## Creating and Dropping Temporal Table

CREATE TABLE [dbo].[tblEmployeeTemporal](

[EmployeeNumber] [int] NOT NULL PRIMARY KEY CLUSTERED,

[EmployeeFirstName] [varchar](50) NOT NULL,

[EmployeeMiddleName] [varchar](50) NULL,

[EmployeeLastName] [varchar](50) NOT NULL,

[EmployeeGovernmentID] [char](10) NOT NULL,

[DateOfBirth] [date] NOT NULL, [Department] [varchar](19) NULL

, ValidFrom datetime2(2) GENERATED ALWAYS AS ROW START -- HIDDEN

, ValidTo datetime2(2) GENERATED ALWAYS AS ROW END -- HIDDEN

, PERIOD FOR SYSTEM\_TIME (ValidFrom, ValidTo)

) WITH (SYSTEM\_VERSIONING = ON (HISTORY\_TABLE = dbo.tblEmployeeHistory))

GO

INSERT INTO [dbo].[tblEmployeeTemporal]

( [EmployeeNumber], [EmployeeFirstName], [EmployeeMiddleName], [EmployeeLastName]

, [EmployeeGovernmentID], [DateOfBirth], [Department])

VALUES (123, 'Jane', NULL, 'Zwilling', 'AB123456G', '1985-01-01', 'Customer Relations'),

(124, 'Carolyn', 'Andrea', 'Zimmerman', 'AB234578H', '1975-06-01', 'Commercial'),

(125, 'Jane', NULL, 'Zabokritski', 'LUT778728T', '1977-12-09', 'Commercial'),

(126, 'Ken', 'J', 'Yukish', 'PO201903O', '1969-12-27', 'HR'),

(127, 'Terri', 'Lee', 'Yu', 'ZH206496W', '1986-11-14', 'Customer Relations'),

(128, 'Roberto', NULL, 'Young', 'EH793082D', '1967-04-05', 'Customer Relations')

select \* from dbo.tblEmployeeTemporal

update [dbo].[tblEmployeeTemporal] set EmployeeLastName = 'Smith' where EmployeeNumber = 124

update [dbo].[tblEmployeeTemporal] set EmployeeLastName = 'Albert' where EmployeeNumber = 124

select \* from dbo.tblEmployeeTemporal

ALTER TABLE [dbo].[tblEmployeeTemporal] SET ( SYSTEM\_VERSIONING = OFF )

DROP TABLE [dbo].[tblEmployeeTemporal]

DROP TABLE [dbo].[tblEmployeeHistory]

## Altering Existing Table

alter table [dbo].[tblEmployee]

add

ValidFrom datetime2(2) GENERATED ALWAYS AS ROW START CONSTRAINT def\_ValidFrom DEFAULT SYSUTCDATETIME()

, ValidTo datetime2(2) GENERATED ALWAYS AS ROW END CONSTRAINT def\_ValidTo DEFAULT

CONVERT(datetime2(2), '9999-12-31 23:59:59')

alter table dbo.tblEmployee

set (SYSTEM\_VERSIONING = ON (HISTORY\_TABLE = dbo.tblEmployeeHistory2))

## Querying temporal data at a point of time

select \* from dbo.tblEmployeeTemporal

FOR SYSTEM\_TIME AS OF '2021-02-01'

## Querying temporal data between time periods

select \* from dbo.tblEmployeeTemporal

FOR SYSTEM\_TIME

--FROM startdatetime TO enddatetime

--BETWEEN startdatetime AND enddatetime

--CONTAINED IN (startdatetime, enddatetime)