName	[sdVehicleString].[VehicleMakeString]	60
ModelName	[sdVehicleString].[VehicleModelString]	70
Cost	nvarchar(4000)	8000
RepairsCost	nvarchar(4000)	8000
PartsCost	nvarchar(4000)	8000
TransportInCost	nvarchar(4000)	8000
Color	[sdVehicleString].[VehicleColor]	40
SalePrice	int	4
LineItemDiscount	int	4
InvoiceNumber	[sdShortTextString].[InvoiceNumber]	8
SaleDate	varchar(30)	30
CustomerName	[sdNameString].[CustomerName]	130
SalesDetailsID	[sdKey].[SurrogateKeyInteger]	4

```
CREATE VIEW [Sales].[uvw_SalesByCountry] as

SELECT

"Locale"."Country"."CountryName",

"Production"."ManufacturerVehicleMake"."ManufacturerVehicleMakeName" AS "MakeName",

"Production"."ManufacturerModel"."ManufacturerModelName" AS "ModelName",

FORMAT("Production"."ManufacturerVehicleStock"."Cost", 'C', 'en-US') AS "Cost",

FORMAT("Production"."ManufacturerVehicleStock"."RepairsCharge", 'C', 'en-US') AS

"RepairsCost",

FORMAT("Production"."ManufacturerVehicleStock"."PartsCharge", 'C', 'en-US') AS
```

```
"PartsCost",
   FORMAT ("Production". "ManufacturerVehicleStock". "DeliveryCharge", 'C', 'en-US') AS
"TransportInCost",
    "Production". "ManufacturerVehicleStock". "VehicleColor" AS "Color",
   CAST("Sales"."SalesOrderVehicleDetail"."SalePrice" as INT) as SalePrice,
   CAST ("Sales". "SalesOrderVehicleDetail". "LineItemDiscount" as INT) as LineItem-
Discount,
   "Sales". "SalesOrderVehicle". "InvoiceNumber",
   TRY CONVERT (VARCHAR, "Sales". "SalesOrderVehicle". "SaleDate", 101) as SaleDate,
    "Sales" "Customer" "CustomerName",
    "Sales". "SalesOrderVehicleDetail". "SalesOrderVehicleDetailId" AS "SalesDetailsID"
FROM
    "Sales". "SalesOrderVehicle"
JOIN
    "Sales"."Customer" ON "Sales"."SalesOrderVehicle"."CustomerId" =
"Sales"."Customer"."CustomerId"
    "Locale". "Country" ON "Sales". "Customer". "CountryId" = "Locale". "Country". "Country-
    "Sales". "SalesOrderVehicleDetail" ON "Sales". "SalesOrderVehicle". "SalesOrderVehicle".
Id" = "Sales"."SalesOrderVehicleDetail"."SalesOrderVehicleId"
    "Production". "ManufacturerVehicleStock" ON "Sales". "SalesOrderVehicle-
Detail". "ManufacturerVehicleStockId" = "Production". "ManufacturerVehicle-
Stock". "ManufacturerVehicleStockId"
    "Production". "ManufacturerModel" ON "Production". "ManufacturerVehicleStock". "Model-
Id" = "Production"."ManufacturerModel"."ManufacturerModelId"
JOIN
    "Production"."ManufacturerVehicleMake" ON "Production"."Manufacturer-
Model"."ManufacturerVehicleMakeId" = "Production"."ManufacturerVehicle-
Make". "ManufacturerVehicleMakeId";
GO
```

Uses

[Locale].[Country]
[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdAddressesString].[CountryString]
[sdKey].[SurrogateKeyInteger]
[sdNameString].[CustomerName]
[sdShortTextString].[InvoiceNumber]
[sdVehicleString].[VehicleColor]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]

Project >	· 127.0.0.1,13001 > I	Jser databases > 0	Group3-European0	CarManufacturerSQL	_Server2019 > \	√iews >
Sales.uv	w SalesBvCountry					

Sales

Sales].[uvw_SalesText]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
CountryName	[sdAddressesString].[CountryString]	100
MakeName	[sdVehicleString].[VehicleMakeString]	60
Cost	[sdNumber].[Currency]	9
SalePrice	[sdNumber].[Currency]	9

```
CREATE VIEW [Sales].[uvw_SalesText] AS
SELECT
   co."CountryName",
   mvm."ManufacturerVehicleMakeName" AS "MakeName",
   mvs."Cost" AS "Cost",
   sv."TotalSalePrice" AS "SalePrice"
FROM
   "Sales". "SalesOrderVehicle" sv
   JOIN "Sales". "SalesOrderVehicleDetail" svd ON svd. "SalesOrderVehicleId" = sv. "Sales-
OrderVehicleId"
   JOIN "Production". "ManufacturerVehicleStock" mvs ON svd. "ManufacturerVehicleStock-
Id" = mvs."ManufacturerVehicleStockId"
   JOIN "Production". "ManufacturerModel" mm ON mvs. "ModelId" = mm. "ManufacturerModel-
   JOIN "Production". "ManufacturerVehicleMake" mvm ON mvm. "ManufacturerVehicleMakeId"
= mm."ManufacturerVehicleMakeId"
  JOIN "Sales". "Customer" c ON sv. "CustomerId" = c. "CustomerId"
   JOIN "Locale"."Country" co ON c."CountryId" = co."CountryId";
GO
```

Uses

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[sdAddressesString].[CountryString]

[sdNumber].[Currency]

[sdVehicleString].[VehicleMakeString]

Sales

[Sales].[uvw_StockPrices]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
MakeName	[sdVehicleString].[VehicleMakeString]	60
ModelName	[sdVehicleString].[VehicleModelString]	70
RetailCost	nvarchar(4000)	8000

SQL Script

```
CREATE VIEW [Sales].[uvw_StockPrices] AS

SELECT

mvsmm."ManufacturerVehicleMakeName" AS "MakeName",

mm."ManufacturerModelName" AS "ModelName",

FORMAT (mvs."Cost", '$#,0.00') AS "RetailCost"

FROM

"Production"."ManufacturerVehicleStock" mvs

JOIN "Production"."ManufacturerModel" mm

ON mvs."ModelId" = mm."ManufacturerModelId"

JOIN "Production"."ManufacturerVehicleMake" mvsmm

ON mm."ManufacturerVehicleMakeId" = mvsmm."ManufacturerVehicleMakeId";

GO
```

Uses

[Production].[ManufacturerModel] [Production].[ManufacturerVehicleMake] [Production].[ManufacturerVehicleStock] [sdVehicleString].[VehicleMakeString] Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Views > Sales.uvw_StockPrices

[sdVehicleString].[VehicleModelString] Sales

[Sales].[uvw_YearlySales]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)	
SalesYear	int	4	
MakeName	[sdVehicleString].[VehicleMakeString]	60	
ModelName	[sdVehicleString].[VehicleModelString]	70	
CustomerName	[sdNameString].[CustomerName]	130	
CountryName	[sdAddressesString].[CountryString]	100	
Cost	nvarchar(4000)	8000	
RepairsCost	nvarchar(4000)	8000	
PartsCost	nvarchar(4000)	8000	
TransportInCost	nvarchar(4000)	8000	
SalePrice	int	4	
SaleDate	varchar(30)	30	

```
CREATE VIEW [Sales].[uvw_YearlySales] AS

SELECT

YEAR("Sales"."SalesOrderVehicle"."SaleDate") AS "SalesYear",

"Production"."ManufacturerVehicleMake"."ManufacturerVehicleMakeName" AS "MakeName",

"Production"."ManufacturerModel"."ManufacturerModelName" AS "ModelName",

"Sales"."Customer"."CustomerName",

"Locale"."Country"."CountryName",

FORMAT("Production"."ManufacturerVehicleStock"."Cost", 'C', 'en-US') as "Cost",

FORMAT("Production"."ManufacturerVehicleStock"."RepairsCharge", 'C', 'en-US') as "RepairsCost",

FORMAT("Production"."ManufacturerVehicleStock"."PartsCharge", 'C', 'en-US') AS "PartsCost",

FORMAT("Production"."ManufacturerVehicleStock"."DeliveryCharge", 'C', 'en-US') AS
```

```
"TransportInCost",
    CAST ("Sales". "SalesOrderVehicleDetail". "SalePrice" AS INT) as "SalePrice",
    TRY CONVERT (VARCHAR, "Sales". "SalesOrderVehicle". "SaleDate", 101) AS "SaleDate"
FROM
   "Sales"."Customer"
TNNER JOIN
    "Sales". "SalesOrderVehicle"
ON
    "Sales"."Customer"."CustomerId" = "Sales"."SalesOrderVehicle"."CustomerId"
INNER JOIN
    "Locale". "Country"
ON
    "Sales"."Customer"."CountryId" = "Locale"."Country"."CountryId"
INNER JOIN
    "Sales". "SalesOrderVehicleDetail"
ON
    "Sales"."SalesOrderVehicle"."SalesOrderVehicleId" = "Sales"."SalesOrderVehicle-
Detail". "SalesOrderVehicleId"
INNER JOIN
    "Production". "ManufacturerVehicleStock"
ON
   "Sales". "SalesOrderVehicleDetail". "ManufacturerVehicleStockId" =
"Production". "ManufacturerVehicleStock". "ManufacturerVehicleStockId"
    "Production"."ManufacturerModel"
ON
    "Production". "ManufacturerModel". "ManufacturerModelId" = "Production". "Manufacturer-
VehicleStock"."ModelId"
INNER JOIN
    "Production". "ManufacturerVehicleMake"
ON
   "Production". "ManufacturerModel". "ManufacturerVehicleMakeId" =
"Production". "ManufacturerVehicleMake". "ManufacturerVehicleMakeId";
GO
```

Uses

```
[Locale].[Country]
[Production].[ManufacturerModel]
[Production].[ManufacturerVehicleMake]
[Production].[ManufacturerVehicleStock]
[Sales].[Customer]
[Sales].[SalesOrderVehicle]
[Sales].[SalesOrderVehicleDetail]
[sdAddressesString].[CountryString]
[sdNameString].[CustomerName]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleModelString]
Sales
```

[Utils].[uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	8:25:47 AM Thursday, December 7, 2023
Last Modified	8:25:47 AM Thursday, December 7, 2023

Columns

Name	Data Type	Max Length (Bytes)
FullyQualifiedTableName The fully qualified name of a table	nvarchar(257)	514
SchemaName The name of a schema	[sys].[sysname]	256
TableName The name of a table	[sys].[sysname]	256
ColumnName The name of the column	[sys].[sysname]	256
OrdinalPosition An ordinal position	int	4
FullyQualifiedDomainName The fully qualified name of a domain	nvarchar(257)	514
DomainName The domain name	[sys].[sysname]	256
DataType The data type for a column	nvarchar(128)	256
IsNullable Flag used to check if an entry is nullable	varchar(3)	3
DefaultName The default name	[sys].[sysname]	256
DefaultNameDefinition The default name definition	nvarchar(4000)	8000
CheckConstraintRuleName The rule name of a check constraint	[sys].[sysname]	256
CheckConstraintRuleNameDefinition The definition of a check constraint rule name	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 Column-
Name, 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 = 'char' THEN concat( 'char(', 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 CheckConstraintRule-
Name, cc.CHECK CLAUSE AS CheckConstraintRuleNameDefinition FROM ( SELECT TABLE -
CATALOG, TABLE SCHEMA, TABLE NAME, TABLE TYPE FROM INFORMATION SCHEMA. TABLES 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
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 = \overline{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. THECK CLAUSE FROM INFORMATION SCHEMA. CONSTRAINT COLUMN USAGE AS cu INNER JOIN
INFORMATION_SCHEMA.CHECK_CONSTRAINTS AS c ON c.CONSTRAINT_NAME = cu.CONSTRAINT_NAME )
AS cc ON cc.TABLE SCHEMA = tbl.TABLE SCHEMA AND cc.TABLE NAME = tbl.TABLE NAME AND
cc.COLUMN NAME = col.COLUMN NAME
EXEC sp_addextendedproperty N'MS_Description', N'The rule name of a check constraint',
'SCHEMA, N'Utils', 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheckConstraint',
'COLUMN', N'CheckConstraintRuleName'
EXEC sp_addextendedproperty N'MS_Description', N'The definition of a check constraint rule name', 'SCHEMA', N'Utils', 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheck-
Constraint', 'COLUMN', N'CheckConstraintRuleNameDefinition'
EXEC sp addextendedproperty N'MS Description', N'The name of the column', 'SCHEMA',
N'Utils', 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN',
EXEC sp_addextendedproperty N'MS_Description', N'The data type for a column', 'SCHEMA',
N'Utils, 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN',
N'DataType'
EXEC sp_addextendedproperty N'MS_Description', N'The default name', 'SCHEMA', N'Utils', 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN', N'Default-
EXEC sp addextendedproperty N'MS Description', N'The default name definition',
'SCHEMA', N'Utils', 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint',
'COLUMN', N'DefaultNameDefinition'
EXEC sp_addextendedproperty N'MS_Description', N'The domain name', 'SCHEMA', N'Utils', 'VIEW', N'uvw FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN', N'Domain-
EXEC sp_addextendedproperty N'MS_Description', N'The fully qualified name of a domain',
```

```
'SCHEMA', N'Utils', 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN', N'FullyQualifiedDomainName'
GO
EXEC sp addextendedproperty N'MS Description', N'The fully qualified name of a table',
'SCHEMA', N'Utils', 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint',
'COLUMN', N'FullyQualifiedTableName'
EXEC sp addextendedproperty N'MS Description', N'Flag used to check if an entry is
nullable', 'SCHEMA', N'Utils', 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheck-Constraint', 'COLUMN', N'ISNullable'
EXEC sp addextendedproperty N'MS Description', N'An ordinal position', 'SCHEMA',
N'Utils, 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN',
N'OrdinalPosition'
EXEC sp addextendedproperty N'MS Description', N'The name of a schema', 'SCHEMA',
N'Utils, 'VIEW', N'uww FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN',
N'SchemaName'
EXEC sp addextendedproperty N'MS Description', N'The name of a table', 'SCHEMA',
N'Utils', 'VIEW', N'uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint', 'COLUMN',
N'TableName'
GO
```

Uses

Utils

■ Table-valued Functions

Objects

Name
Audit.itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff
Audit.itvfnFindAllTransactionsByTablePkyOfLocaleCountry
Audit.itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel
Audit.itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake
Audit.itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock
Audit.itvfnFindAllTransactionsByTablePkyOfSalesCustomer
Audit.itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle
Audit.itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff] (@Pky
RETURNS TABLE
AS
 RETURN
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"DBAction",
"d"."StaffId", "d"."StaffName", "d"."ManagerId", "d"."Department",
"d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime",
"d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
Trigger"
   FROM "HumanResources". "Staff" AS "d"
   WHERE "d". "StaffId" = @Pky
   UNION
   SELECT 'History' as TransactionType, "d". "AuditDateTimeStamp", "d". "DBAction",
"d"."StaffId", "d"."StaffName", "d"."ManagerId", "d"."Department", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime",
"d". "SysEndTime", "d". "RowLevelHashKey", "d". "PriorRowLevelHashKey", "d". "FireAudit-
Trigger"
   FROM "Audit". "HumanResourcesStaffHistory" as "d"
   WHERE "d". "StaffId" = @Pkv
  );
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfHuman-ResourcesStaff

GO

Uses

[Audit].[HumanResourcesStaffHistory]
[HumanResources].[Staff]
[sdBusinessComponentString].[DepartmentString]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdNameString].[FullNameString]
[sdOrdinalNumber].[TransactionNumber]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfLocaleCountry" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry] (@Pky int)
RETURNS TABLE
AS
  RETURN
  (
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"d"."CountryId", "d"."CountryISO3", "d"."CountryName", "d"."CountryISO2", "d"."SalesRegion", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d"."FireAuditTrigger"
    FROM "Locale". "Country" AS "d"
   WHERE "d". "CountryId" = @Pky
   UNION
    SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
"d"."CountryId", "d"."CountryISO3", "d"."CountryName", "d"."CountryISO2", "d"."SalesRegion", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d"."FireAuditTrigger"
   FROM "Audit". "LocaleCountryHistory" as "d"
    WHERE "d"."CountryId" = @Pky
  );
GΟ
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfLocale-Country

Uses

[Audit].[LocaleCountryHistory]
[Locale].[Country]
[sdAddressesString].[CountryString]
[sdAddressesString].[RegionString]
[sdCountryStringVariant].[CountryISO2]
[sdCountryStringVariant].[CountryISO3]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-Model]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
Model] (@Pky int)
RETURNS TABLE
AS
  RETURN
  (
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"DBAction",
"d"."ManufacturerModelId", "d"."ManufacturerVehicleMakeId", "d"."ManufacturerModel-Name", "d"."ManufacturerModelVariant", "d"."TransactionNumber", "d"."Note", "d"."User-AuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey",
"d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
    FROM "Production". "ManufacturerModel" AS "d"
    WHERE "d"."ManufacturerModelId" = @Pky
    UNION
    SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
"d"."ManufacturerModelId", "d"."ManufacturerVehicleMakeId", "d"."ManufacturerModel-Name", "d"."ManufacturerModelVariant", "d"."TransactionNumber", "d"."Note", "d"."User-AuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey",
"d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
    FROM "Audit". "ProductionManufacturerModelHistory" as "d"
    WHERE "d"."ManufacturerModelId" = @Pky
```

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);			
GO			

Uses

[Audit].[ProductionManufacturerModelHistory]
[Production].[ManufacturerModel]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleModelString]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-VehicleMake]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
VehicleMake" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
VehicleMake] (@Pky int)
RETURNS TABLE
AS
  RETURN
  (
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"DBAction",
     "d". "ManufacturerVehicleMakeId", "d". "ManufacturerVehicleMakeName", "d". "Country-
Id", "d"."MarketingType", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevel-
HashKey", "d"."FireAuditTrigger"
   FROM "Production". "ManufacturerVehicleMake" AS "d"
   WHERE "d"."ManufacturerVehicleMakeId" = @Pky
   UNION
   SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
     "d"."ManufacturerVehicleMakeId", "d"."ManufacturerVehicleMakeName", "d"."Country-
Id", "d". "MarketingType", "d". "TransactionNumber", "d". "Note", "d". "UserAuthorization-Id", "d". "SysStartTime", "d". "SysEndTime", "d". "RowLevelHashKey", "d". "PriorRowLevel-
HashKey", "d"."FireAuditTrigger"
   FROM "Audit"."ProductionManufacturerVehicleMakeHistory" as "d"
   WHERE "d"."ManufacturerVehicleMakeId" = @Pky
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfProduction-ManufacturerVehicleMake

);			
GO			

Uses

[Audit].[ProductionManufacturerVehicleMakeHistory]
[Production].[ManufacturerVehicleMake]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleManufacturerMarketingType]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-VehicleStock]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
VehicleStock" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturer-
VehicleStock] (@Pky int)
RETURNS TABLE
AS
  RETURN
  (
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"DBAction",
      "d"."ManufacturerVehicleStockId", "d"."StockCode", "d"."ModelId", "d"."Cost",
"d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."IsPremiumRoad-HandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."PurchaseDate", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
Trigger"
   FROM "Production". "ManufacturerVehicleStock" AS "d"
   WHERE "d". "ManufacturerVehicleStockId" = @Pky
    SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
      "d"."ManufacturerVehicleStockId", "d"."StockCode", "d"."ModelId", "d"."Cost",
"d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."IsPremiumRoad-HandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."PurchaseDate", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime",
"d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfProduction-ManufacturerVehicleStock

```
Trigger"
   FROM "Audit"."ProductionManufacturerVehicleStockHistory" as "d"
   WHERE "d"."ManufacturerVehicleStockId" = @Pky
   );
GO
```

Uses

[Audit].[ProductionManufacturerVehicleStockHistory]
[Production].[ManufacturerVehicleStock]
[sdDate].[DateYYYYMMDD]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[CustomerComments]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdShortTextString].[StockCode]
[sdVehicleString].[VehicleColor]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfSalesCustomer" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer] (@Pky int)
RETURNS TABLE
AS
 RETURN
 (
  SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
     "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."Customer-
Address2", "d". "CustomerTown", "d". "CustomerPostalCode", "d". "CountryId", "d". "Is-
CustomerReseller", "d"."IsCustomerCreditRisk", "d"."SpendCapacity", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime",
"d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
   FROM "Sales". "Customer" AS "d"
   WHERE "d". "CustomerId" = @Pky
   UNTON
   SELECT 'History' as TransactionType, "d". "AuditDateTimeStamp", "d". "DBAction",
     "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."Customer-
Address2", "d". "CustomerTown", "d". "CustomerPostalCode", "d". "CountryId", "d". "Is-
CustomerReseller", "d"."IsCustomerCreditRisk", "d"."SpendCapacity", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime",
"d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
   FROM "Audit". "SalesCustomerHistory" as "d"
   WHERE "d"."CustomerId" = @Pky
 );
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfSales-Customer

GO

Uses

Audit

[Audit].[SalesCustomerHistory]
[Sales].[Customer]
[sdAddressesString].[AddressString]
[sdAddressesString].[PostalCodeString]
[sdAddressesString].[TownString]
[sdFlag].[FlagBit]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdMarketingTextString].[CustomerSpendCapacity]
[sdNameString].[CustomerName]
[sdOrdinalNumber].[TransactionNumber]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle"
()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]
(@Pky int)
RETURNS TABLE
AS
 RETURN
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
     "d". "SalesOrderVehicleId", "d". "CustomerId", "d". "StaffId", "d". "InvoiceNumber",
"d"."TotalSalePrice", "d"."SaleDate", "d"."CategoryDescription", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime",
"d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
  FROM "Sales". "SalesOrderVehicle" AS "d"
   WHERE "d"."SalesOrderVehicleId" = @Pky
   UNION
   SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
     "d"."SalesOrderVehicleId", "d"."CustomerId", "d"."StaffId", "d"."InvoiceNumber",
"d"."TotalSalePrice", "d"."SaleDate", "d"."CategoryDescription", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime",
"d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
   FROM "Audit". "SalesSalesOrderVehicleHistory" as "d"
   WHERE "d"."SalesOrderVehicleId" = @Pky
 );
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfSalesSales-OrderVehicle

GO

Uses

[Audit].[SalesSalesOrderVehicleHistory]
[Sales].[SalesOrderVehicle]
[sdDate].[DateYYYYMMDD]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdShortTextString].[InvoiceNumber]
Audit

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Audit"."itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle-
Detail" ()
-- Description: A view to find all transactions by Primary Key
CREATE FUNCTION [Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle-
Detail] (@Pky int)
RETURNS TABLE
AS
  RETURN
   SELECT 'Current' as TransactionType, NULL AS "AuditDateTimeStamp", NULL AS
"d"."SalesOrderVehicleDetailId", "d"."SalesOrderVehicleId", "d"."LineItemNumber", "d"."ManufacturerVehicleStockId", "d"."SalePrice", "d"."LineItemDiscountt", "d"."Derived-DiscountedSalePrice", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId",
"d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d". "FireAuditTrigger"
   FROM "Sales". "SalesOrderVehicleDetail" AS "d"
   WHERE "d". "SalesOrderVehicleDetailId" = @Pky
    SELECT 'History' as TransactionType, "d"."AuditDateTimeStamp", "d"."DBAction",
      "d"."SalesOrderVehicleDetailId", "d"."SalesOrderVehicleId", "d"."LineItemNumber",
"d"."ManufacturerVehicleStockId", "d"."SalePrice", "d"."LineItemDiscount", "d"."Derived-DiscountedSalePrice", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d"."FireAuditTrigger"
    FROM "Audit". "SalesSalesOrderVehicleDetailHistory" as "d"
    WHERE "d"."SalesOrderVehicleDetailId" = @Pky
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Table-valued Functions > Audit.itvfnFindAllTransactionsByTablePkyOfSalesSales-OrderVehicleDetail

);			
GO				
GO				

Uses

[Audit].[SalesSalesOrderVehicleDetailHistory]
[Sales].[SalesOrderVehicleDetail]
[sdFlag].[FlagYesNoString]
[sdHashKey].[RowLevelHashKey]
[sdKey].[SurrogateKeyInteger]
[sdLongTextString].[Note]
[sdOrdinalNumber].[TransactionNumber]
[sdSequenceNumber].[LineItemNumber]
Audit



Scalar-valued Functions

Objects

Name
Hashing.CreateSha256KeyFromJsonInputHumanResourcesStaff
Hashing.CreateSha256KeyFromJsonInputLocaleCountry
Hashing.CreateSha256KeyFromJsonInputProductionManufacturerModel
Hashing.CreateSha256KeyFromJsonInputProductionManufacturerVehicleMake
Hashing.CreateSha256KeyFromJsonInputProductionManufacturerVehicleStock
Hashing.CreateSha256KeyFromJsonInputSalesCustomer
Hashing.CreateSha256KeyFromJsonInputSalesSalesOrderVehicle
Hashing.CreateSha256KeyFromJsonInputSalesSalesOrderVehicleDetail

[Hashing].[CreateSha256KeyFromJsonInputHumanResourcesStaff]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputHumanResourcesStaff"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputHumanResourcesStaff] (@Pky int)
RETURNS VARBINARY (32)
AS
BEGIN
 DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
SELECT "d"."StaffId", "d"."StaffName", "d"."ManagerId", "d"."Department", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
Trigger"
    FROM "HumanResources". "Staff" as "d"
    WHERE "d". "StaffId" = @Pky
    FOR JSON AUTO, INCLUDE NULL VALUES
   );
  RETURN HASHBYTES ('SHA2 256', @ColumnOutputInJSONIncludingNullValues);
END:
GO
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputHuman-ResourcesStaff

Uses

[HumanResources].[Staff] Hashing

[Hashing].[CreateSha256KeyFromJsonInputLocaleCountry]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputLocaleCountry"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputLocaleCountry] (@Pky int)
RETURNS VARBINARY (32)
AS
BEGIN
  DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
SELECT "d"."CountryId", "d"."CountryISO3", "d"."CountryName", "d"."CountryISO2", "d"."SalesRegion", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHash-
Key", "d"."FireAuditTrigger"
    FROM "Locale". "Country" as "d"
    WHERE "d". "CountryId" = @Pky
    FOR JSON AUTO, INCLUDE NULL VALUES
  RETURN HASHBYTES ('SHA2 256', @ColumnOutputInJSONIncludingNullValues);
END;
GO
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputLocaleCountry

Uses

[Locale].[Country] Hashing

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerModel]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputProductionManufacturerModel"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerModel]
(@Pky int)
RETURNS VARBINARY (32)
  DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
    SELECT "d"."ManufacturerModelId", "d"."ManufacturerVehicleMakeId",
"d"."ManufacturerModelName", "d"."ManufacturerModelVariant", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."Row-LevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
    FROM "Production". "ManufacturerModel" as "d"
    WHERE "d"."ManufacturerModelId" = @Pky
    FOR JSON AUTO, INCLUDE_NULL_VALUES
   );
  RETURN HASHBYTES ('SHA2 256', @ColumnOutputInJSONIncludingNullValues);
END;
GO
```

Uses		
[Production].[ManufacturerModel]		
Hashing		

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputProduction-ManufacturerModel

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicle-Make]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing". "CreateSha256KeyFromJsonInputProductionManufacturerVehicle-
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicle-
Make] (@Pky int)
RETURNS VARBINARY (32)
AS
BEGIN
  DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
SELECT "d"."ManufacturerVehicleMakeId", "d"."ManufacturerVehicleMakeName", "d"."CountryId", "d"."MarketingType", "d"."TransactionNumber", "d"."Note", "d"."User-AuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey",
"d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"
    FROM "Production". "ManufacturerVehicleMake" as "d"
    WHERE "d"."ManufacturerVehicleMakeId" = @Pky
    FOR JSON AUTO, INCLUDE NULL VALUES
   );
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputProduction-ManufacturerVehicleMake

```
RETURN HASHBYTES('SHA2_256', @ColumnOutputInJSONIncludingNullValues);
END;
GO
```

Uses

[Production].[ManufacturerVehicleMake] Hashing

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicle-Stock]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing". "CreateSha256KeyFromJsonInputProductionManufacturerVehicle-
Stock"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicle-
Stock] (@Pky int)
RETURNS VARBINARY (32)
AS
BEGIN
  DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
    SELECT "d". "ManufacturerVehicleStockId", "d". "StockCode", "d". "ModelId",
"d"."Cost", "d"."RepairsCharge", "d"."PartsCharge", "d"."DeliveryCharge", "d"."Is-
PremiumRoadHandlingPackage", "d"."VehicleColor", "d"."CustomerComment", "d"."Purchase-
Date", "d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStart-
Time", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."Fire-
AuditTrigger"
     FROM "Production". "ManufacturerVehicleStock" as "d"
     WHERE "d"."ManufacturerVehicleStockId" = @Pky
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputProduction-ManufacturerVehicleStock

```
FOR JSON AUTO, INCLUDE_NULL_VALUES
);

RETURN HASHBYTES('SHA2_256', @ColumnOutputInJSONIncludingNullValues);
END;
GO
```

Uses

[Production].[ManufacturerVehicleStock] Hashing

[Hashing].[CreateSha256KeyFromJsonInputSalesCustomer]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputSalesCustomer"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputSalesCustomer] (@Pky int)
RETURNS VARBINARY (32)
BEGIN
  DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
    SELECT "d"."CustomerId", "d"."CustomerName", "d"."CustomerAddress1", "d"."Customer-
Address2", "d"."CustomerTown", "d"."CustomerPostalCode", "d"."CountryId", "d"."Is-
CustomerReseller", "d"."IsCustomerCreditRisk", "d"."SpendCapacity", "d"."Transaction-Number", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."FireAuditTrigger"
    FROM "Sales". "Customer" as "d"
    WHERE "d". "CustomerId" = @Pky
    FOR JSON AUTO, INCLUDE_NULL_VALUES
   );
  RETURN HASHBYTES ('SHA2 256', @ColumnOutputInJSONIncludingNullValues);
END;
GO
```

Uses			
[Sales].[Customer] Hashing			
Hashing			

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputSales-Customer

[Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicle]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputSalesSalesOrderVehicle"
-- Description: Create SHA256 Hashkey from JSON Input
CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicle] (@Pky
int)
RETURNS VARBINARY (32)
AS
 DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
   SELECT "d". "SalesOrderVehicleId", "d". "CustomerId", "d". "StaffId", "d". "Invoice-
Number", "d". "TotalSalePrice", "d". "SaleDate", "d". "CategoryDescription",
"d"."TransactionNumber", "d"."Note", "d"."UserAuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey", "d"."PriorRowLevelHashKey", "d"."FireAudit-
Trigger"
    FROM "Sales". "SalesOrderVehicle" as "d"
    WHERE "d"."SalesOrderVehicleId" = @Pky
    FOR JSON AUTO, INCLUDE NULL VALUES
 RETURN HASHBYTES ('SHA2 256', @ColumnOutputInJSONIncludingNullValues);
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputSalesSales-OrderVehicle

GO		
90		
Uses		
0363		
10 110 0 1/1 1		
Sales . SalesOrdervenicle		
[Sales].[SalesOrderVehicle] Hashing		
Hashing		

[Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicleDetail]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

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

```
-- Author: Ralph Granata
-- Creation Date: 11/30/2023
-- Modification Date: 11/30/2023
-- Function Name: "Hashing"."CreateSha256KeyFromJsonInputSalesSalesOrderVehicleDetail"
-- Description: Create SHA256 Hashkey from JSON Input

CREATE FUNCTION [Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicleDetail]
(@Pky int)

RETURNS VARBINARY(32)
AS

BEGIN

DECLARE @ColumnOutputInJSONIncludingNullValues nvarchar(max) =
(

SELECT "d"."SalesOrderVehicleDetailId", "d"."SalesOrderVehicleId", "d"."LineItem-Number", "d"."ManufacturerVehicleStocKId", "d"."SalePrice", "d"."LineItemDiscount",
"d"."DerivedDiscountedSalerice", "d"."TransactionNumber", "d"."Mote", "d"."User-AuthorizationId", "d"."SysStartTime", "d"."SysEndTime", "d"."RowLevelHashKey",
"d"."PriorRowLevelHashKey", "d"."FireAuditTrigger"

FROM "Sales"."SalesOrderVehicleDetail" as "d"
WHERE "d"."SalesOrderVehicleDetail" as "d"
WHERE "d"."SalesOrderVehicleDetailid" = @Pky
FOR JSON AUTO, INCLUDE_NULL_VALUES
);

RETURN HASHBYTES('SHA2_256', @ColumnOutputInJSONIncludingNullValues);
END;
```

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Functions > Scalar-valued Functions > Hashing.CreateSha256KeyFromJsonInputSalesSales-OrderVehicleDetail

00		
GO		
Uses		
0363		
[Sales].[SalesOrderVehicleDetail]		
Literatura de		
Hashing		

iii User-Defined Data Types

Objects

Name
dbo.dEuropeanCarManufacturer The top level domain for European Car Manufacturer Data Model
dEuropeanCarManufacturer.sdBlob
dEuropeanCarManufacturer.sdDatetime
dEuropeanCarManufacturer.sdFlag
dEuropeanCarManufacturer.sdKey
dEuropeanCarManufacturer.sdNumber
dEuropeanCarManufacturer.sdString
sdAddressesString.AddressString
sdAddressesString.CountryString
sdAddressesString.PostalCodeString
sdAddressesString.RegionString
sdAddressesString.TownString
sdAudit.DbAction
sdBlob.sdHashKey
sdBusinessComponentString.DepartmentString
sdCountryStringVariant.CountryISO2
sdCountryStringVariant.CountryISO3
sdDate.DateYYYYMMDD
sdDateTime.DateTimestamp
sdDateTime.sdDate
sdFlag.FlagBit
sdFlag.FlagYesNoString

sdHashKey.RowLevelHashKey sdKey.SurrogateKeyInteger sdLongTextString.CustomerComments sdLongTextString.Note sdMarketingTextString.CustomerSpendCapacity sdMarketingTextString.VehicleSalesThresholdCategory sdNameString.CustomerName sdNameString.FirstNameString sdNameString.FullNameString sdNameString.LastNameString sdNumber.Currency sdNumber.sdOrdinalNumber sdNumber.sdSequenceNumber sdOrdinalNumber.TransactionNumber sdProjectString.GrouplProjectNameString sdProjectString.IndividualProjectNameString sd Sequence Number. Line Item NumbersdSequenceNumber.StockIdNumber sdShortTextString. InvoiceNumbersdShortTextString.StockCodesdString.sdAddressesString sdString.sdAudit sdString.sdBusinessComponentString sdString.sdCountryStringVariantsdString.sdLongTextString

sdString.sdMarketingTextString
sdString.sdNameString
sdString.sdProjectString
sdString.sdShortTextString
sdString.sdTimeString
sdString.sdVehicleString
sdTimeString.ClassTimeString
sdVehicleString.VehicleColor
sdVehicleString.VehicleIdentifier
sdVehicleString.VehicleMakeString
sdVehicleString.VehicleManufacturerMarketingType
sdVehicleString.VehicleModelString

[dbo].[dEuropeanCarManufacturer]

MS_Description

The top level domain for European Car Manufacturer Data Model

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	char
Length	18

```
CREATE TYPE [dbo].[dEuropeanCarManufacturer] FROM char (18) NULL

GO

EXEC sp_addextendedproperty N'MS_Description', N'The top level domain for European Car
Manufacturer Data Model', 'SCHEMA', N'dbo', 'TYPE', N'dEuropeanCarManufacturer', NULL,
NULL

GO
```

[dEuropeanCarManufacturer].[sdBlob]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	varbinary
Length	32

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdBlob] FROM varbinary (32) NULL
GO

Uses

[dEuropeanCarManufacturer].[sdDatetime]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	datetime
Length	8

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdDatetime] FROM datetime NULL GO

Uses

🗓 [dEuropeanCarManufacturer].[sdFlag]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdFlag] FROM int NULL
GO

Uses

🗓 [dEuropeanCarManufacturer].[sdKey]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdKey] FROM int NULL
GO

Uses

[dEuropeanCarManufacturer].[sdNumber]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdNumber] FROM int NULL
GO

Uses

[dEuropeanCarManufacturer].[sdString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [dEuropeanCarManufacturer].[sdString] FROM nvarchar (20) NULL GO

Uses

🛅 [sdAddressesString].[AddressString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	60

SQL Script

CREATE TYPE [sdAddressesString].[AddressString] FROM nvarchar (60) NULL
GO

Uses

sdAddressesString

Used By

[Audit].[SalesCustomerHistory]

[Sales].[Customer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdAddressesString].[CountryString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdAddressesString].[CountryString] FROM nvarchar (50) NULL
GO

Uses

sdAddressesString

Used By

[Audit].[LocaleCountryHistory]

[Locale].[Country]

 $[Custom Views]. [uvw_Chuan Customer Country] \\$

[CustomViews].[uvw_ChuanMakeCountry]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

🛅 [sdAddressesString].[PostalCodeString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	9

SQL Script

CREATE TYPE [sdAddressesString].[PostalCodeString] FROM nvarchar (9) NULL GO

Uses

sdAddressesString

Used By

[Audit].[SalesCustomerHistory]

[Sales].[Customer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdAddressesString].[RegionString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdAddressesString].[RegionString] FROM nvarchar (20) NULL
GO

Uses

sdAddressesString

Used By

[Audit].[LocaleCountryHistory]
[Locale].[Country]
[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

ille [sdAddressesString].[TownString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	30

SQL Script

CREATE TYPE [sdAddressesString].[TownString] FROM nvarchar (30) NULL
GO

Uses

sdAddressesString

Used By

[Audit].[SalesCustomerHistory]

[Sales].[Customer]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdAudit].[DbAction]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	char
Length	1

SQL Script

CREATE TYPE [sdAudit].[DbAction] FROM char (1) NULL
GO

Uses

sdAudit

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit]. [Production Manufacturer Model History]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[sdBlob].[sdHashKey]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	varbinary
Length	32

SQL Script

CREATE TYPE [sdBlob].[sdHashKey] FROM varbinary (32) NULL
GO

Uses

sdBlob

[sdBusinessComponentString].[DepartmentString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	15

SQL Script

CREATE TYPE [sdBusinessComponentString].[DepartmentString] FROM nvarchar (15) NULL GO

Uses

sdBusinessComponentString

Used By

[Audit].[HumanResourcesStaffHistory]
[HumanResources].[Staff]
[CustomViews].[uvw_RalphEmployeeManager]
[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[sdCountryStringVariant].[CountryISO2]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	2

SQL Script

CREATE TYPE [sdCountryStringVariant].[CountryISO2] FROM nvarchar (2) NULL GO

Uses

sdCountryStringVariant

Used By

[Audit].[LocaleCountryHistory]
[Locale].[Country]
[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[sdCountryStringVariant].[CountryISO3]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nchar
Length	3

SQL Script

CREATE TYPE [sdCountryStringVariant].[CountryISO3] FROM nchar (3) NULL GO

Uses

sdCountryStringVariant

Used By

[Audit].[LocaleCountryHistory]
[Locale].[Country]
[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[sdDate].[DateYYYYMMDD]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	date
Length	3

SQL Script

CREATE TYPE [sdDate].[DateYYYYMMDD] FROM date NULL
GO

Uses

sdDate

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[Production].[ManufacturerVehicleStock]

[Sales].[SalesOrderVehicle]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[sdDateTime].[DateTimestamp]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	datetime2
Length	8

SQL Script

CREATE TYPE [sdDateTime].[DateTimestamp] FROM datetime2 NOT NULL
GO

Uses

sdDateTime

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[DbSecurity].[UserAuthorization]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[sdDateTime].[sdDate]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	date
Length	3

SQL Script

CREATE TYPE [sdDateTime].[sdDate] FROM date NULL
GO

Uses

sdDateTime

iii [sdFlag].[FlagBit]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	int
Length	4

SQL Script

```
CREATE TYPE [sdFlag].[FlagBit] FROM int NULL
GO
```

Uses

sdFlag

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdFlag].[FlagYesNoString]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	char
Length	1

SQL Script

```
CREATE TYPE [sdFlag].[FlagYesNoString] FROM char (1) NOT NULL GO
```

Uses

sdFlag

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

🗓 [sdHashKey].[RowLevelHashKey]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	varbinary
Length	32

SQL Script

```
CREATE TYPE [sdHashKey].[RowLevelHashKey] FROM varbinary (32) NULL GO
```

Uses

sdHashKey

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

🛅 [sdKey].[SurrogateKeyInteger]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

```
CREATE TYPE [sdKey].[SurrogateKeyInteger] FROM int NOT NULL
GO
```

Uses

sdKey

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[DbSecurity].[UserAuthorization]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Audit]. [vwFindUniqueTablePkyHumanResourcesStaff]

[Audit].[vwFindUniqueTablePkyLocaleCountry]

[Audit].[vwFindUniqueTablePkyProductionManufacturerModel]

[Audit]. [vwFindUniqueTablePkyProductionManufacturerVehicleMake]

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock]

[Audit].[vwFindUniqueTablePkySalesCustomer]

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle]

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicleDetail]

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Programmability > Types > User-Defined Data Types > sdKey.SurrogateKeyInteger

[Sales].[uvw_SalesByCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

[sdLongTextString].[CustomerComments]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	200

SQL Script

CREATE TYPE [sdLongTextString].[CustomerComments] FROM nvarchar (200) NULL GO

Uses

sdLongTextString

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Production].[ManufacturerVehicleStock]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[sdLongTextString].[Note]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	100

SQL Script

```
CREATE TYPE [sdLongTextString].[Note] FROM nvarchar (100) NULL
GO
```

Uses

sdLongTextString

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

[sdMarketingTextString].[CustomerSpendCapacity]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	15

SQL Script

CREATE TYPE [sdMarketingTextString].[CustomerSpendCapacity] FROM nvarchar (15) NULL GO

Uses

sdMarketingTextString

Used By

[Audit].[SalesCustomerHistory]

[Sales].[Customer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdMarketingTextString].[VehicleSalesThresholdCategory]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdMarketingTextString].[VehicleSalesThresholdCategory] FROM nvarchar (20) NULL GO

Uses

sdMarketingTextString

Used By

[Audit].[SalesSalesOrderVehicleHistory]

[sdNameString].[CustomerName]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	65

SQL Script

CREATE TYPE [sdNameString].[CustomerName] FROM nvarchar (65) NULL
GO

Uses

sdNameString

Used By

[Audit].[SalesCustomerHistory]

[Sales].[Customer]

[CustomViews].[uvw_ChuanCustomerCountry]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[sdNameString].[FirstNameString]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	25

SQL Script

CREATE TYPE [sdNameString].[FirstNameString] FROM nvarchar (25) NOT NULL GO

Uses

sdNameString

Used By

[DbSecurity].[UserAuthorization]

[sdNameString].[FullNameString]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	60

SQL Script

CREATE TYPE [sdNameString].[FullNameString] FROM nvarchar (60) NOT NULL
GO

Uses

sdNameString

Used By

[Audit].[HumanResourcesStaffHistory]

[HumanResources].[Staff]

 $[Custom Views]. [uvw_Chuan Staff Discount Given] \\$

[CustomViews].[uvw_ChuanStaffSales]

[CustomViews].[uvw_RalphEmployeeManager]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[sdNameString].[LastNameString]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	35

SQL Script

CREATE TYPE [sdNameString].[LastNameString] FROM nvarchar (35) NOT NULL
GO

Uses

sdNameString

Used By

[DbSecurity].[UserAuthorization]

iii [sdNumber].[Currency]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	numeric
Length	9

SQL Script

```
CREATE TYPE [sdNumber].[Currency] FROM numeric (18, 2) NULL
GO
```

Uses

sdNumber

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[Production].[ManufacturerVehicleStock]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[CustomViews].[uvw_MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

 $[Custom Views]. [uvw_Mehrshad Yearly Sales Profits]$

 $[Custom Views]. [uvw_Ralph Make Model Parts Cost] \\$

[Sales].[uvw_SalesText]

ille [sdNumber].[sdOrdinalNumber]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [sdNumber].[sdOrdinalNumber] FROM int NOT NULL
GO

Uses

sdNumber

[sdNumber].[sdSequenceNumber]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [sdNumber].[sdSequenceNumber] FROM int NOT NULL
GO

Uses

sdNumber

🗓 [sdOrdinalNumber].[TransactionNumber]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [sdOrdinalNumber].[TransactionNumber] FROM int NOT NULL GO

Uses

sdOrdinalNumber

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[HumanResources].[Staff]

[Locale].[Country]

[Production].[ManufacturerModel]

[Production].[ManufacturerVehicleMake]

[Production].[ManufacturerVehicleStock]

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

[sdProjectString].[GrouplProjectNameString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdProjectString].[GrouplProjectNameString] FROM nvarchar (20) NULL GO

Uses

sdProjectString

Used By

[DbSecurity].[UserAuthorization]

[sdProjectString].[IndividualProjectNameString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	60

SQL Script

CREATE TYPE [sdProjectString].[IndividualProjectNameString] FROM nvarchar (60) NULL GO

Uses

sdProjectString

Used By

[DbSecurity].[UserAuthorization]

🗓 [sdSequenceNumber].[LineItemNumber]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [sdSequenceNumber].[LineItemNumber] FROM int NOT NULL
GO

Uses

sdSequenceNumber

Used By

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Sales].[SalesOrderVehicleDetail]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

[sdSequenceNumber].[StockIdNumber]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	int
Length	4

SQL Script

CREATE TYPE [sdSequenceNumber].[StockIdNumber] FROM int NOT NULL
GO

Uses

sdSequenceNumber

[sdShortTextString].[InvoiceNumber]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	varchar
Length	8

SQL Script

CREATE TYPE [sdShortTextString].[InvoiceNumber] FROM varchar (8) NULL
GO

Uses

sdShortTextString

Used By

[Audit].[SalesSalesOrderVehicleHistory]

[Sales].[SalesOrderVehicle]

[Sales].[uvw_SalesByCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

illi [sdShortTextString].[StockCode]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdShortTextString].[StockCode] FROM nvarchar (50) NULL
GO

Uses

sdShortTextString

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Production].[ManufacturerVehicleStock]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[sdString].[sdAddressesString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdString].[sdAddressesString] FROM nvarchar (20) NULL GO

Uses

[sdString].[sdAudit]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	char
Length	1

SQL Script

CREATE TYPE [sdString].[sdAudit] FROM char (1) NULL
GO

Uses

[sdString].[sdBusinessComponentString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdString].[sdBusinessComponentString] FROM nvarchar (20) NULL GO

Uses

[sdString].[sdCountryStringVariant]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdString].[sdCountryStringVariant] FROM nvarchar (20) NULL
GO

Uses

[sdString].[sdLongTextString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	200

SQL Script

CREATE TYPE [sdString].[sdLongTextString] FROM nvarchar (200) NULL
GO

Uses

[sdString].[sdMarketingTextString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	25

SQL Script

CREATE TYPE [sdString].[sdMarketingTextString] FROM nvarchar (25) NULL GO

Uses

[sdString].[sdNameString]

Properties

Property	Value
Nullability	NOT NULL
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdString].[sdNameString] FROM nvarchar (50) NOT NULL
GO

Uses

[sdString].[sdProjectString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdString].[sdProjectString] FROM nvarchar (50) NULL
GO

Uses

[sdString].[sdShortTextString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdString].[sdShortTextString] FROM nvarchar (50) NULL
GO

Uses

[sdString].[sdTimeString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdString].[sdTimeString] FROM nvarchar (20) NULL
GO

Uses

[sdString].[sdVehicleString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	50

SQL Script

CREATE TYPE [sdString].[sdVehicleString] FROM nvarchar (50) NULL
GO

Uses

[sdTimeString].[ClassTimeString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nchar
Length	5

SQL Script

CREATE TYPE [sdTimeString].[ClassTimeString] FROM nchar (5) NULL
GO

Uses

sdTimeString

Used By

[DbSecurity].[UserAuthorization]

iii [sdVehicleString].[VehicleColor]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	20

SQL Script

CREATE TYPE [sdVehicleString].[VehicleColor] FROM nvarchar (20) NULL
GO

Uses

sdVehicleString

Used By

[Audit].[ProductionManufacturerVehicleStockHistory]

[Production].[ManufacturerVehicleStock]

[Sales].[uvw_PivotTable]

[Sales].[uvw_SalesByCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[sdVehicleString].[VehicleIdentifier]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	150

SQL Script

CREATE TYPE [sdVehicleString].[VehicleIdentifier] FROM nvarchar (150) NULL GO

Uses

sdVehicleString

🛅 [sdVehicleString].[VehicleMakeString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	30

SQL Script

CREATE TYPE [sdVehicleString].[VehicleMakeString] FROM nvarchar (30) NULL GO

Uses

sdVehicleString

Used By

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Production].[ManufacturerVehicleMake]

[CustomViews].[uvw_ChuanMakeCountry]

[CustomViews].[uvw_ChuanModelMake]

[CustomViews].[uvw_MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[CustomViews].[uvw_RalphMakeModelPartsCost]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_StockPrices]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[sdVehicleString].[VehicleManufacturerMarketingType]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	25

SQL Script

CREATE TYPE [sdVehicleString].[VehicleManufacturerMarketingType] FROM nvarchar (25)
NULL
GO

Uses

sdVehicleString

Used By

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Production].[ManufacturerVehicleMake]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

🛅 [sdVehicleString].[VehicleModelString]

Properties

Property	Value
Nullability	NULL allowed
Base Type Name	nvarchar
Length	35

SQL Script

CREATE TYPE [sdVehicleString].[VehicleModelString] FROM nvarchar (35) NULL GO

Uses

sdVehicleString

Used By

[Audit].[ProductionManufacturerModelHistory]

[Production].[ManufacturerModel]

[CustomViews].[uvw_ChuanModelMake]

[CustomViews].[uvw_MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

 $[CustomViews].[uvw_RalphMakeModelPartsCost]$

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw StockPrices]

[Sales].[uvw_YearlySales]

[Audit]. [itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

Sequences

Objects

Name
SequenceIdInsert.Audit_HumanResourcesStaffHistory_Id
SequenceIdInsert.Audit_LocaleCountryHistory_Id
SequenceIdInsert.Audit_ProductionManufacturerModelHistory_Id
SequenceIdInsert.Audit_ProductionManufacturerVehicleMakeHistory_Id
SequenceIdInsert.Audit_ProductionManufacturerVehicleStockHistory_Id
SequenceIdInsert.Audit_SalesCustomerHistory_Id
SequenceIdInsert.Audit_SalesSalesCategoryThresholdHistory_Id
SequenceIdInsert.Audit_SalesSalesOrderVehicleDetailHistory_Id
SequenceIdInsert.Audit_SalesSalesOrderVehicleHistory_Id
SequenceIdInsert.DbSecurity_UserAuthorization_Id
SequenceIdInsert.HumanResources_Staff_Id
SequenceIdInsert.Locale_Country_Id
SequenceIdInsert.Production_ManufacturerModel_Id
SequenceIdInsert.Production_ManufacturerVehicleMake_Id
SequenceIdInsert.Production_ManufacturerVehicleStock_Id
SequenceIdInsert.Sales_Customer_Id
SequenceIdInsert.Sales_SalesCategoryThreshold_Id
SequenceIdInsert.Sales_SalesOrderVehicle_Id
SequenceIdInsert.Sales_SalesOrderVehicleDetail_Id

[SequenceIdInsert].[Audit_HumanResourcesStaffHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_HumanResourcesStaffHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_LocaleCountryHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_LocaleCountryHistory_Id]

AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_ProductionManufacturerModelHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_ProductionManufacturerModelHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_ProductionManufacturerVehicleMakeHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_ProductionManufacturerVehicleMakeHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_ProductionManufacturerVehicleStockHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_ProductionManufacturerVehicleStockHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_SalesCustomerHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_SalesCustomerHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_SalesSalesCategoryThresholdHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_SalesSalesCategoryThresholdHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_SalesSalesOrderVehicleDetailHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_SalesSalesOrderVehicleDetailHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Audit_SalesSalesOrderVehicleHistory_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Audit_SalesSalesOrderVehicleHistory_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[DbSecurity_UserAuthorization_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[DbSecurity_UserAuthorization_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[HumanResources_Staff_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[HumanResources_Staff_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Locale_Country_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Locale_Country_Id]

AS bigint

START WITH 1

INCREMENT BY 1

MINVALUE -9223372036854775808

MAXVALUE 9223372036854775807

NO CYCLE

CACHE

GO
```

Uses

[SequenceIdInsert].[Production_ManufacturerModel_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Production_ManufacturerModel_Id]

AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Production_ManufacturerVehicleMake_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Production_ManufacturerVehicleMake_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Production_ManufacturerVehicleStock_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Production_ManufacturerVehicleStock_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Sales_Customer_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Sales_Customer_Id]

AS bigint

START WITH 1

INCREMENT BY 1

MINVALUE -9223372036854775808

MAXVALUE 9223372036854775807

NO CYCLE

CACHE

GO
```

Uses

[SequenceIdInsert].[Sales_SalesCategoryThreshold_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Sales_SalesCategoryThreshold_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Sales_SalesOrderVehicle_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Sales_SalesOrderVehicle_Id]

AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

[SequenceIdInsert].[Sales_SalesOrderVehicleDetail_Id]

Properties

Property	Value
Owner	SequenceldInsert

SQL Script

```
CREATE SEQUENCE [SequenceIdInsert].[Sales_SalesOrderVehicleDetail_Id]
AS bigint
START WITH 1
INCREMENT BY 1
MINVALUE -9223372036854775808
MAXVALUE 9223372036854775807
NO CYCLE
CACHE
GO
```

Uses

Project > 127.0.0.1,13001 > User databases > Group3-EuropeanCarManufacturerSQLServer2019 > Security > Users



Objects

Name	
dbo	
guest	



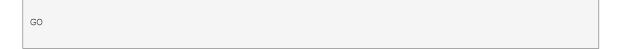
Properties

Property	Value
Туре	SqlUser
Login Name	sa
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script



 $\label{local_project} Project > 127.0.0.1, 13001 > User \ databases > Group 3-European Car Manufacturer SQL Server 2019 > Security > Users > guest$



Properties

Property	Value
Туре	SqlUser
Default Schema	guest

SQL Script

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

db_datawriter

Properties

Property	Value
Owner	dbo

db_ddladmin

Properties

Property	Value
Owner	dbo

db_denydatareader

Properties

Property	Value
Owner	dbo

db_denydatawriter

Properties

Property	Value
Owner	dbo

db_owner

Properties

Property	Value
Owner	dbo

db_securityadmin

Properties

Property	Value
Owner	dbo

public public

Properties

Property	Value
Owner	dbo

∴ Schemas

Objects

Name
Audit
CustomViews
DbSecurity
dEuropeanCarManufacturer
Hashing
HumanResources
Locale
Output
Production
RawData
Sales
sdAddressesString
sdAudit
sdBlob
sdBusinessComponentString
sdCountryStringVariant
sdDate
sdDateTime
sdFlag
sdHashKey
sdKey
sdLongTextString
sdMarketingTextString
sdNameString
sdNumber
sdOrdinalNumber
sdProjectString
sdSequenceNumber
sdShortTextString
sdString
sdTimeString
sdVehicleString
SequenceldInsert
Utils





Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Audit].[HumanResourcesStaffHistory]

[Audit].[LocaleCountryHistory]

[Audit].[ProductionManufacturerModelHistory]

[Audit].[ProductionManufacturerVehicleMakeHistory]

[Audit].[ProductionManufacturerVehicleStockHistory]

[Audit].[SalesCustomerHistory]

[Audit].[SalesSalesOrderVehicleDetailHistory]

[Audit].[SalesSalesOrderVehicleHistory]

[Audit].[vwFindUniqueTablePkyHumanResourcesStaff]

[Audit].[vwFindUniqueTablePkyLocaleCountry]

[Audit]. [vwFindUniqueTablePkyProductionManufacturerModel]

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleMake]

[Audit].[vwFindUniqueTablePkyProductionManufacturerVehicleStock]

[Audit].[vwFindUniqueTablePkySalesCustomer]

[Audit].[vwFindUniqueTablePkySalesSalesOrderVehicle]

[Audit]. [vwFindUniqueTablePkySalesSalesOrderVehicleDetail]

[Audit].[itvfnFindAllTransactionsByTablePkyOfHumanResourcesStaff]

[Audit].[itvfnFindAllTransactionsByTablePkyOfLocaleCountry]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerModel]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleMake]

[Audit].[itvfnFindAllTransactionsByTablePkyOfProductionManufacturerVehicleStock]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesCustomer]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicle]

[Audit].[itvfnFindAllTransactionsByTablePkyOfSalesSalesOrderVehicleDetail]

△ CustomViews

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[CustomViews].[uvw_ChuanCustomerCountry]

[CustomViews].[uvw_ChuanMakeCountry]

[CustomViews].[uvw_ChuanModelMake]

[CustomViews].[uvw_ChuanStaffDiscountGiven]

[CustomViews].[uvw_ChuanStaffSales]

[CustomViews].[uvw_MehrshadVehicleCost]

[CustomViews].[uvw_MehrshadYearlyCustomerSales]

[CustomViews].[uvw_MehrshadYearlySalesProfits]

[CustomViews].[uvw_RalphEmployeeManager]

 $[Custom Views]. [uvw_Ralph Make Model Parts Cost] \\$



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [DbSecurity]
AUTHORIZATION [dbo]
GO

Used By

[DbSecurity].[UserAuthorization]

△ dEuropeanCarManufacturer

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[dEuropeanCarManufacturer].[sdBlob]
[dEuropeanCarManufacturer].[sdDatetime]
[dEuropeanCarManufacturer].[sdFlag]
[dEuropeanCarManufacturer].[sdKey]
[dEuropeanCarManufacturer].[sdNumber]
[dEuropeanCarManufacturer].[sdString]

△ Hashing

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[Hashing].[CreateSha256KeyFromJsonInputHumanResourcesStaff]

[Hashing]. [CreateSha256KeyFromJsonInputLocaleCountry]

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerModel]

[Hashing].[CreateSha256KeyFromJsonInputProductionManufacturerVehicleMake]

[Hashing]. [CreateSha256KeyFromJsonInputProductionManufacturerVehicleStock]

[Hashing]. [CreateSha256KeyFromJsonInputSalesCustomer]

[Hashing]. [CreateSha256KeyFromJsonInputSalesSalesOrderVehicle]

[Hashing].[CreateSha256KeyFromJsonInputSalesSalesOrderVehicleDetail]

△ HumanResources

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[HumanResources].[Staff]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Locale]
AUTHORIZATION [dbo]
GO

Used By

[Locale].[Country]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Output]
AUTHORIZATION [dbo]
GO



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Production]
AUTHORIZATION [dbo]
GO

Used By

[Production].[ManufacturerModel] [Production].[ManufacturerVehicleMake] [Production].[ManufacturerVehicleStock]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [RawData]
AUTHORIZATION [dbo]
GO



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [Sales]
AUTHORIZATION [dbo]
GO

Used By

[Sales].[Customer]

[Sales].[SalesOrderVehicle]

[Sales].[SalesOrderVehicleDetail]

[Sales].[uvw_PivotTable]

[Sales].[uvw_Sales2018]

[Sales].[uvw_SalesByCountry]

[Sales].[uvw_SalesText]

[Sales].[uvw_StockPrices]

[Sales].[uvw_YearlySales]

△ sdAddressesString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdAddressesString].[AddressString]
[sdAddressesString].[CountryString]
[sdAddressesString].[PostalCodeString]
[sdAddressesString].[RegionString]
[sdAddressesString].[TownString]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdAudit]
AUTHORIZATION [dbo]
GO

Used By

[sdAudit].[DbAction]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdBlob]
AUTHORIZATION [dbo]
GO

Used By

[sdBlob].[sdHashKey]

△ sdBusinessComponentString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdBusinessComponentString].[DepartmentString]

△ sdCountryStringVariant

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdCountryStringVariant].[CountryISO2] [sdCountryStringVariant].[CountryISO3]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdDate]
AUTHORIZATION [dbo]
GO

Used By

[sdDate].[DateYYYYMMDD]

△ sdDateTime

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdDateTime].[DateTimestamp]
[sdDateTime].[sdDate]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdFlag]
AUTHORIZATION [dbo]
GO

Used By

[sdFlag].[FlagBit] [sdFlag].[FlagYesNoString]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdHashKey]
AUTHORIZATION [dbo]
GO

Used By

[sdHashKey].[RowLevelHashKey]



Property	Value
Owner	dbo

SQL Script

CREATE SCHEMA [sdKey]
AUTHORIZATION [dbo]
GO

Used By

[sdKey].[SurrogateKeyInteger]

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdLongTextString].[CustomerComments] [sdLongTextString].[Note]

△ sdMarketingTextString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdMarketingTextString].[CustomerSpendCapacity] [sdMarketingTextString].[VehicleSalesThresholdCategory]

△ sdNameString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdNameString].[CustomerName] [sdNameString].[FirstNameString] [sdNameString].[FullNameString] [sdNameString].[LastNameString]



Property	Value
Owner	dbo

SQL Script

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

Used By

[sdNumber].[currency]
[sdNumber].[sdOrdinalNumber]
[sdNumber].[sdSequenceNumber]

△ sdOrdinalNumber

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdOrdinalNumber].[TransactionNumber]

△ sdProjectString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdProjectString].[GrouplProjectNameString]
[sdProjectString].[IndividualProjectNameString]

△ sdSequenceNumber

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdSequenceNumber].[LineItemNumber] [sdSequenceNumber].[StockIdNumber]

∧ sdShortTextString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdShortTextString].[InvoiceNumber] [sdShortTextString].[StockCode]

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdString].[sdAddressesString] [sdString].[sdAudit]

[sdString].[sdBusinessComponentString]

[sdString].[sdCountryStringVariant]

[sdString].[sdLongTextString]

[sdString].[sdMarketingTextString]

[sdString].[sdNameString]

[sdString].[sdProjectString]

[sdString].[sdShortTextString]

[sdString].[sdTimeString]

[sdString].[sdVehicleString]

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdTimeString].[ClassTimeString]

△ sdVehicleString

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[sdVehicleString].[VehicleColor]
[sdVehicleString].[VehicleIdentifier]
[sdVehicleString].[VehicleMakeString]
[sdVehicleString].[VehicleManufacturerMarketingType]
[sdVehicleString].[VehicleModelString]

△ SequenceldInsert

Properties

Property	Value
Owner	dbo

SQL Script

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

Used By

[SequenceIdInsert].[Audit HumanResourcesStaffHistory Id]

[SequenceIdInsert].[Audit_LocaleCountryHistory_Id]

[SequenceIdInsert].[Audit_ProductionManufacturerModelHistory_Id]

[SequenceIdInsert].[Audit_ProductionManufacturerVehicleMakeHistory_Id]

[SequenceIdInsert].[Audit ProductionManufacturerVehicleStockHistory Id]

[SequenceIdInsert].[Audit SalesCustomerHistory Id]

[SequenceIdInsert].[Audit_SalesSalesCategoryThresholdHistory_Id]

[SequenceIdInsert].[Audit_SalesSalesOrderVehicleDetailHistory_Id]

[SequenceIdInsert].[Audit_SalesSalesOrderVehicleHistory_Id]

[SequenceIdInsert].[DbSecurity_UserAuthorization_Id]

[SequenceIdInsert].[HumanResources_Staff_Id]

[SequenceIdInsert].[Locale_Country_Id]

 $[Sequence IdInsert]. [Production_Manufacturer Model_Id] \\$

 $[Sequence IdInsert]. [Production_ManufacturerVehicle Make_Id] \\$

 $[Sequence IdInsert]. [Production_Manufacturer Vehicle Stock_Id] \\$

[SequenceIdInsert].[Sales_Customer_Id]

 $[Sequence IdInsert]. [Sales_Sales Category Threshold_Id] \\$

 $[Sequence IdInsert]. [Sales_SalesOrderVehicle_Id] \\$

[SequenceIdInsert].[Sales_SalesOrderVehicleDetail_Id]



Property	Value
Owner	dbo

SQL Script

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

Used By

 $[Utils]. [uvw_FindColumnDefinitionPlusDefaultAndCheckConstraint] \\$