# (local)\MSSQLSERVER22 Documentation

Telecom, Telecom\_DWH

Server (local)\MSSQLSERVER22

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public	

# **≡** (local)\MSSQLSERVER22

# Databases (2)

- | Telecom
- | Telecom\_DWH

# **Server Properties**

Property	Value		
Product	Microsoft SQL Server		
Version	16.0.1000.6		
Language	English (United States)		
Platform	NT x64		
Edition	Developer Edition (64-bit)		
Engine Edition	3 (Enterprise)		
Processors	8		
OS Version	6.3 (22621)		
Physical Memory	16281		
Is Clustered	False		
Root Directory	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL		
Collation	Arabic_CI_AS		

# Server Settings

Property	Value
Default data file path	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\
Default backup file path	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\Backup
Default log file path	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\
Recovery Interval (minutes)	0
Default index fill factor	0
Default backup media retention	0
Compress Backup	False

# **Advanced Server Settings**

Property	Value
Full text upgrade option	0
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	8
Min server memory	16
Max server memory	4000
Scan for startup procs	False
Transform noise words	False
CLR enabled	False
Blocked process threshold	0
Filestream access level	False
Optimize for ad hoc workloads	False
CLR strict security	True

□ User databases				
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# Databases (2)

- | Telecom
- | Telecom\_DWH

# **目 Telecom Database**

# **Database Properties**

Property	Value
Users	22

# Files

Name	Туре	Size	Maxsize	Autogrowth	File Name
Telcom	Data	72.00 MB	unlimited	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\Telcom.mdf
Telcom_log	Log	72.00 MB	2048.00 GB	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\Telcom_log.ldf

# **■ Tables**

# Objects

Name
dbo.Agent
dbo.Aquisition_Channel
dbo.Call_Customer_Agent
dbo.Churn Reason
dbo.Churn_Customer
dbo.ChurnCategory
dbo.Customer
dbo.Customer_Paying
dbo.CustomerInternet
dbo.InternetService
dbo.Location
dbo.New_Comer
dbo.Notification
dbo.Offers
dbo.Payment_Method
dbo.Phone_Service
dbo.Population
dbo.Receiving_Notification
dbo.Taking Offers

# [dbo].[Agent]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	8
Created	11:55:01 AM Monday, March 4, 2024
Last Modified	4:54:43 AM Thursday, March 14, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	Agent_id	int	4	NOT NULL	1 - 1
	HANDLING_TIME	decimal(18,0)	9	NULL allowed	
	Name	nvarchar(50)	100	NULL allowed	

## **SQL Script**

```
CREATE TABLE [dbo].[Agent]

(
[Agent_id] [int] NOT NULL IDENTITY(1, 1),
[HANDLING_TIME] [decimal] (18, 0) NULL,
[Name] [nvarchar] (50) COLLATE Arabic_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Agent] ADD CONSTRAINT [PK_Agent_F4A8E573E3AF641A] PRIMARY KEY CLUSTERED ([Agent_id]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [idx_Name] ON [dbo].[Agent] ([Name]) ON [PRIMARY]

GO
```

## **Used By**

```
[dbo].[Call_Customer_Agent]
[dbo].[V_#CallsAnswered_AndSatisfactionRate_PerCustomer]
[dbo].[vw_AgentPerformance]
[dbo].[vw_TopPerformingAgents]
```

# [dbo].[Aquisition\_Channel]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	7
Created	7:01:03 PM Sunday, March 3, 2024
Last Modified	8:05:33 PM Friday, March 8, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PK G	Channel_ID	int	4	NOT NULL
	Channel_Name	varchar(50)	50	NOT NULL

## **SQL Script**

```
CREATE TABLE [dbo].[Aquisition_Channel]
(
[Channel_ID] [int] NOT NULL,
[Channel_Name] [varchar] (50) COLLATE Arabic_CI_AS NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[Aquisition_Channel] ADD CONSTRAINT [PK_Aquisiti_0548C240B1A0469B] PRIMARY
KEY CLUSTERED ([Channel_ID]) ON [PRIMARY]
GO
```

## **Used By**

[dbo].[Customer]

[dbo]. [Acqcithion chan el with number of customer]

[dbo].[CreateNewcomerForm]

[dbo].[PROC\_Customers\_Per\_Aquisition\_Channel]

[dbo].[SelectAllCustomers]

# [dbo].[Call\_Customer\_Agent]

# **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5000
Created	2:55:43 PM Monday, March 4, 2024
Last Modified	4:54:43 AM Thursday, March 14, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
<b>₽</b> / <b>2</b> ∴	Call_id	int	4	NOT NULL	1 - 1
FK	customer_id	int	4	NULL allowed	
FK	agent_id	int	4	NULL allowed	
<b>.</b>	answered	bit	1	NULL allowed	
	call_time	time	5	NULL allowed	
	call_date	date	3	NULL allowed	
	end_call_time	time	5	NULL allowed	
<b>.</b>	satisfaction_rating	int	4	NULL allowed	
	resolution_status	bit	1	NULL allowed	
	speed_of_answer	int	4	NULL allowed	
<b>.</b>	Duration	int	4	NULL allowed	
	topic	nvarchar(255)	510	NULL allowed	

# **Triggers**

Name	ANSI Nulls On	Quoted Identifier On	On
trgCalculteDuration	True	True	After Insert

# Foreign Keys

Name	Columns	
FKCall_Custagent787EE5A0	agent_id->[dbo].[Agent].[Agent_id]	
FK_Call_Cust_custo_778AC167	customer_id->[dbo].[Customer].[Customer_ID]	

# **SQL Script**

```
CREATE TABLE [dbo].[Call_Customer_Agent]
```

```
[Call id] [int] NOT NULL IDENTITY(1, 1),
[customer id] [int] NULL,
[agent id] [int] NULL,
[answered] [bit] NULL,
[call_time] [time] NULL,
[call date] [date] NULL,
[end_call_time] [time] NULL,
[satisfaction_rating] [int] NULL,
[resolution status] [bit] NULL,
[speed_of_answer] [int] NULL,
[Duration] [int] NULL,
[topic] [nvarchar] (255) COLLATE Arabic CI AS NULL
) ON [PRIMARY]
GO
CREATE TRIGGER [dbo].[trgCalculteDuration]
ON [dbo].[Call Customer Agent]
AFTER INSERT
AS
BEGIN
   SET NOCOUNT ON;
   UPDATE cca
   SET cca.[Duration] = DATEDIFF(minute, i.[call time], i.[end call time])
   FROM [dbo].[Call Customer Agent] cca
   INNER JOIN inserted i ON cca.call id = i.call id;
END;
ALTER TABLE [dbo].[Call Customer Agent] ADD CONSTRAINT [PK Call Cus 19E7F09370FE3AE4]
PRIMARY KEY CLUSTERED ([Call id]) ON [PRIMARY]
CREATE NONCLUSTERED INDEX [idx_Call_Customer_Agent] ON [dbo].[Call_Customer_Agent] ([Call_id],
[answered], [Duration], [satisfaction rating]) ON [PRIMARY]
ALTER TABLE [dbo].[Call_Customer_Agent] ADD CONSTRAINT [FK__Call_Cust__agent__787EE5A0]
FOREIGN KEY ([agent id]) REFERENCES [dbo].[Agent] ([Agent id])
ALTER TABLE [dbo].[Call_Customer_Agent] ADD CONSTRAINT [FK__Call_Cust__custo__778AC167]
FOREIGN KEY ([customer id]) REFERENCES [dbo].[Customer] ([Customer ID])
```

# Uses

[dbo].[Agent] [dbo].[Customer]

#### **Used By**

```
[dbo].[V_#CallsAnswered_AndSatisfactionRate_PerCustomer]
[dbo].[vw_AgentPerformance]
[dbo].[vw_CustomerSatisfaction]
[dbo].[vw_TopPerformingAgents]
[dbo].[Agent_Success]
[dbo].[CallsHandledByAgent]
[dbo].[GetCountCallsALLTopic]
[dbo].[GetCountCallsTopic]
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Tables > dbo.Call\_Customer\_Agent

[dbo].[GetResolved]

# [dbo].[Churn Reason]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	1831
Created	11:18:34 PM Sunday, March 10, 2024
Last Modified	11:32:52 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	Reason_ID	int	4	NOT NULL	1 - 1
	Reason_Description	varchar(200)	200	NULL allowed	
FK	Churn_Category_ID	int	4	NULL allowed	
FK	Churned_ID	int	4	NOT NULL	

## Foreign Keys

Name	Columns
ChurncategoryFK	Churn_Category_ID->[dbo].[ChurnCategory].[ChurnCategoryID]
FK_Churn Reason_Churn_Customer	Churned_ID->[dbo].[Churn_Customer].[Customer_ID]

## **SQL Script**

```
CREATE TABLE [dbo].[Churn Reason]

(
[Reason_ID] [int] NOT NULL IDENTITY(1, 1),

[Reason_Description] [varchar] (200) COLLATE Arabic_CI_AS NULL,

[Churn_Category_ID] [int] NULL,

[Churned_ID] [int] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Churn Reason] ADD CONSTRAINT [PK_Churn Reason] PRIMARY KEY CLUSTERED

([Reason_ID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Churn Reason] ADD CONSTRAINT [ChurncategoryFK] FOREIGN KEY ([Churn_-
Category_ID]) REFERENCES [dbo].[ChurnCategory] ([ChurnCategoryID])

GO

ALTER TABLE [dbo].[Churn Reason] ADD CONSTRAINT [FK_Churn Reason_Churn_Customer] FOREIGN KEY

([Churned_ID]) REFERENCES [dbo].[Churn_Customer] ([Customer_ID])

GO
```

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#### Uses

[dbo].[Churn\_Customer]
[dbo].[ChurnCategory]

# **Used By**

[dbo].[Churned\_Customer\_Form]
[dbo].[DisplayChurnCustomerWithReason]
[dbo].[PROC\_ChurnCustomers\_Per\_Category]
[dbo].[PROC\_Top5\_Churn\_Reasons]

# [dbo].[Churn\_Customer]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	1831
Created	11:19:54 PM Sunday, March 10, 2024
Last Modified	11:32:52 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
	Outer_ID	int	4	NOT NULL	1 - 1
PKOFKO C	Customer_ID	int	4	NOT NULL	
	Feedback	varchar(max)	max	NULL allowed	
	Tenure_in_Month	int	4	NULL allowed	
	Churn_Date	date	3	NOT NULL	

## Foreign Keys

Name	Columns
Outer_Customer	Customer_ID->[dbo].[Customer].[Customer_ID]

## **SQL Script**

```
CREATE TABLE [dbo].[Churn_Customer]

(
[Outer_ID] [int] NOT NULL IDENTITY(1, 1),

[Customer_ID] [int] NOT NULL,

[Feedback] [varchar] (max) COLLATE Arabic_CI_AS NULL,

[Tenure_in_Month] [int] NULL,

[Churn_Date] [date] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Churn_Customer] ADD CONSTRAINT [PK_Churn_Customer] PRIMARY KEY CLUSTERED

([Customer_ID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Churn_Customer] ADD CONSTRAINT [Outer_Customer] FOREIGN KEY ([Customer_ID]))

REFERENCES [dbo].[Customer] ([Customer_ID])

GO
```

#### Uses

[dbo].[Customer]

## **Used By**

[dbo].[Churn Reason]

[dbo].[TotalRevenueLossChurn]

[dbo].[Churned\_Customer\_Form]

[dbo].[DisplayChurnCustomerWithReason]

[dbo].[PROC\_ChurnCustomers\_Per\_Category]

[dbo].[PROC\_ChurnCustomers\_Per\_City]

[dbo].[PROC\_Top5\_Churn\_Reasons]

[dbo].[UpdateCustomerStatus]

# [dbo].[ChurnCategory]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5
Created	7:02:57 PM Sunday, March 3, 2024
Last Modified	11:18:35 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	ChurnCategoryID	int	4	NOT NULL	1 - 1
	CategoryName	varchar(100)	100	NULL allowed	

## **SQL Script**

```
CREATE TABLE [dbo].[ChurnCategory]
(
[ChurnCategoryID] [int] NOT NULL IDENTITY(1, 1),
[CategoryName] [varchar] (100) COLLATE Arabic_CI_AS NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[ChurnCategory] ADD CONSTRAINT [PK_ChurnCat_8428800E1E579650] PRIMARY KEY CLUSTERED ([ChurnCategoryID]) ON [PRIMARY]
GO
```

## **Used By**

[dbo].[Churn Reason]
[dbo].[PROC\_ChurnCustomers\_Per\_Category]

# **■** [dbo].[Customer]

# **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	6877
Created	2:10:11 PM Tuesday, March 5, 2024
Last Modified	9:40:58 PM Wednesday, March 13, 2024

## Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKC	Customer_ID	int	4	NOT NULL
	Status	varchar(30)	30	NULL allowed
	Churn_Score	int	4	NULL allowed
	No_of_Dependent	int	4	NOT NULL
	CLTV	int	4	NOT NULL
	Has_Dependent	bit	1	NOT NULL
	Has_Referrals	bit	1	NOT NULL
	No_of_Referrals	int	4	NOT NULL
FK	Channel_ID	int	4	NULL allowed
	Gender	varchar(20)	20	NOT NULL
	Age	int	4	NOT NULL
	Married	bit	1	NOT NULL
	contract_type	varchar(100)	100	NULL allowed

# **Triggers**

Name	ANSI Nulls On	Quoted Identifier On	On
trg_offers_churnnn	True	True	After Insert
trg_offers_cltv	True	True	After Insert

# **Check Constraints**

Name	On Column	Constraint
Gender_check	Gender	([Gender]='Female' OR [Gender]='Male')
Status_Check	Status	([Status]='Churned' OR [Status]='Joined' OR [Status]='Stayed')

## Foreign Keys

Name	Columns		
FK_Customer_Aquisition_Channel	Channel_ID->[dbo].[Aquisition_Channel].[Channel_ID]		

#### **SQL Script**

```
CREATE TABLE [dbo].[Customer]
[Customer ID] [int] NOT NULL,
[Status] [varchar] (30) COLLATE Arabic_CI_AS NULL,
[Churn_Score] [int] NULL,
[No of Dependent] [int] NOT NULL,
[CLTV] [int] NOT NULL,
[Has Dependent] [bit] NOT NULL,
[Has Referrals] [bit] NOT NULL,
[No of Referrals] [int] NOT NULL,
[Channel_ID] [int] NULL,
[Gender] [varchar] (20) COLLATE Arabic CI AS NOT NULL,
[Age] [int] NOT NULL,
[Married] [bit] NOT NULL,
[contract_type] [varchar] (100) COLLATE Arabic_CI_AS NULL
) ON [PRIMARY]
CREATE TRIGGER [dbo].[trg_offers_churnnn]
ON [dbo].[Customer]
AFTER INSERT
AS
BEGIN
  DECLARE @Customer_ID int
   DECLARE @Offer ID int = 3
   DECLARE @churn score INT
   SELECT @Customer_ID = Customer_ID, @churn_score = Churn_Score
   FROM inserted;
   IF (@churn score >= 80)
       INSERT INTO [Taking Offers] ([Customer_ID],[Offer_ID])
       VALUES (@Customer ID, @Offer ID);
       PRINT('Double the usual data allowance for the same price ')
   END
END
create trigger [dbo].[trg_offers_cltv]
on [dbo].[Customer]
AFTER INSERT
AS
BEGIN
  DECLARE @Customer ID int
  DECLARE @CLTV INT
   SELECT @Customer ID = Customer ID, @CLTV = CLTV
   FROM inserted;
   IF (@CLTV >= 4000)
   BEGIN
```

```
INSERT INTO [Taking Offers]
            SELECT o.Offer ID, i.Customer ID
            FROM inserted i
            CROSS JOIN Offers o
            WHERE i.CLTV >= 4000 and o.Offer ID =1
           print('25% discount when paying three months in one transaction')
   END
END
ALTER TABLE [dbo].[Customer] ADD CONSTRAINT [Gender_check] CHECK (([Gender]='Female' OR
[Gender]='Male'))
ALTER TABLE [dbo].[Customer] ADD CONSTRAINT [Status Check] CHECK (([Status]='Churned' OR
[Status]='Joined' OR [Status]='Stayed'))
ALTER TABLE [dbo].[Customer] ADD CONSTRAINT [PK Customer 8CB286B920846DBA] PRIMARY KEY
CLUSTERED ([Customer_ID]) ON [PRIMARY]
ALTER TABLE [dbo].[Customer] ADD CONSTRAINT [FK_Customer_Aquisition_Channel] FOREIGN KEY
([Channel ID]) REFERENCES [dbo].[Aquisition Channel] ([Channel ID])
```

#### Uses

[dbo].[Aquisition\_Channel]

#### **Used By**

```
[dbo].[Call_Customer_Agent]
[dbo].[Churn_Customer]
[dbo].[Customer_Paying]
[dbo].[CustomerInternet]
[dbo].[Location]
[dbo].[New_Comer]
[dbo].[Phone_Service]
[dbo].[Receiving_Notification]
[dbo].[Taking Offers]
[dbo].[Acqcithionchanelwithnumberofcustomer]
[dbo].[ahmed]
[dbo].[countGenderCustomer]
[dbo].[CustomerInternetInfo]
[dbo].[ex]
[dbo].[m]
[dbo].[mx]
[dbo].[TotalRevenueStatus]
[dbo].[V\_Number\_Of\_Customers\_Per\_City]
[dbo].[vw_CustByAgeGroup]
[dbo].[CreateNewcomerForm]
[dbo].[GET_CUSTOMER_INFO]
[dbo].[GetCustomer]
[dbo].[GetRiskLevelCustomer_Proc]
[dbo].[HighValueCustomers]
[dbo].[PROC_Customers_Per_Aquisition_Channel]
[dbo].[PROC_NumOf_Customers_Per_City]
[dbo].[SelectAllCustomers]
[dbo].[UpdateCustomerStatus]
```

# [dbo].[Customer\_Paying]

#### **Properties**

Property	Value
Неар	True
Row Count (~)	6861
Created	7:03:08 PM Sunday, March 3, 2024
Last Modified	5:31:11 AM Wednesday, March 6, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
FK	Customer_ID	int	4	NULL allowed
FK	Payment_ID	int	4	NULL allowed

# Foreign Keys

Name	Columns
customerpayingid	Customer_ID->[dbo].[Customer].[Customer_ID]
paymentCustomer	Payment_ID->[dbo].[Payment_Method].[Payment_Method_ID]

## **SQL** Script

```
CREATE TABLE [dbo].[Customer_Paying]

(
[Customer_ID] [int] NULL,

[Payment_ID] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Customer_Paying] ADD CONSTRAINT [customerpayingid] FOREIGN KEY ([Customer_ID]) REFERENCES [dbo].[Customer] ([Customer_ID])

GO

ALTER TABLE [dbo].[Customer_Paying] ADD CONSTRAINT [paymentCustomer] FOREIGN KEY ([Payment_ID]) REFERENCES [dbo].[Payment_Method] ([Payment_Method_ID])

GO
```

#### Uses

[dbo].[Customer]
[dbo].[Payment\_Method]

#### **Used By**

[dbo].[ViewCustomerInfoPayment\_Proc]

# [dbo].[CustomerInternet]

# **Properties**

Property	Value
Row Count (~)	5380
Created	7:02:53 PM Sunday, March 3, 2024
Last Modified	11:20:07 PM Wednesday, March 13, 2024

# Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Default
PKOFKO C	CustomerID	int	4	NOT NULL	
PKOFKO	InternetServiceID	int	4	NOT NULL	
	TotalLongDistanceCharges	float	8	NULL allowed	
	MonthlyCharges	float	8	NULL allowed	
	MonthlyGBDownload	int	4	NULL allowed	
	InternetUsage	int	4	NULL allowed	
	TotalCharges	float	8	NULL allowed	
	TotalRefunds	float	8	NULL allowed	((0))
	TotalExtraDataCharges	int	4	NULL allowed	((0))
	usage_prct	float	8	NULL allowed	

# **Triggers**

Name	ANSI Nulls On	Quoted Identifier On	On
trg_MonthlyGBOffer	True	True	After Insert Update
trg_TotalExtraDataOffer	True	True	After Insert Update
trg_UsageNoti	True	True	After Insert Update
trg_UsagePct	True	True	After Insert Update

# Foreign Keys

Name	Columns
FK_CustomerInternet_Customer	CustomerID->[dbo].[Customer].[Customer_ID]
FK_CustomerInternet_InternetService	InternetServiceID->[dbo].[InternetService].[InternetServiceID]

# **SQL Script**

```
CREATE TABLE [dbo].[CustomerInternet]
```

```
[CustomerID] [int] NOT NULL,
[InternetServiceID] [int] NOT NULL,
[TotalLongDistanceCharges] [float] NULL,
[MonthlyCharges] [float] NULL,
[MonthlyGBDownload] [int] NULL,
[InternetUsage] [int] NULL,
[TotalCharges] [float] NULL,
[TotalRefunds] [float] NULL CONSTRAINT [DF CustomerI Total 6383C8BA] DEFAULT ((0)),
[TotalExtraDataCharges] [int] NULL CONSTRAINT [DF CustomerI Total 6477ECF3] DEFAULT ((0)),
[usage_prct] [float] NULL
) ON [PRIMARY]
GO
CREATE TRIGGER [dbo].[trg MonthlyGBOffer]
ON [dbo].[CustomerInternet]
AFTER INSERT, UPDATE
BEGIN
   declare @customer_id int = (select [CustomerID] from inserted)
   DECLARE @GBdownload int = (SELECT [MonthlyGBDownload] FROM inserted)
   IF @GBdownload > 50
       INSERT INTO [Taking Offers] VALUES (4,@customer_id)
END
GO
CREATE TRIGGER [dbo].[trg TotalExtraDataOffer]
ON [dbo].[CustomerInternet]
AFTER INSERT, UPDATE
AS
BEGIN
   declare @customer id int = (select [CustomerID] from inserted)
   IF ((SELECT TotalExtraDataCharges FROM inserted) <> 50)
       INSERT INTO [Taking Offers]
       VALUES
       (5,@customer id)
END
GO
CREATE TRIGGER [dbo].[trg UsageNoti]
ON [dbo].[CustomerInternet]
AFTER INSERT, UPDATE
BEGIN
   DECLARE @usageprcnt FLOAT
   DECLARE @CustomerID INT
   SELECT @usageprcnt = [usage_prct], @CustomerID = CustomerID
   FROM INSERTED
   IF @usageprcnt = 50
       INSERT INTO Receiving Notification VALUES (3, @CustomerID)
   IF @usageprcnt = 75
       INSERT INTO Receiving_Notification VALUES (4, @CustomerID)
    IF @usageprcnt = 100
       INSERT INTO Receiving Notification VALUES (5, @CustomerID)
END
CREATE
       TRIGGER [dbo].[trg_UsagePct]
```

```
ON [dbo].[CustomerInternet]
AFTER INSERT, UPDATE
AS
BEGIN
    DECLARE @CUST ID int
    DECLARE @Inter serv int, @inter_usage INT
    SELECT @CUST_ID = [CustomerID], @Inter_serv = [InternetServiceID], @inter_usage =
    FROM INSERTED
   UPDATE CustomerInternet
   SET usage_prct = CONVERT(FLOAT, @inter_usage) / i.Quota * 100
   FROM CustomerInternet ci
    {\tt INNER\ JOIN\ InternetService\,i\ ON\ ci.InternetServiceID} = {\tt i.InternetServiceID}
    WHERE i.Quota > 0
      AND ci.CustomerID = @CUST ID
END
ALTER TABLE [dbo].[CustomerInternet] ADD CONSTRAINT [PK Customer D196565083D40233] PRIMARY
KEY CLUSTERED ([CustomerID], [InternetServiceID]) ON [PRIMARY]
ALTER TABLE [dbo].[CustomerInternet] ADD CONSTRAINT [FK CustomerInternet Customer] FOREIGN KEY
([CustomerID]) REFERENCES [dbo].[Customer] ([Customer ID])
ALTER TABLE [dbo].[CustomerInternet] ADD CONSTRAINT [FK CustomerInternet InternetService]
FOREIGN KEY ([InternetServiceID]) REFERENCES [dbo].[InternetService] ([InternetServiceID])
```

#### Uses

[dbo].[Customer]
[dbo].[InternetService]

#### **Used By**

[dbo].[AVGChargeService]
[dbo].[CustomerInternetInfo]
[dbo].[TotalRevenueLossChurn]
[dbo].[TotalRevenueStatus]
[dbo].[V\_Total\_Revenue\_Per\_City]
[dbo].[vw\_AvgMonthlyCharge]
[dbo].[GET\_CUSTOMER\_INFO]
[dbo].[GetServiceCustomer]

# [dbo].[InternetService]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5517
Created	7:26:41 PM Friday, March 8, 2024
Last Modified	4:54:43 AM Thursday, March 14, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Default
PKC .ft.	InternetServiceID	int	4	NOT NULL	
	StreamingTV	bit	1	NULL allowed	((0))
	StreamingMovies	bit	1	NULL allowed	((0))
	OnlineSecurity	bit	1	NULL allowed	((0))
	OnlineBackup	bit	1	NULL allowed	((0))
ı.	Quota	int	4	NOT NULL	
	DeviceProtection	bit	1	NULL allowed	((0))
	StreamingMusic	bit	1	NULL allowed	
	PremiumTechSupport	bit	1	NULL allowed	
	UnlimitedData	bit	1	NULL allowed	
<b>.</b>	ServiceType	nvarchar(255)	510	NOT NULL	

#### **SQL Script**

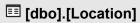
```
CREATE TABLE [dbo].[InternetService]
[InternetServiceID] [int] NOT NULL,
[StreamingTV] [bit] NULL CONSTRAINT [DF__InternetS__Strea__5BE2A6F2] DEFAULT ((0)),
[StreamingMovies] [bit] NULL CONSTRAINT [DF__InternetS__Strea__5CD6CB2B] DEFAULT ((0)),
[OnlineSecurity] [bit] NULL CONSTRAINT [DF__InternetS__Onlin__5DCAEF64] DEFAULT ((0)),
[OnlineBackup] [bit] NULL CONSTRAINT [DF__InternetS__Onlin__5EBF139D] DEFAULT ((0)),
[Quota] [int] NOT NULL,
[DeviceProtection] [bit] NULL CONSTRAINT [DF InternetS Devic 5FB337D6] DEFAULT ((0)),
[StreamingMusic] [bit] NULL,
[PremiumTechSupport] [bit] NULL,
[UnlimitedData] [bit] NULL,
[ServiceType] [nvarchar] (255) COLLATE Arabic_CI_AS NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[InternetService] ADD CONSTRAINT [PK Internet 53832E86FDD7A897] PRIMARY
KEY CLUSTERED ([InternetServiceID]) ON [PRIMARY]
CREATE NONCLUSTERED INDEX [idx_InternetService] ON [dbo].[InternetService] ([InternetService
```

# Project > (local)\MSSQLSERVER22 > User databases > Telecom > Tables > dbo.InternetService

```
ID], [ServiceType], [Quota]) ON [PRIMARY]
GO
```

# **Used By**

[dbo].[CustomerInternet]
[dbo].[AVGChargeService]
[dbo].[CustomerInternetInfo]
[dbo].[vw\_AvgMonthlyCharge]
[dbo].[GET\_CUSTOMER\_INFO]
[dbo].[GetServiceCustomer]



#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	6861
Created	5:59:11 AM Wednesday, March 6, 2024
Last Modified	4:54:43 AM Thursday, March 14, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK G	Location_ID	int	4	NOT NULL	1 - 1
₼FK	Customer_ID	int	4	NULL allowed	
<b>.</b>	City	varchar(50)	50	NULL allowed	
	Country	varchar(50)	50	NULL allowed	
	State	varchar(50)	50	NULL allowed	
	Longitude	varchar(max)	max	NULL allowed	
	Latitude	varchar(max)	max	NULL allowed	
	zip	int	4	NOT NULL	

#### Foreign Keys

Name	Columns
customerLocation	Customer_ID->[dbo].[Customer].[Customer_ID]

#### **SQL Script**

```
CREATE TABLE [dbo].[Location]

(
[Location_ID] [int] NOT NULL IDENTITY(1, 1),
[Customer_ID] [int] NULL,
[City] [varchar] (50) COLLATE Arabic_CI_AS NULL,
[Country] [varchar] (50) COLLATE Arabic_CI_AS NULL,
[State] [varchar] (50) COLLATE Arabic_CI_AS NULL,
[Longitude] [varchar] (max) COLLATE Arabic_CI_AS NULL,
[Latitude] [varchar] (max) COLLATE Arabic_CI_AS NULL,
[zip] [int] NOT NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Location] ADD CONSTRAINT [PK_Location_D2BA00C2B02C2AA1] PRIMARY KEY CLUSTERED ([Location_ID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [idx_location] ON [dbo].[Location] ([City], [Customer_ID]) ON
```

```
[PRIMARY]

GO

ALTER TABLE [dbo].[Location] ADD CONSTRAINT [customerLocation] FOREIGN KEY ([Customer_ID])

REFERENCES [dbo].[Customer] ([Customer_ID])

GO
```

#### Uses

[dbo].[Customer]

## **Used By**

[dbo].[Population]
[dbo].[V\_Number\_Of\_Customers\_Per\_City]
[dbo].[V\_Total\_Revenue\_Per\_City]
[dbo].[GetCustomer\_loc]
[dbo].[PROC\_ChurnCustomers\_Per\_City]
[dbo].[PROC\_NumOf\_Customers\_Per\_City]

# [dbo].[New\_Comer]

#### **Properties**

Property	Value
Row Count (~)	8
Created	7:01:34 PM Sunday, March 3, 2024
Last Modified	5:41:07 PM Thursday, March 7, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK G	Enter_ID	int	4	NOT NULL	1 - 1
FK	Customer_ID	int	4	NULL allowed	
	Acquisition_Date	date	3	NULL allowed	

# Foreign Keys

Name	Columns
Enter_Customer	Customer_ID->[dbo].[Customer].[Customer_ID]

## **SQL Script**

```
CREATE TABLE [dbo].[New_Comer]
(
[Enter_ID] [int] NOT NULL IDENTITY(1, 1),
[Customer_ID] [int] NULL,
[Acquisition_Date] [date] NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[New_Comer] ADD CONSTRAINT [PK__New_Come__62D2F76A26FAB7F2] PRIMARY KEY
CLUSTERED ([Enter_ID]) ON [PRIMARY]
GO
ALTER TABLE [dbo].[New_Comer] ADD CONSTRAINT [Enter_Customer] FOREIGN KEY ([Customer_ID])
REFERENCES [dbo].[Customer] ([Customer_ID])
GO
```

#### Uses

[dbo].[Customer]

## **Used By**

[dbo].[CreateNewcomerForm] [dbo].[NewcomersByContract] [dbo].[UpdateCustomerStatus]

# [dbo].[Notification]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5
Created	5:28:43 PM Wednesday, March 6, 2024
Last Modified	5:28:47 PM Wednesday, March 6, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	Notification_ID	int	4	NOT NULL	1 - 1
	Notification_Text	varchar(255)	255	NOT NULL	

# **SQL Script**

```
CREATE TABLE [dbo].[Notification]

(
[Notification_ID] [int] NOT NULL IDENTITY(1, 1),

[Notification_Text] [varchar] (255) COLLATE Arabic_CI_AS NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Notification] ADD CONSTRAINT [PK_Notifica_8C1160B50D541F41] PRIMARY KEY
CLUSTERED ([Notification_ID]) ON [PRIMARY]

GO
```

## **Used By**

[dbo].[Receiving\_Notification]



#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5
Created	3:41:56 PM Monday, March 4, 2024
Last Modified	3:41:58 PM Monday, March 4, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	Offer_ID	int	4	NOT NULL	1 - 1
	Offer_Label	varchar(200)	200	NULL allowed	
	Start_Date	datetime	8	NOT NULL	
	End_Date	datetime	8	NOT NULL	

# SQL Script

```
CREATE TABLE [dbo].[Offers]
(
[Offer_ID] [int] NOT NULL IDENTITY(1, 1),
[Offer_Label] [varchar] (200) COLLATE Arabic_CI_AS NULL,
[Start_Date] [datetime] NOT NULL,
[End_Date] [datetime] NOT NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[Offers] ADD CONSTRAINT [PK_Offers_66E8916E837AD626] PRIMARY KEY CLUSTERED ([Offer_ID]) ON [PRIMARY]
GO
```

## **Used By**

[dbo].[Taking Offers] [dbo].[insertoffer]

# [dbo].[Payment\_Method]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	4
Created	5:31:11 AM Wednesday, March 6, 2024
Last Modified	4:54:43 AM Thursday, March 14, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK G	Payment_Method_ID	int	4	NOT NULL	1 - 1
<b>.</b>	Payment_Type	varchar(30)	30	NULL allowed	

## **SQL Script**

```
CREATE TABLE [dbo].[Payment_Method]

(
[Payment_Method_ID] [int] NOT NULL IDENTITY(1, 1),

[Payment_Type] [varchar] (30) COLLATE Arabic_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Payment_Method] ADD CONSTRAINT [PK__Payment___7813028662018D2B] PRIMARY KEY CLUSTERED ([Payment_Method_ID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [idx_Payment_Type] ON [dbo].[Payment_Method] ([Payment_Type]) ON [PRIMARY]

GO
```

## **Used By**

[dbo].[Customer\_Paying]
[dbo].[ViewCustomerInfoPayment\_Proc]

# [dbo].[Phone\_Service]

#### **Properties**

Property	Value
Row Count (~)	6861
Created	7:03:25 PM Sunday, March 3, 2024
Last Modified	9:30:06 AM Wednesday, March 6, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
FK	Customer_ID	int	4	NULL allowed	
	multiple_lines	bit	1	NULL allowed	
PK C	phone_service_ID	int	4	NOT NULL	1 - 1

# Foreign Keys

Name	Columns
FKPhone_SerCusto7B5B524B	Customer_ID->[dbo].[Customer].[Customer_ID]

## **SQL Script**

```
CREATE TABLE [dbo].[Phone_Service]
(
[Customer_ID] [int] NULL,
[multiple_lines] [bit] NULL,
[phone_service_ID] [int] NOT NULL IDENTITY(1, 1)
) ON [PRIMARY]

GO
ALTER TABLE [dbo].[Phone_Service] ADD CONSTRAINT [PK__Phone_Se__FF06A9461B79068D] PRIMARY KEY
CLUSTERED ([phone_service_ID]) ON [PRIMARY]

GO
ALTER TABLE [dbo].[Phone_Service] ADD CONSTRAINT [FK__Phone_Ser__Custo__7B5B524B] FOREIGN KEY
([Customer_ID]) REFERENCES [dbo].[Customer] ([Customer_ID])

GO
```

#### Uses

[dbo].[Customer]

## **Used By**

[dbo].[GET\_CUSTOMER\_INFO] [dbo].[GetServiceCustomer]

### [dbo].[Population]

#### **Properties**

Property	Value
Row Count (~)	1626
Created	6:05:27 AM Wednesday, March 6, 2024
Last Modified	6:05:27 AM Wednesday, March 6, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKP C	Zip_Code	int	4	NOT NULL
	Population_size	int	4	NULL allowed
FK	Location_ID	int	4	NULL allowed

#### Foreign Keys

Name	Columns
populationlocation	Location_ID->[dbo].[Location].[Location_ID]

#### **SQL Script**

```
CREATE TABLE [dbo].[Population]
(
[Zip_Code] [int] NOT NULL,
[Population_size] [int] NULL,
[Location_ID] [int] NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[Population] ADD CONSTRAINT [PK_Populati_3929D5633CCB3DCF] PRIMARY KEY
CLUSTERED ([Zip_Code]) ON [PRIMARY]
GO
ALTER TABLE [dbo].[Population] ADD CONSTRAINT [populationlocation] FOREIGN KEY ([Location_ID])
REFERENCES [dbo].[Location] ([Location_ID])
GO
```

#### Uses

#### [dbo].[Location]

### [dbo].[Receiving\_Notification]

#### **Properties**

Property	Value
Row Count (~)	1
Created	7:02:42 PM Sunday, March 3, 2024
Last Modified	5:28:47 PM Wednesday, March 6, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKOFKO C	Notification_ID	int	4	NOT NULL
PKPFKP C	Customer_ID	int	4	NOT NULL

#### Foreign Keys

Name	Columns	
Customer_Notification	Notification_ID->[dbo].[Notification].[Notification_ID]	
Customer_Recieve_Notification	Customer_ID->[dbo].[Customer].[Customer_ID]	

#### **SQL Script**

```
CREATE TABLE [dbo].[Receiving_Notification]

(
[Notification_ID] [int] NOT NULL,
[Customer_ID] [int] NOT NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Receiving_Notification] ADD CONSTRAINT [PK__Receivin__04DA48DE555301BA]
PRIMARY KEY CLUSTERED ([Notification_ID], [Customer_ID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Receiving_Notification] ADD CONSTRAINT [Customer_Notification] FOREIGN KEY
([Notification_ID]) REFERENCES [dbo].[Notification] ([Notification_ID])

GO

ALTER TABLE [dbo].[Receiving_Notification] ADD CONSTRAINT [Customer_Recieve_Notification]
FOREIGN KEY ([Customer_ID]) REFERENCES [dbo].[Customer] ([Customer_ID])

GO
```

#### Uses

[dbo].[Customer] [dbo].[Notification]

### [dbo].[Taking Offers]

#### **Properties**

Property	Value
Row Count (~)	7
Created	7:04:07 PM Sunday, March 3, 2024
Last Modified	2:10:12 PM Tuesday, March 5, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKEFKE C	Offer_ID	int	4	NOT NULL
PKEFKE C	Customer_ID	int	4	NOT NULL

#### Foreign Keys

Name	Columns	
Customer_ID	Customer_ID->[dbo].[Customer].[Customer_ID]	
Offer_id	Offer_ID->[dbo].[Offers].[Offer_ID]	

#### **SQL Script**

```
CREATE TABLE [dbo].[Taking Offers]

(
[Offer_ID] [int] NOT NULL,
[Customer_ID] [int] NOT NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Taking Offers] ADD CONSTRAINT [PK__Taking O__EE23B90552520A7E] PRIMARY KEY
CLUSTERED ([Offer_ID], [Customer_ID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Taking Offers] ADD CONSTRAINT [Customer_ID] FOREIGN KEY ([Customer_ID])

REFERENCES [dbo].[Customer] ([Customer_ID])

GO

ALTER TABLE [dbo].[Taking Offers] ADD CONSTRAINT [Offer_id] FOREIGN KEY ([Offer_ID])

REFERENCES [dbo].[Offers] ([Offer_ID])

GO
```

#### Uses

[dbo].[Customer] [dbo].[Offers] Project > (local)\MSSQLSERVER22 > User databases > Telecom > Tables > dbo.Taking Offers

**Used By** 

[dbo].[TAKING\_OFFER]



### Objects

Name
dbo.Acqcithionchanelwithnumberofcustomer
dbo.ahmed
dbo.AVGChargeService
dbo.countGenderCustomer
dbo.CustomerInternetInfo
dbo.ex
dbo.m
dbo.mx
dbo.TotalRevenueLossChurn
dbo.TotalRevenueStatus
dbo.V_#CallsAnswered_AndSatisfactionRate_PerCustomer
dbo.V_Number_Of_Customers_Per_City
dbo.V_Total_Revenue_Per_City
dbo.vw_AgentPerformance
dbo.vw_AvgMonthlyCharge
dbo.vw_CustByAgeGroup
dbo.vw_CustomerSatisfaction
dbo.vw_TopPerformingAgents

### [dbo].[Acqcithionchanelwithnumberofcustomer]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	11:04:10 PM Wednesday, March 6, 2024
Last Modified	1:56:08 AM Wednesday, March 13, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Channel_Name	varchar(50)	50
Number_of_Customers	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
CREATE VIEW [dbo].[Acqcithionchanelwithnumberofcustomer]
SELECT ac.[Channel_Name], COUNT(c.Channel_ID) AS Number_of_Customers
FROM Customer c
JOIN [Aquisition_Channel] ac ON c.Channel_ID = ac.Channel_ID
GROUP BY ac.[Channel_Name];
GRANT SELECT ON [dbo].[Acqcithionchanelwithnumberofcustomer] TO [stackholderUser]
```

#### Uses

[dbo].[Aquisition\_Channel] [dbo].[Customer]

# [dbo].[ahmed]

### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	6:56:45 PM Monday, March 4, 2024
Last Modified	6:56:45 PM Monday, March 4, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Status	varchar(30)	30
Churn_Score	int	4
No_of_Dependent	int	4
DOB	date	3
Email	varchar(max)	max
CLTV	int	4
Has_Dependent	bit	1
Has_Referrals	bit	1
No_of_Referrals	int	4
Channel_ID	int	4
Gender	varchar(20)	20

#### **SQL Script**

```
create view [dbo].[ahmed] as
select * from customer
GO
```

#### Uses

### [dbo].[AVGChargeService]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
ServiceType	nvarchar(255)	510
AVG Monthly Charges	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
CREATE VIEW [dbo].[AVGChargeService]

AS

SELECT

ServiceType,

ROUND(AVG(MonthlyCharges),2) 'AVG Monthly Charges'

FROM

CustomerInternet CustInt

LEFT JOIN InternetService Int

ON Int.InternetServiceID = CustInt.InternetServiceID

GROUP BY ServiceType

GO

GRANT SELECT ON [dbo].[AVGChargeService] TO [stackholderUser]

GO
```

#### Uses

[dbo].[CustomerInternet]
[dbo].[InternetService]

# [dbo].[countGenderCustomer]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Gender	varchar(20)	20
# customer	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### SQL Script

```
CREATE VIEW [dbo].[countGenderCustomer]

AS

SELECT
Gender,
COUNT(Customer_ID) '# customer'
FROM
Customer
GROUP BY Gender

GO
GRANT SELECT ON [dbo].[countGenderCustomer] TO [stackholderUser]
GO
```

#### Uses

### [dbo].[CustomerInternetInfo]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Gender	varchar(20)	20
Contract_Type	varchar(100)	100
ServiceType	nvarchar(255)	510
Quota	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
--Display Info About Customer For Agent

CREATE VIEW [dbo].[CustomerInternetInfo] AS

SELECT

c.[Customer_ID],
c.[Gender],
c.[Contract_Type],
ins.[ServiceType],
ins.[Quota]

FROM

Customer c

JOIN
    [dbo].[CustomerInternet] custInt ON custInt.[CustomerID] = c.Customer_ID

JOIN
    InternetService ins ON custInt.InternetServiceID = ins.InternetServiceID;

GO

GRANT SELECT ON [dbo].[CustomerInternetInfo] TO [stackholderUser]

GO
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Views > dbo.CustomerInternetInfo

#### Uses

[dbo].[Customer] [dbo].[CustomerInternet] [dbo].[InternetService]



### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	7:04:22 PM Monday, March 4, 2024
Last Modified	7:04:22 PM Monday, March 4, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Status	varchar(30)	30
Churn_Score	int	4
No_of_Dependent	int	4
DOB	date	3
Email	varchar(max)	max
CLTV	int	4
Has_Dependent	bit	1
Has_Referrals	bit	1
No_of_Referrals	int	4
Channel_ID	int	4
Gender	varchar(20)	20

#### **SQL Script**

```
create view [dbo].[ex] as
select * from customer
GO
```

#### Uses



### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	7:13:50 PM Monday, March 4, 2024
Last Modified	7:13:50 PM Monday, March 4, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Status	varchar(30)	30
Churn_Score	int	4
No_of_Dependent	int	4
DOB	date	3
Email	varchar(max)	max
CLTV	int	4
Has_Dependent	bit	1
Has_Referrals	bit	1
No_of_Referrals	int	4
Channel_ID	int	4
Gender	varchar(20)	20

#### **SQL Script**

```
create view [dbo].[m] as
select * from customer
GO
```

#### Uses



### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	7:10:54 PM Monday, March 4, 2024
Last Modified	7:10:54 PM Monday, March 4, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Status	varchar(30)	30
Churn_Score	int	4
No_of_Dependent	int	4
DOB	date	3
Email	varchar(max)	max
CLTV	int	4
Has_Dependent	bit	1
Has_Referrals	bit	1
No_of_Referrals	int	4
Channel_ID	int	4
Gender	varchar(20)	20

#### **SQL Script**

```
create view [dbo].[mx] as
select * from customer
GO
```

#### Uses

## [dbo].[TotalRevenueLossChurn]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True
Created	12:00:57 PM Thursday, March 7, 2024
Last Modified	1:56:08 AM Wednesday, March 13, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
Total_Revenue	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
CREATE VIEW [dbo].[TotalRevenueLossChurn]

AS

SELECT
CHCust.Customer_ID,
ROUND(SUM(CI.totalExtraDataCharges + CI.TotalLongDistanceCharges),2) AS Total_Revenue
FROM
Churn_Customer CHCust
LEFT JOIN[CustomerInternet] CI
ON CHCust.Customer_ID = CI.CustomerID
GROUP BY CHCust.Customer_ID

GO
GRANT SELECT ON [dbo].[TotalRevenueLossChurn] TO [stackholderUser]
GO
```

#### Uses

[dbo].[Churn\_Customer] [dbo].[CustomerInternet]

## [dbo].[TotalRevenueStatus]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
ANSI Nulls On	True
Quoted Identifier On	True
Created	11:04:10 PM Wednesday, March 6, 2024
Last Modified	1:56:08 AM Wednesday, March 13, 2024

#### Columns

Name	Data Type	Max Length (Bytes)
Status	varchar(30)	30
Total_Revenue	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
--Total Revenue Per Sta

CREATE VIEW [dbo].[TotalRevenueStatus]

AS

SELECT

C.[Status],

round(SUM(( CI.[TotalCharges] - CI.[TotalRefunds] ) +

(CI.totalExtraDataCharges + CI.TotalLongDistanceCharges)),2) AS Total_Revenue

FROM [dbo].[CustomerInternet] CI join Customer C

ON C.Customer_ID = CI.CustomerID

GROUP BY C.[Status]

GO

GRANT SELECT ON [dbo].[TotalRevenueStatus] TO [stackholderUser]

GO
```

#### Uses

[dbo].[Customer]
[dbo].[CustomerInternet]

### [dbo].[V\_#CallsAnswered\_AndSatisfactionRate\_PerCustomer]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:09:07 PM Wednesday, March 6, 2024	
Last Modified	11:30:09 PM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Agent_id	int	4
Agent Name	nvarchar(50)	100
No Of Answered Calls	int	4
No Of Resolved Calls	int	4
Avg Satisfaction Rate	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	QAUser

#### **SQL Script**

```
-- NO of calls answerd per agent and his satisfaction rate?
CREATE VIEW [dbo].[V_#CallsAnswered_AndSatisfactionRate_PerCustomer]
SELECT
   A.Agent id,
   A.Name 'Agent Name',
   SUM(cast(CCA.answered as int)) 'No Of Answered Calls',
   SUM(cast(CCA.resolution_status as int)) 'No Of Resolved Calls',
   AVG(satisfaction_rating) 'Avg Satisfaction Rate'
FROM Agent A
join Call_Customer_Agent CCA
ON A.Agent_id = CCA.agent_id
GROUP BY A.Agent id, A.Name
ALTER AUTHORIZATION ON [dbo].[V #CallsAnswered AndSatisfactionRate PerCustomer] TO [dbo]
GRANT SELECT ON [dbo].[V #CallsAnswered AndSatisfactionRate PerCustomer] TO [QAUser]
```

Project > (local	)\MSSQLSERVEF	R22 > User databases	> Telecom >
/iews > dbo.V	#CallsAnswered	AndSatisfactionRate	PerCustomer

#### Uses

[dbo].[Agent]
[dbo].[Call\_Customer\_Agent]

### [dbo].[V\_Number\_Of\_Customers\_Per\_City]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
City	varchar(50)	50
Count Of Customers	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
CREATE VIEW [dbo].[V_Number_Of_Customers_Per_City]

AS

SELECT L.City, COUNT(C.Customer_ID) 'Count Of Customers'

FROM Location L join Customer C

ON L.Customer_ID = C.Customer_ID

GROUP BY L.City

GO

GRANT SELECT ON [dbo].[V_Number_Of_Customers_Per_City] TO [stackholderUser]

GO
```

#### Uses

[dbo].[Customer] [dbo].[Location]

### [dbo].[V\_Total\_Revenue\_Per\_City]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	1:56:08 AM Wednesday, March 13, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
city	varchar(50)	50
Total_Revenue	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
-- Total Revenue Company Gain From Each City?

CREATE VIEW [dbo].[V_Total_Revenue_Per_City]

AS

SELECT

L.city,

ROUND(SUM(CI.totalExtraDataCharges + CI.TotalLongDistanceCharges),2) AS Total_Revenue

FROM CustomerInternet CI
join [Location] L

ON CI.CustomerID = L.customer_id

GROUP BY L.city

GO

GRANT SELECT ON [dbo].[V_Total_Revenue_Per_City] TO [stackholderUser]

GO
```

#### Uses

[dbo].[CustomerInternet] [dbo].[Location]

## [dbo].[vw\_AgentPerformance]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	11:30:09 PM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Agent_ID	int	4
AgentName	nvarchar(50)	100
AvgHandlingTime	decimal(18,0)	9
TotalCallsHandled	int	4
TotalAnsweredCalls	int	4
AvgSatisfactionRating	float	8
AvgSpeedOfAnswer	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	QAUser

#### **SQL Script**

```
-- Agent Performance
CREATE VIEW [dbo].[vw_AgentPerformance] AS
SELECT
   a.Agent_ID,
   a.[Name] AS AgentName,
   a.[HANDLING TIME] AS AvgHandlingTime,
   COUNT (cca.Call ID) AS TotalCallsHandled,
   SUM(CAST(cca.Answered AS INT)) AS TotalAnsweredCalls,
   ROUND(AVG(CAST(cca.satisfaction_rating AS FLOAT)),2) AS AvgSatisfactionRating,
   ROUND (AVG (CAST (cca.speed of answer AS FLOAT)), 2) AS AvgSpeedOfAnswer
FROM
    [dbo].[Agent] a
JOIN
   [dbo].[Call_Customer_Agent] cca ON a.Agent_ID = cca.Agent_ID
GROUP BY
    a.Agent ID, a.[Name], a.[HANDLING TIME]
```

# Project > (local)\MSSQLSERVER22 > User databases > Telecom > Views > dbo.vw\_AgentPerformance

```
-- VIEW CustomerSatisfaction

-- DOESN''T LOOK RIGHT

GO
ALTER AUTHORIZATION ON [dbo].[vw_AgentPerformance] TO [dbo]

GO
GRANT SELECT ON [dbo].[vw_AgentPerformance] TO [QAUSer]

GO
```

#### Uses

[dbo].[Agent] [dbo].[Call\_Customer\_Agent]

# [dbo].[vw\_AvgMonthlyCharge]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	1:56:08 AM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
ServiceType	nvarchar(255)	510
AvgMonthlyCharge	float	8

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser

#### **SQL Script**

```
CREATE VIEW [dbo].[vw_AvgMonthlyCharge] AS

SELECT
ServiceType,
ROUND(AVG(MonthlyCharges),2) AS AvgMonthlyCharge

FROM InternetService i

JOIN CustomerInternet c ON i.InternetServiceID = c.InternetServiceID

GROUP BY ServiceType

-- churn Customers by Age Group

GO
GRANT SELECT ON [dbo].[vw_AvgMonthlyCharge] TO [stackholderUser]

GO
```

#### Uses

[dbo].[CustomerInternet]
[dbo].[InternetService]

## [dbo].[vw\_CustByAgeGroup]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	11:30:09 PM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID	int	4
age	int	4
AgeGroup	varchar(22)	22
ChurnStatus	varchar(11)	11

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	stackholderUser
Grant	SELECT	QAUser

#### **SQL Script**

```
CREATE VIEW [dbo].[vw_CustByAgeGroup] AS
SELECT
   Customer_ID,
   age,
   CASE
       WHEN age < 18 THEN 'Under 18'
       WHEN age BETWEEN 18 AND 24 THEN 'Young (18-24)'
       WHEN age BETWEEN 25 AND 34 THEN 'Adults (25-34)'
       WHEN age BETWEEN 35 AND 44 THEN 'Adults (35-44)'
       WHEN age BETWEEN 45 AND 54 THEN 'Adults (45-54)'
       WHEN age BETWEEN 55 AND 64 THEN 'old (55-64)'
       ELSE 'Seniors (65 and above)'
   END AS AgeGroup,
       WHEN Status = 'churn' THEN 'Churned'
       ELSE 'Not Churned'
   END AS ChurnStatus
FROM
   Customer
```

# Project > (local)\MSSQLSERVER22 > User databases > Telecom > Views > dbo.vw\_CustByAgeGroup

```
GO
ALTER AUTHORIZATION ON [dbo].[vw_CustByAgeGroup] TO [dbo]
GO
GRANT SELECT ON [dbo].[vw_CustByAgeGroup] TO [QAUser]
GO
GRANT SELECT ON [dbo].[vw_CustByAgeGroup] TO [stackholderUser]
GO
```

#### Uses

## [dbo].[vw\_CustomerSatisfaction]

#### **Properties**

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:04:10 PM Wednesday, March 6, 2024	
Last Modified	11:30:09 PM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Customer_ID		4
AvgSatisfaction	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	QAUser

#### **SQL Script**

#### Uses

[dbo].[Call\_Customer\_Agent]

## [dbo].[vw\_TopPerformingAgents]

#### **Properties**

Property	Value	
Collation	Arabic_CI_AS	
ANSI Nulls On	True	
Quoted Identifier On	True	
Created	11:06:19 PM Wednesday, March 6, 2024	
Last Modified	11:30:09 PM Wednesday, March 13, 2024	

#### Columns

Name	Data Type	Max Length (Bytes)
Agent_ID	int	4
Name	nvarchar(50)	100
TotalCallsHandled	int	4

#### **Permissions**

Туре	Action	Owning Principal
Grant	SELECT	QAUser

#### **SQL Script**

```
CREATE VIEW [dbo].[vw_TopPerformingAgents]
AS
SELECT
  TOP (5)
   CA.Agent ID,
   Agent.[Name],
   COUNT(Call_ID) AS TotalCallsHandled
   Call_Customer_Agent CA
LEFT JOIN Agent
ON CA.agent_id = Agent.Agent_id
   Answered = 1
GROUP BY
  CA.Agent_ID, Agent.[Name]
ORDER BY
   TotalCallsHandled
                           ---AvgMonthlyCharge
ALTER AUTHORIZATION ON [dbo].[vw_TopPerformingAgents] TO [dbo]
GRANT SELECT ON [dbo].[vw TopPerformingAgents] TO [QAUser]
```

GO

Uses

[dbo].[Agent] [dbo].[Call\_Customer\_Agent]

### ■ Stored Procedures

### Objects

Name
dbo.Agent_Success
dbo.CallsHandledByAgent
dbo.Churned_Customer_Form
dbo.CreateNewcomerForm
dbo.DisplayChurnCustomerWithReason
dbo.GET_CUSTOMER_INFO
dbo.GetCountCallsALLTopic
dbo.GetCountCallsTopic
dbo.GetCustomer
dbo.GetCustomer_loc
dbo.GetResolved
dbo.GetRiskLevelCustomer_Proc
dbo.GetServiceCustomer
dbo.HI_QA
dbo.HI_QA_Welcome
dbo.hi_telecom
dbo.HighValueCustomers
dbo.insertoffer
dbo.NewcomersByContract
dbo.PROC_ChurnCustomers_Per_Category
dbo.PROC_ChurnCustomers_Per_City
dbo.PROC_Customers_Per_Aquisition_Channel
dbo.PROC_NumOf_Customers_Per_City
dbo.PROC_Top5_Churn_Reasons
dbo.SelectAllCustomers
dbo.SelectCustomersByChurnStatus
dbo.TAKING_OFFER
dbo.UpdateCustomerStatus
dbo.ViewCustomerInfoPayment_Proc

## [dbo].[Agent\_Success]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

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

#### **SQL Script**

```
CREATE PROCEDURE [dbo].[Agent_Success]
    @agent_id INT

AS

BEGIN

SELECT

CASE

WHEN SUM(CAST(answered AS INT)) > 0

THEN (SUM(CAST(resolution_status AS INT)) * 100 / SUM(CAST(answered AS INT)))

ELSE 0

END AS 'Success Rate %'

FROM Call_Customer_Agent
WHERE agent_id = @agent_id

END

GO
```

#### Uses

[dbo].[Call\_Customer\_Agent]

# [dbo].[CallsHandledByAgent]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

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

#### **SQL Script**

```
CREATE PROC [dbo].[CallsHandledByAgent]
    @AgentID INT

AS

BEGIN

SELECT
    agent_id AS Agent_ID,
    SUM(cast (resolution_status as int)) AS Calls_Handled

FROM
    [dbo].[Call_Customer_Agent]
    WHERE
    agent_id = @AgentID
    GROUP BY Agent_id

END

GO
```

#### Uses

[dbo].[Call\_Customer\_Agent]

### [dbo].[Churned\_Customer\_Form]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@Customer_ID	int	4
@Feedback	varchar(max)	max
@Tenure	int	4
@Churn_Date	date	3
@Reason	varchar(max)	max

#### **SQL Script**

```
PROC [dbo].[Churned Customer Form] (@Customer ID int, @Feedback varchar(max), @Tenure
int, @Churn Date date, @Reason varchar(max))
AS
BEGIN
    INSERT INTO [Churn Customer] (Customer ID, Feedback, Tenure in Month, Churn Date)
   VALUES (@Customer ID, @Feedback, @Tenure, @Churn Date);
   INSERT INTO [Churn Reason] (Reason Description, Churned ID, Churn Category ID)
   Select @Reason, @Customer_ID,
       CASE @Reason
       when 'Attitude of support person' then 1
       when 'Attitude of service provider' then 1
       when 'Competitor made better offer' then 2
       when 'Competitor had better devices' then 2
       when 'Competitor offered higher download speeds' then 2
       when 'Competitor offered more data' then 2
       when 'Lack of self-service on Website' then 3
       when 'Network reliability' then 3
       when 'Product dissatisfaction' then 3
       when 'Poor expertise of online support' then 3
       when 'Poor expertise of phone support' then 3
       when 'Limited range of services' then 3
       when 'Service dissatisfaction' then 3
        when 'Price too high' then 4
       when 'Lack of affordable download/upload speed' then 4
       when 'Long distance charges' then 4
        when 'Extra data charges' then 4
       else 'Other'
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Programmability > Stored Procedures > dbo.Churned\_Customer\_-Form

End			
END			
GO			

#### Uses

[dbo].[Churn Reason]
[dbo].[Churn\_Customer]

### [dbo].[CreateNewcomerForm]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@No_of_Dependent	int	4
@age	int	4
@Has_Dependent	bit	1
@Has_Referrals	bit	1
@No_of_Referrals	int	4
@ChannelName	varchar(50)	50
@Contract_Type	varchar(30)	30
@gender	varchar(20)	20
@married	bit	1

#### **SQL Script**

```
CREATE PROCEDURE [dbo].[CreateNewcomerForm]
   @No_of_Dependent INT,
   @age int,
   @Has Dependent BIT,
   @Has Referrals BIT,
   @No of Referrals INT,
   @ChannelName VARCHAR(50),
   @Contract_Type VARCHAR(30),
    @gender varchar(20),
    @married BIT
AS
BEGIN
   DECLARE @Customer ID INT = (SELECT MAX([Customer ID]) FROM [dbo].[Customer]);
   SET @Customer ID += 1
   DECLARE @channelID INT = (SELECT [Channel_ID] FROM [dbo].[Aquisition_Channel] WHERE
[{\tt Channel\_Name}] \ = \ {\tt @ChannelName})
   INSERT INTO [Customer] ([Customer ID], [CLTV], [Gender], [Married], [No of Dependent],
[Has_Dependent],
   [Has_Referrals], [No_of_Referrals], [contract_type], [Age], [Channel_ID], [Status])
    (@Customer_ID, 0, @gender, @married, @No_of_Dependent, @Has_Dependent,
    @Has_Referrals, @No_of_Referrals, @Contract_Type, @age, @channelID, 'Joined');
```

# Project > (local)\MSSQLSERVER22 > User databases > Telecom > Programmability > Stored Procedures > dbo.CreateNewcomerForm

```
INSERT INTO [New_Comer] ([Customer_ID], [Acquisition_Date])
VALUES (@Customer_ID, GETDATE());

-- print the inserted data
    SELECT * FROM [dbo].[Customer]
    WHERE [Customer_ID] = @Customer_ID

END;
GO
```

#### Uses

[dbo].[Aquisition\_Channel] [dbo].[Customer] [dbo].[New\_Comer] Project > (local)\MSSQLSERVER22 > User databases > Telecom > Programmability > Stored Procedures > dbo.DisplayChurnCustomer-WithReason



### [dbo].[DisplayChurnCustomerWithReason]

#### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **SQL Script**

```
CREATE PROCEDURE [dbo].[DisplayChurnCustomerWithReason]
AS
BEGIN
   SELECT cc.Outer_ID, cc.Tenure_in_Month,
     cc.Churn_Date, cr.Reason_Description
   FROM Churn_Customer cc
   JOIN [Churn Reason] cr ON cc.Outer_ID = cr.Churned_ID;
END;
GO
```

#### Uses

[dbo].[Churn Reason] [dbo].[Churn\_Customer]

# [dbo].[GET\_CUSTOMER\_INFO]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data	ta Type	Max Length (Bytes)
@customer_id	int		4

### **Permissions**

Туре	Action	Owning Principal
Grant	EXECUTE	DianeUser
Grant	EXECUTE	BeckyUser
Grant	EXECUTE	StewartUser
Grant	EXECUTE	GregUser
Grant	EXECUTE	JimUser
Grant	EXECUTE	JoeUser
Grant	EXECUTE	MarthaUser
Grant	EXECUTE	DanUser

```
CREATE PROCEDURE [dbo].[GET_CUSTOMER_INFO]
   @customer_id INT
AS
BEGIN
   -- Check if the customer ID exists
  IF NOT EXISTS (SELECT 1 FROM dbo.Customer WHERE Customer ID = @customer id)
      PRINT 'Oops! Customer not found. Maybe they''re on a secret mission!';
       RETURN;
   END
   -- Your existing query here
   SELECT
      c.*,
       ci.*,
       isv.*,
       ps.*
   FROM
```

```
dbo.Customer AS c
   LEFT JOIN
      dbo.CustomerInternet AS ci ON c.Customer_ID = ci.CustomerID
   LEFT JOIN
      dbo.InternetService AS isv ON ci.InternetServiceID = isv.InternetServiceID
   LEFT JOIN
       dbo.Phone Service AS ps ON ps.Customer ID = c.Customer ID
       c.Customer_ID = @customer_id;
END;
GO
GRANT EXECUTE ON [dbo].[GET_CUSTOMER_INFO] TO [BeckyUser]
GRANT EXECUTE ON [dbo].[GET_CUSTOMER_INFO] TO [DanUser]
GRANT EXECUTE ON [dbo].[GET CUSTOMER INFO] TO [DianeUser]
GRANT EXECUTE ON [dbo].[GET CUSTOMER INFO] TO [Greguser]
GRANT EXECUTE ON [dbo].[GET CUSTOMER INFO] TO [JimUser]
GRANT EXECUTE ON [dbo].[GET_CUSTOMER INFO] TO [JoeUser]
GO
GRANT EXECUTE ON [dbo].[GET CUSTOMER INFO] TO [MarthaUser]
GRANT EXECUTE ON [dbo].[GET_CUSTOMER_INFO] TO [StewartUser]
```

#### Uses

[dbo].[CustomerInternet] [dbo].[CustomerInternet] [dbo].[InternetService] [dbo].[Phone\_Service]

# [dbo].[GetCountCallsALLTopic]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **SQL Script**

```
CREATE PROC [dbo].[GetCountCallsALLTopic]

AS

BEGIN

SELECT

COUNT(Call_id) '# calls',

topic

FROM [dbo].[Call_Customer_Agent]

GROUP BY topic

END

--23 Display resolved and answered calls per agent

--This procedure displays the number of resolved and answered calls handled by a specific agent.

GO
```

## Uses

[dbo].[Call\_Customer\_Agent]

# [dbo].[GetCountCallsTopic]

## **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

Na	ame	Data Type	Max Length (Bytes)
@	topic	varchar(30)	30

# **SQL Script**

```
CREATE PROC [dbo].[GetCountCallsTopic]
(
    @topic varchar(30)
)
AS
BEGIN
    SELECT
    topic,
    COUNT(Call_id) '# calls'
    FROM [dbo].[Call_Customer_Agent]
    WHERE topic = @topic
    GROUP BY topic
END
GO
```

## Uses

[dbo].[Call\_Customer\_Agent]

# [dbo].[GetCustomer]

# **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

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

# **SQL Script**

```
CREATE PROCEDURE [dbo].[GetCustomer]
@customer_id INT
AS
BEGIN
    SELECT
    *
    FROM
    [dbo].[Customer]
    WHERE
    Customer_ID = @customer_id
END
GO
```

## Uses

[dbo].[Customer]

# [dbo].[GetCustomer\_loc]

# **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

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

# **SQL Script**

```
CREATE PROCEDURE [dbo].[GetCustomer_loc]
@location_id INT
AS
BEGIN
    SELECT
    *
    FROM
    [dbo].[Location]
    WHERE
    [Location_ID] = @location_id
END

---NewcomersByContract
GO
```

## Uses

[dbo].[Location]

# [dbo].[GetResolved]

## **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

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

# **SQL Script**

```
CREATE PROCEDURE [dbo].[GetResolved]
    @agent_id INT

AS

BEGIN
    SELECT
    sum(cast(answered as int)) '# Answered',
    SUM(cast(resolution_status as int)) '# Resolved'
    FROM Call_Customer_Agent
    WHERE agent_id = @agent_id

END

GO
```

### Uses

[dbo].[Call\_Customer\_Agent]

# [dbo].[GetRiskLevelCustomer\_Proc]

### **Properties**

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	

#### **Parameters**

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

## **SQL Script**

```
CREATE PROC [dbo].[GetRiskLevelCustomer Proc]
   @Customer_ID INT
)
AS
BEGIN
   DECLARE @AvgChurnScore DECIMAL(10, 2)
   -- Calculate average churn score
   SELECT @AvgChurnScore = AVG(Churn Score)
   FROM [dbo].[Customer]
   -- Determine risk level based on churn score
   SELECT
       CASE
           WHEN Churn_Score > @AvgChurnScore THEN 'High'
           ELSE 'Low'
       END AS RiskLevel
   FROM [dbo].[Customer]
   WHERE [Customer_ID] = @Customer_ID
END
GO
```

#### Uses

[dbo].[Customer]

# [dbo].[GetServiceCustomer]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

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

# **SQL Script**

```
CREATE PROC [dbo].[GetServiceCustomer]
   @Customer ID INT
)
AS
BEGIN
   SELECT
   [StreamingTV],
   [StreamingMovies],
    [OnlineSecurity],
    [ServiceType],
    [OnlineBackup],
    [Quota],
    [DeviceProtection],
    [multiple_lines]
   [dbo].[CustomerInternet] CustINTServ
   LEFT JOIN [dbo].[InternetService] INTServ
   ON INTServ.InternetServiceID = CustINTServ.InternetServiceID
   LEFT JOIN [dbo].[Phone Service] PHServ
   ON CustINTServ.CustomerID = PHServ.Customer_ID
    CustINTServ.CustomerID = @Customer ID
END
GO
```

### Uses

[dbo].[CustomerInternet] [dbo].[InternetService] [dbo].[Phone\_Service]



Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Permissions**

Туре	Action	Owning Principal
Grant	EXECUTE	QAUser

```
CREATE PROCEDURE [dbo].[HI_QA]

AS

BEGIN

PRINT 'Welcome, QA Team!';

PRINT 'Feel free to query the allowed views and gather valuable insights.';

END;

GO

ALTER AUTHORIZATION ON [dbo].[HI_QA] TO [dbo]

GO

GRANT EXECUTE ON [dbo].[HI_QA] TO [QAUser]

GO
```

# [dbo].[HI\_QA\_Welcome]

# **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

```
CREATE PROCEDURE [dbo].[HI_QA_Welcome]

AS

BEGIN

PRINT 'Welcome, QA Team!';

PRINT 'Feel free to query the allowed views and gather valuable insights.';

END;

GO
```

# [dbo].[hi\_telecom]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Permissions**

Туре	Action	Owning Principal
Grant	EXECUTE	stackholderUser

```
CREATE PROCEDURE [dbo].[hi_telecom]
AS
BEGIN
  PRINT 'Welcome, sir!';
   PRINT 'Feel free to explore the information and generate valuable insights.';
    -- list of views the user has access to
   PRINT 'List of Views:'
   DECLARE @ViewName NVARCHAR(255);
   DECLARE view_cursor CURSOR FOR
   SELECT TABLE NAME
   FROM INFORMATION SCHEMA.VIEWS
   WHERE TABLE_SCHEMA = 'dbo';
   OPEN view cursor;
   FETCH NEXT FROM view cursor INTO @ViewName;
   WHILE @@FETCH_STATUS = 0
   BEGIN
       PRINT @ViewName;
       FETCH NEXT FROM view_cursor INTO @ViewName;
   END
   CLOSE view_cursor
    DEALLOCATE view_cursor
END
GRANT EXECUTE ON [dbo].[hi_telecom] TO [stackholderUser]
```

# [dbo].[HighValueCustomers]

# **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

## SQL Script

```
CREATE PROC [dbo].[HighValueCustomers]

AS

BEGIN

SELECT

Customer_ID,

CLTV

FROM

[dbo].[Customer]

WHERE

CLTV > 4000

END

GO
```

## Uses

[dbo].[Customer]

# [dbo].[insertoffer]

## **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

Name	Data Type	Max Length (Bytes)
@Label	varchar(200)	200
@STARTDATE	datetime	8
@ENDDATE	datetime	8

# **SQL Script**

```
CREATE PROC [dbo].[insertoffer] @Label VARCHAR(200),@STARTDATE DATETIME,@ENDDATE DATETIME

AS

IF EXISTS(SELECT*FROM[dbo].[Offers] where Offer_Label = @Label)

SELECT'This Offer Is Already Existed'

else

INSERT INTO [dbo].[Offers] VALUES( @Label,@STARTDATE,@ENDDATE)

GO
```

### Uses

[dbo].[Offers]

# [dbo].[NewcomersByContract]

## **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@ContractType	varchar(30)	30

# **SQL Script**

# Uses

[dbo].[New\_Comer]

# [dbo].[PROC\_ChurnCustomers\_Per\_Category]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

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

## **SQL Script**

```
CREATE PROC [dbo].[PROC_ChurnCustomers_Per_Category] (@Category_ID int)

AS

BEGIN

SELECT C.CategoryName, COUNT(CC.Customer_ID) 'No of customers'

FROM Churn_Customer CC join [Churn Reason] CR

ON CC.Customer_ID = CR.Churned_ID join ChurnCategory C

ON CR.Churn_Category_ID = C.ChurnCategoryID

WHERE CR.Churn_Category_ID = @Category_ID

GROUP BY C.CategoryName

END

GO
```

### Uses

[dbo].[Churn Reason] [dbo].[Churn\_Customer] [dbo].[ChurnCategory]

# [dbo].[PROC\_ChurnCustomers\_Per\_City]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@City	varchar(50)	50

## **SQL Script**

```
CREATE PROC [dbo].[PROC_ChurnCustomers_Per_City] (@City varchar(50))

AS

BEGIN

SELECT @city AS City, COUNT(CC.Customer_ID) AS ChurnCount

FROM Churn_Customer CC

JOIN [Location] L ON CC.Customer_ID = L.Customer_ID

WHERE L.City = @City

GROUP BY City;

END

GO
```

### Uses

[dbo].[Churn\_Customer] [dbo].[Location]

# [dbo].[PROC\_Customers\_Per\_Aquisition\_Channel]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@Channel	varchar(50)	50

## **SQL Script**

```
CREATE PROC [dbo].[PROC_Customers_Per_Aquisition_Channel] (@Channel varchar(50))

AS

BEGIN

SELECT @Channel 'Channel Name', COUNT(Customer_ID) 'No of customers'

FROM Aquisition_Channel AC join customer C

ON AC.Channel_ID = C.Channel_ID

WHERE AC.Channel_Name = @Channel

GROUP BY AC.Channel_Name

END

GO
```

#### Uses

[dbo].[Aquisition\_Channel] [dbo].[Customer]

# [dbo].[PROC\_NumOf\_Customers\_Per\_City]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@City	varchar(50)	50

## **SQL Script**

```
CREATE PROC [dbo].[PROC_NumOf_Customers_Per_City] (@City varchar(50))

AS

BEGIN

SELECT @City 'City', COUNT(C.Customer_ID) 'NO Of Customers'

FROM Customer C join [Location] L

ON C.Customer_ID = L.Customer_ID

WHERE L.City = @City

GROUP BY L.City

END

GO
```

# Uses

[dbo].[Customer] [dbo].[Location] Project > (local)\MSSQLSERVER22 > User databases > Telecom > Programmability > Stored Procedures > dbo.PROC\_Top5\_Churn\_-

# [dbo].[PROC\_Top5\_Churn\_Reasons]

## **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

# **SQL Script**

```
CREATE PROC [dbo].[PROC_Top5_Churn_Reasons]

AS

BEGIN

SELECT TOP 5 CR.Reason_Description ,COUNT(CC.Customer_ID) 'No of customers'

FROM Churn_Customer CC join [Churn Reason] CR

ON CC.Customer_ID = CR.Churned_ID

GROUP BY CR.Reason_Description

ORDER BY 2 DESC

END

GO
```

#### Uses

[dbo].[Churn Reason]
[dbo].[Churn\_Customer]

# [dbo].[SelectAllCustomers]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **SQL Script**

```
CREATE PROCEDURE [dbo].[SelectAllCustomers]

AS

BEGIN

SELECT c.[Customer_ID] , c.[Status] , c.[Churn_Score],

c.[No_of_Dependent] ,c.[No_of_Referrals]

,AC.[Channel_Name]

FROM Customer c Join [Aquisition_Channel] AC

ON c.[Channel_ID] = AC.[Channel_ID];

END;

GO
```

### Uses

[dbo].[Aquisition\_Channel] [dbo].[Customer]

# [dbo].[SelectCustomersByChurnStatus]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

#### **Parameters**

Name	Data Type	Max Length (Bytes)
@ChurnStatus	varchar(50)	50

```
CREATE PROCEDURE [dbo].[SelectCustomersByChurnStatus]
    @ChurnStatus VARCHAR(50)

AS

BEGIN
    DECLARE @SQLQuery NVARCHAR(MAX);

SET @SQLQuery = 'SELECT * FROM Customer WHERE [Status] = @ChurnStatus';

EXEC sp_executesql @SQLQuery, N'@ChurnStatus VARCHAR(50)', @ChurnStatus;
END;
-- TEST
GO
```

# [dbo].[TAKING\_OFFER]

# **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

### **Parameters**

Name	Data Type	Max Length (Bytes)
@OFFER_ID	int	4
@CUSTOMER_ID	int	4

## **SQL Script**

```
CREATE PROC [dbo].[TAKING_OFFER] @OFFER_ID INT,@CUSTOMER_ID INT

AS

BEGIN TRY

INSERT INTO [dbo].[Taking Offers] VALUES (@OFFER_ID,@CUSTOMER_ID)

END TRY

BEGIN CATCH

SELECT'ERROR'

END CATCH

GO
```

## Uses

[dbo].[Taking Offers]

# [dbo].[UpdateCustomerStatus]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

```
CREATE PROCEDURE [dbo].[UpdateCustomerStatus]
AS
BEGIN
   DECLARE @customerId INT;
   DECLARE @acquisitionDate DATE;
   DECLARE @status VARCHAR(50);
   DECLARE customerCursor CURSOR FOR
   SELECT NC.[Acquisition_Date], NC.[Customer_ID]
   FROM [dbo].[New Comer] NC
   JOIN customer c ON c.Customer id = NC.Customer id;
   OPEN customerCursor;
   FETCH NEXT FROM customerCursor INTO @acquisitionDate, @customerId;
   WHILE @@FETCH STATUS = 0
       IF DATEDIFF(MONTH, @acquisitionDate, GETDATE()) <= 1</pre>
           SET @status = 'Joined';
       ELSE IF DATEDIFF (MONTH, @acquisitionDate, GETDATE()) > 1
           AND NOT EXISTS (SELECT 1 FROM [dbo].[Churn Customer] OC WHERE OC.Customer id =
@customerId)
           SET @status = 'stayed';
       ELSE
           SET @status = 'CHURN';
        -- Update status
       UPDATE customer
       SET status = @status
       WHERE Customer_id = @customerId;
       -- Fetch the next row
       FETCH NEXT FROM customerCursor INTO @acquisitionDate, @customerId;
   END
   CLOSE customerCursor;
   DEALLOCATE customerCursor;
END;
GO
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Programmability > Stored Procedures > dbo.UpdateCustomerStatus

## Uses

[dbo].[Churn\_Customer] [dbo].[Customer] [dbo].[New\_Comer]

# [dbo].[ViewCustomerInfoPayment\_Proc]

### **Properties**

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

## **SQL Script**

```
CREATE PROC [dbo].[ViewCustomerInfoPayment_Proc]

AS

BEGIN

SELECT

PayM.Payment_Type,

COUNT(CustPay.Customer_ID) '# Customers'

FROM [dbo].[Customer_Paying] CustPay

LEFT JOIN [dbo].[Payment_Method] PayM

ON PayM.Payment_Method_ID = CustPay.Payment_ID

GROUP BY PayM.Payment_Type

ORDER BY 2 DESC

END

GO
```

#### Uses

[dbo].[Customer\_Paying] [dbo].[Payment\_Method]



# Objects

Name
ahmed
Asaeso
BeckyUser
DanUser
dbo
DianeUser
GregUser
guest
hadi
Hadi_login
hadikh
JimUser
JoeUser
MarthaUser
memo
QAUser
salwa
stackholderUser
StewartUser
team



Property	Value
Туре	SqlUser
Login Name	ahmed
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

# SQL Script

CREATE USER [ahmed] FOR LOGIN [ahmed]
GO



Property	Value
Туре	SqlUser
Login Name	Asaeso
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

# SQL Script

CREATE USER [Asaeso] FOR LOGIN [Asaeso]
GO



Property	Value
Туре	SqlUser
Login Name	Becky
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

# SQL Script

CREATE USER [BeckyUser] FOR LOGIN [Becky]
GO



Property	Value
Туре	SqlUser
Login Name	Dan
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

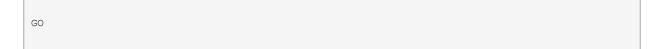
```
CREATE USER [DanUser] FOR LOGIN [Dan]
GO
```



Property	Value
Туре	SqlUser
Login Name	sa
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant





Property	Value
Туре	SqlUser
Login Name	Diane
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

# SQL Script

CREATE USER [DianeUser] FOR LOGIN [Diane]
GO



Property	Value
Туре	SqlUser
Login Name	Greg
Default Schema	dbo

# **Database Level Permissions**

Туре	Action
CONNECT	Grant

# **SQL Script**

CREATE USER [GregUser] FOR LOGIN [Greg]
GO



Property	Value
Туре	SqlUser
Default Schema	guest

# SQL Script

GO



Property	Value
Туре	SqlUser
Login Name	hadi
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant
BACKUP DATABASE	Grant
BACKUP LOG	Grant
CREATE DEFAULT	Grant
CREATE FUNCTION	Grant
CREATE PROCEDURE	Grant
CREATE RULE	Grant
CREATE TABLE	Grant
CREATE VIEW	Grant

```
CREATE USER [hadi] FOR LOGIN [hadi]

GO

GRANT ALTER ANY SCHEMA TO [hadi]

GRANT BACKUP DATABASE TO [hadi]

GRANT BACKUP LOG TO [hadi]

GRANT CONTROL TO [hadi]

GRANT CREATE DEFAULT TO [hadi]

GRANT CREATE FUNCTION TO [hadi]

GRANT CREATE PROCEDURE TO [hadi]

GRANT CREATE RULE TO [hadi]

GRANT CREATE TABLE TO [hadi]

GRANT CREATE VIEW TO [hadi]

GRANT CREATE VIEW TO [hadi]
```



Property	Value
Туре	SqlUser
Login Name	Hadi_login
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

### SQL Script

CREATE USER [Hadi\_login] FOR LOGIN [Hadi\_login]
GO



Property	Value
Туре	SqlUser
Login Name	hadikh
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [hadikh] FOR LOGIN [hadikh]
GO



Property	Value
Туре	SqlUser
Login Name	Jim
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant

```
CREATE USER [JimUser] FOR LOGIN [Jim]
GO
```



Property	Value
Туре	SqlUser
Login Name	Joe
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant

```
CREATE USER [JoeUser] FOR LOGIN [Joe]
GO
```



Property	Value
Туре	SqlUser
Login Name	Martha
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [MarthaUser] FOR LOGIN [Martha]
GO



Property	Value
Туре	SqlUser
Login Name	memo
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant

```
CREATE USER [memo] FOR LOGIN [memo]
GO
```



Property	Value
Туре	SqlUser
Login Name	QA
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [QAUSER] FOR LOGIN [QA]
GO



Property	Value
Туре	SqlUser
Login Name	salwa
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [salwa] FOR LOGIN [salwa]
GO

# **1** stackholderUser

### **Properties**

Property	Value
Туре	SqlUser
Login Name	stackholder
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [stackholderUser] FOR LOGIN [stackholder]
GO



Property	Value
Туре	SqlUser
Login Name	Stewart
Default Schema	dbo

### **Database Level Permissions**

Туре	Action
CONNECT	Grant

```
CREATE USER [StewartUser] FOR LOGIN [Stewart]
GO
```



Property	Value
Туре	SqlUser
Login Name	team
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant

## SQL Script

CREATE USER [team] FOR LOGIN [team]
GO

# ♣ Database Roles

## **Objects**

Name
db_accessadmin
db_backupoperator
db_datareader
db_datawriter
db_ddladmin
db_denydatareader
db_denydatawriter
db_owner
db_securityadmin
public

# db\_accessadmin

## **Properties**

Property	Value
Owner	dbo

# db\_backupoperator

## **Properties**

Property	Value
Owner	dbo

# db\_datareader

### **Properties**

Property	Value
Owner	dbo

### **Members**

- hadi
- Hadi\_login

### SQL Script

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

GO

ALTER ROLE [db_datareader] ADD MEMBER [Hadi_login]

GO
```

### Uses

hadi

Hadi\_login

# db\_datawriter

## **Properties**

Property	Value
Owner	dbo

### Members

- hadi
- Hadi\_login

```
ALTER ROLE [db_datawriter] ADD MEMBER [hadi]
GO
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Security > Roles > Database Roles > db\_datawriter

ALTER ROLE [db_dat	tawriter] <mark>ADD</mark> MEMBER	[Hadi_login]	
GO			

#### Uses

hadi

Hadi\_login

# ♣ db\_ddladmin

### **Properties**

Property	Value
Owner	dbo

### **Members**

- hadi
- Hadi\_login

### SQL Script

```
ALTER ROLE [db_ddladmin] ADD MEMBER [hadi]

GO

ALTER ROLE [db_ddladmin] ADD MEMBER [Hadi_login]

GO
```

#### Uses

hadi

Hadi\_login

# db\_denydatareader

### **Properties**

Property	Value
----------	-------

Owner	dbo	

# db\_denydatawriter

### **Properties**

Property	Value
Owner	dbo

# db\_owner

#### **Properties**

Property	Value
Owner	dbo

### **Members**

- ahmed
- Asaeso
- hadikh
- memo
- salwa
- team

```
ALTER ROLE [db_owner] ADD MEMBER [ahmed]

GO

ALTER ROLE [db_owner] ADD MEMBER [Asaeso]

GO

ALTER ROLE [db_owner] ADD MEMBER [hadikh]

GO

ALTER ROLE [db_owner] ADD MEMBER [memo]

GO

ALTER ROLE [db_owner] ADD MEMBER [salwa]

GO

ALTER ROLE [db_owner] ADD MEMBER [salwa]
```

Project > (local)\MSSQLSERVER22 > User databases > Telecom > Security > Roles > Database Roles > db\_owner

GO			
Uses			
ahmed			
Asaeso			
hadikh			
memo			
salwa			
team			

# db\_securityadmin

## **Properties**

Property	Value
Owner	dbo

# **♣** public

# **Properties**

Property	Value
Owner	dbo

# **目 Telecom\_DWH Database**

### **Database Properties**

Property	Value
Users	4

### Files

Name	Туре	Size	Maxsize	Autogrowth	File Name
Telecom DWH	Data	72.00 MB	unlimited	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\Telecom DWH.mdf
Telecom DWH_log	Log	8.00 MB	2048.00 GB	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER22\MSSQL\DATA\Telecom DWH_log.ldf

# **■ Tables**

# Objects

Name
dbo.DIM_AGENT
dbo.DIM_CALL_DETAILS
dbo.DIM_CHURN_REASON
dbo.DIM_CUSTOMER
dbo.DIM_LOCATION
dbo.DIM_NOTIFICATION
dbo.DIM_OFFERS
dbo.DIM_PAYMENT_METHOD
dbo.DIM_SERVICES
dbo.FACT_CALL
dbo.FACT_CUSTOMER_EXPENSES_AND_REVENUE

# **■** [dbo].[DIM\_AGENT]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	8
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	3:54:48 PM Thursday, March 7, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	AGENT_SK	int	4	NOT NULL	1 - 1
	AGENT_BK	int	4	NOT NULL	
	NAME	nvarchar(50)	100	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PK	PKDIM_AGEN0BBA68B516E430B1	AGENT_SK	True

### **SQL Script**

```
CREATE TABLE [dbo].[DIM_AGENT]
(
[AGENT_SK] [int] NOT NULL IDENTITY(1, 1),
[AGENT_BK] [int] NOT NULL,
[NAME] [nvarchar] (50) COLLATE Arabic_CI_AS NULL,
[START_DATE] [datetime] NULL,
[END_DATE] [datetime] NULL,
[IS_CURRENT] [int] NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[DIM_AGENT] ADD CONSTRAINT [PK_DIM_AGEN_OBBA68B516E430B1] PRIMARY KEY CLUSTERED ([AGENT_SK]) ON [PRIMARY]
GO
```

#### Used By

[dbo].[FACT\_CALL]

# **□** [dbo].[DIM\_CALL\_DETAILS]

### **Properties**

Property	Value
Row Count (~)	5000
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	3:54:48 PM Thursday, March 7, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
P/ <mark>P</mark> C	CALLDETAILS_SK	int	4	NOT NULL	1 - 1
	CALLDETAILS_BK	int	4	NOT NULL	
	ANSWERED	bit	1	NULL allowed	
	CALLTIME	time	5	NULL allowed	
	CALLDATE	date	3	NULL allowed	
	ENDCALLTIME	time	5	NULL allowed	
	RESALUATION_STATUES	bit	1	NULL allowed	
	SPEAD_OF_ANSWER	int	4	NULL allowed	
	DURATION	int	4	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PK C	PKDIM_CALLA01C8D79622A1642	CALLDETAILS_SK	True

```
CREATE TABLE [dbo].[DIM_CALL_DETAILS]

(
[CALLDETAILS_SK] [int] NOT NULL IDENTITY(1, 1),
[CALLDETAILS_BK] [int] NOT NULL,

[ANSWERED] [bit] NULL,
[CALLTIME] [time] NULL,
[CALLDATE] [date] NULL,
[ENDCALLTIME] [time] NULL,
[RESALUATION_STATUES] [bit] NULL,
[SPEAD_OF_ANSWER] [int] NULL,
[DURATION] [int] NULL,
[START_DATE] [datetime] NULL,
```

#### Project > (local)\MSSQLSERVER22 > User databases > Telecom\_-DWH > Tables > dbo.DIM\_CALL\_DETAILS

```
[END_DATE] [datetime] NULL,
[IS_CURRENT] [int] NULL
) ON [PRIMARY]
GO
ALTER TABLE [dbo].[DIM_CALL_DETAILS] ADD CONSTRAINT [PK__DIM_CALL_A01C8D79622A1642] PRIMARY
KEY CLUSTERED ([CALLDETAILS_SK]) ON [PRIMARY]
GO
```

### **Used By**

 $[dbo].[FACT\_CALL]$ 

# **□** [dbo].[DIM\_CHURN\_REASON]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	1830
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	7:22:20 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	CHURN_REASON_SK	int	4	NOT NULL	1 - 1
	REASON_ID_BK	int	4	NOT NULL	
	CATEGORY_ID_BK	int	4	NOT NULL	
	REASON_DESCRIPTION	varchar(200)	200	NULL allowed	
	CATEGORY_NAME	varchar(100)	100	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PK G	PKDIM_CHUR83AB297C9164BE43	CHURN_REASON_SK	True

```
CREATE TABLE [dbo].[DIM_CHURN_REASON]

(
[CHURN_REASON_SK] [int] NOT NULL IDENTITY(1, 1),

[REASON_ID_BK] [int] NOT NULL,

[CATEGORY_ID_BK] [int] NOT NULL,

[REASON_DESCRIPTION] [varchar] (200) COLLATE Arabic_CI_AS NULL,

[CATEGORY_NAME] [varchar] (100) COLLATE Arabic_CI_AS NULL,

[START_DATE] [datetime] NULL,

[END_DATE] [datetime] NULL,

[IS_CURRENT] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DIM_CHURN_REASON] ADD CONSTRAINT [PK_DIM_CHUR_83AB297C9164BE43] PRIMARY

KEY CLUSTERED ([CHURN_REASON_SK]) ON [PRIMARY]

GO
```

Used By	
[dbo].[DIM_CUSTOMER]	

Project > (local)\MSSQLSERVER22 > User databases > Telecom\_-DWH > Tables > dbo.DIM\_CHURN\_REASON

# [dbo].[DIM\_CUSTOMER]

## **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	6861
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	7:22:20 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	CUSTOMER_SK	int	4	NOT NULL	1 - 1
	CUSTOMER_ID_BK	int	4	NOT NULL	
	STATUS	varchar(30)	30	NULL allowed	
	CHURN_SCORE	int	4	NULL allowed	
	NO_OF_DEPENDANT	int	4	NULL allowed	
	CLTV	int	4	NULL allowed	
	HASDEP	bit	1	NULL allowed	
	HAS_REF	bit	1	NULL allowed	
	ACQ_CHANNEL_ID	int	4	NULL allowed	
	ACQ_CHANNEL_NAME	varchar(50)	50	NULL allowed	
	GENDER	varchar(20)	20	NULL allowed	
	AGE	int	4	NULL allowed	
	MARRIED	bit	1	NULL allowed	
	FEEDBACK	varchar(max)	max	NULL allowed	
	TENURE_IN_MONTHS	int	4	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	
	NO_OF_REFE	int	4	NULL allowed	
	CONTRACT	varchar(100)	100	NULL allowed	
FK	SK_CHURN_REASON_FK	int	4	NULL allowed	

### Indexes

Key	Name	Key Columns	Unique
PK C	PKDIM_CUST1CE17ED4F8172776	CUSTOMER_SK	True

#### Foreign Keys

Name	Columns
FK_DIM_CUSTOMER_DIM_CHURN_REASON	SK_CHURN_REASON_FK->[dbo].[DIM_CHURN REASON].[CHURN_REASON_SK]

### **SQL Script**

```
CREATE TABLE [dbo].[DIM CUSTOMER]
[CUSTOMER_SK] [int] NOT NULL IDENTITY(1, 1),
[CUSTOMER_ID_BK] [int] NOT NULL,
[STATUS] [varchar] (30) COLLATE Arabic CI AS NULL,
[CHURN SCORE] [int] NULL,
[NO OF DEPENDANT] [int] NULL,
[CLTV] [int] NULL,
[HASDEP] [bit] NULL,
[HAS REF] [bit] NULL,
[ACQ CHANNEL ID] [int] NULL,
[ACQ CHANNEL NAME] [varchar] (50) COLLATE Arabic CI AS NULL,
[GENDER] [varchar] (20) COLLATE Arabic CI AS NULL,
[AGE] [int] NULL,
[MARRIED] [bit] NULL,
[FEEDBACK] [varchar] (max) COLLATE Arabic CI AS NULL,
[TENURE IN MONTHS] [int] NULL,
[START DATE] [datetime] NULL,
[END DATE] [datetime] NULL,
[IS CURRENT] [int] NULL,
[NO OF REFE] [int] NULL,
[CONTRACT] [varchar] (100) COLLATE Arabic CI AS NULL,
[SK_CHURN_REASON_FK] [int] NULL
) ON [PRIMARY]
ALTER TABLE [dbo].[DIM CUSTOMER] ADD CONSTRAINT [PK DIM CUST 1CE17ED4F8172776] PRIMARY KEY
CLUSTERED ([CUSTOMER_SK]) ON [PRIMARY]
ALTER TABLE [dbo].[DIM CUSTOMER] ADD CONSTRAINT [FK DIM CUSTOMER DIM CHURN REASON] FOREIGN KEY
([SK_CHURN_REASON_FK]) REFERENCES [dbo].[DIM_CHURN_REASON] ([CHURN_REASON_SK])
```

#### Uses

[dbo].[DIM\_CHURN\_REASON]

#### **Used By**

```
[dbo].[FACT_CALL]
[dbo].[FACT CUSTOMER EXPENSES AND REVENUE]
```

# [dbo].[DIM\_LOCATION]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	6861
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	2:52:03 AM Tuesday, March 12, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	LOCATION_ID_SK	int	4	NOT NULL	1 - 1
	LOCATION_ID_BK	int	4	NOT NULL	
	CITY	varchar(50)	50	NULL allowed	
	COUNTRY	varchar(50)	50	NULL allowed	
	STATE	varchar(50)	50	NULL allowed	
	LONG	varchar(max)	max	NULL allowed	
	LAT	varchar(max)	max	NULL allowed	
	ZIP_CODE_BK	int	4	NULL allowed	
	POPULATION_SIZE	int	4	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PKC	PK_DIM_LOCA_50C5DD85CFC027A3	LOCATION_ID_SK	True

```
CREATE TABLE [dbo].[DIM_LOCATION]

(
[LOCATION_ID_SK] [int] NOT NULL IDENTITY(1, 1),
[LOCATION_ID_BK] [int] NOT NULL,

[CITY] [varchar] (50) COLLATE Arabic_CI_AS NULL,

[COUNTRY] [varchar] (50) COLLATE Arabic_CI_AS NULL,

[STATE] [varchar] (50) COLLATE Arabic_CI_AS NULL,

[LONG] [varchar] (max) COLLATE Arabic_CI_AS NULL,

[LAT] [varchar] (max) COLLATE Arabic_CI_AS NULL,

[ZIP_CODE_BK] [int] NULL,

[POPULATION_SIZE] [int] NULL,
```

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```
[START_DATE] [datetime] NULL,

[END_DATE] [datetime] NULL,

[IS_CURRENT] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DIM_LOCATION] ADD CONSTRAINT [PK_DIM_LOCA_50C5DD85CFC027A3] PRIMARY KEY

CLUSTERED ([LOCATION_ID_SK]) ON [PRIMARY]

GO
```

### **Used By**

[dbo].[FACT\_CUSTOMER\_EXPENSES\_AND\_REVENUE]

# **■** [dbo].[DIM\_NOTIFICATION]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5
Created	3:04:12 PM Friday, March 8, 2024
Last Modified	3:50:44 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK C	NOTIFICATION_SK	int	4	NOT NULL	1 - 1
	NOTIFICATION_ID_BK	int	4	NOT NULL	
	NOTIFICATION_TEXT	varchar(255)	255	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PK G	PKDIM_NOTI839AE3BCABCEB042	NOTIFICATION_SK	True

### **SQL Script**

```
CREATE TABLE [dbo].[DIM_NOTIFICATION]

(
[NOTIFICATION_SK] [int] NOT NULL IDENTITY(1, 1),

[NOTIFICATION_ID_BK] [int] NOT NULL,

[NOTIFICATION_TEXT] [varchar] (255) COLLATE Arabic_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DIM_NOTIFICATION] ADD CONSTRAINT [PK__DIM_NOTI__839AE3BCABCEB042] PRIMARY

KEY CLUSTERED ([NOTIFICATION_SK]) ON [PRIMARY]

GO
```

#### **Used By**

 $[dbo].[FACT\_CUSTOMER\_EXPENSES\_AND\_REVENUE]$ 

# [dbo].[DIM\_OFFERS]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5
Created	2:45:02 PM Friday, March 8, 2024
Last Modified	2:45:04 PM Friday, March 8, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	OFFERS_SK	int	4	NOT NULL	1 - 1
	OFFERS_BK	int	4	NOT NULL	
	OFFERS_LABEL	varchar(200)	200	NULL allowed	
	Offer_Start_Date	datetime	8	NULL allowed	
	Offer_End_Date	datetime	8	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PK	PKDIM_OFFE59F134A4129B1144	OFFERS_SK	True

```
CREATE TABLE [dbo].[DIM_OFFERS]

(
[OFFERS_SK] [int] NOT NULL IDENTITY(1, 1),
[OFFERS_BK] [int] NOT NULL,
[OFFERS_BK] [int] NOT NULL,
[OFFERS_LABEL] [varchar] (200) COLLATE Arabic_CI_AS NULL,
[Offer_Start_Date] [datetime] NULL,
[Offer_End_Date] [datetime] NULL,
[START_DATE] [datetime] NULL,
[END_DATE] [datetime] NULL,
[IS_CURRENT] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DIM_OFFERS] ADD CONSTRAINT [PK_DIM_OFFE_59F134A4129B1144] PRIMARY KEY
CLUSTERED ([OFFERS_SK]) ON [PRIMARY]

GO
```

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Used By

[dbo].[FACT\_CUSTOMER\_EXPENSES\_AND\_REVENUE]

# **■** [dbo].[DIM\_PAYMENT\_METHOD]

#### **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	4
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	3:50:44 PM Sunday, March 10, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKC	PAYMENT_METHOD_ID_SK	int	4	NOT NULL	1 - 1
	PAYMENT_METHOD_ID	int	4	NULL allowed	
	PAYMENT_METHOD_NAME	varchar(30)	30	NULL allowed	
	START_DATE	datetime	8	NULL allowed	
	END_DATE	datetime	8	NULL allowed	
	IS_CURRENT	int	4	NULL allowed	

#### Indexes

Key	Name	Key Columns	Unique
PKP G	PKDIM_PAYMB88110E7A0CAA2C1	PAYMENT_METHOD_ID_SK	True

```
CREATE TABLE [dbo].[DIM_PAYMENT_METHOD]

(
[PAYMENT_METHOD_ID_SK] [int] NOT NULL IDENTITY(1, 1),

[PAYMENT_METHOD_ID] [int] NULL,

[PAYMENT_METHOD_NAME] [varchar] (30) COLLATE Arabic_CI_AS NULL,

[START_DATE] [datetime] NULL,

[END_DATE] [datetime] NULL,

[IS_CURRENT] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[DIM_PAYMENT_METHOD] ADD CONSTRAINT [PK_DIM_PAYM_B88110E7A0CAA2C1] PRIMARY KEY CLUSTERED ([PAYMENT_METHOD_ID_SK]) ON [PRIMARY]

GO
```

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**Used By** 

 $[dbo]. [FACT\_CUSTOMER\_EXPENSES\_AND\_REVENUE] \\$ 

# [dbo].[DIM\_SERVICES]

## **Properties**

Property	Value
Collation	Arabic_CI_AS
Row Count (~)	5377
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	4:47:29 PM Monday, March 11, 2024

### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PK	SERVICESID_SK	int	4	NOT NULL	1 - 1	
	INTERNET_SERVICES_ID_BK	int	4	NOT NULL		
	STREAMING_TV	bit	1	NULL allowed		
	STREAMING_MOVIES	bit	1	NULL allowed		
	ONLINE_SECURITY	bit	1	NULL allowed		
	ONLINE_BACKUP	bit	1	NULL allowed		
	DEVICE_PRODUCAITN	bit	1	NULL allowed		
	STREAMING_MUSIC	bit	1	NULL allowed		
	PERIEMUM_TAKE_SUPPORT	bit	1	NULL allowed		
	UNLIMMITED_DATA	bit	1	NULL allowed		
	SERVICE_INTERNET_TYPE	nvarchar(255)	510	NULL allowed		
	PHONE_SERVICE_BK	int	4	NULL allowed		
	MULTI_LINE	bit	1	NULL allowed		
	START_DATE	datetime	8	NULL allowed		(getdate())
	END_DATE	datetime	8	NULL allowed		
	IS_CURRENT	int	4	NULL allowed		

### Indexes

Key	Name	Key Columns	Unique
_			



PK DIM SERV C421FE2DBE1154CC

SERVICESID SK

True

#### **SQL Script**

```
CREATE TABLE [dbo].[DIM SERVICES]
[SERVICESID SK] [int] NOT NULL IDENTITY(1, 1),
[INTERNET_SERVICES_ID_BK] [int] NOT NULL,
[STREAMING_TV] [bit] NULL,
[STREAMING MOVIES] [bit] NULL,
[ONLINE SECURITY] [bit] NULL,
[ONLINE_BACKUP] [bit] NULL,
[DEVICE PRODUCAITN] [bit] NULL,
[STREAMING MUSIC] [bit] NULL,
[PERIEMUM TAKE SUPPORT] [bit] NULL,
[UNLIMMITED DATA] [bit] NULL,
[SERVICE INTERNET TYPE] [nvarchar] (255) COLLATE Arabic CI AS NULL,
[PHONE SERVICE BK] [int] NULL,
[MULTI_LINE] [bit] NULL,
[START DATE] [datetime] NULL CONSTRAINT [DF DIM SERVICES START DATE] DEFAULT (getdate()),
[END DATE] [datetime] NULL,
[IS_CURRENT] [int] NULL
) ON [PRIMARY]
ALTER TABLE [dbo].[DIM SERVICES] ADD CONSTRAINT [PK DIM SERV C421FE2DBE1154CC] PRIMARY KEY
CLUSTERED ([SERVICESID SK]) ON [PRIMARY]
```

#### **Used By**

[dbo].[FACT CUSTOMER EXPENSES AND REVENUE]

# [dbo].[FACT\_CALL]

### **Properties**

Property	Value
Row Count (~)	5000
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	1:21:31 AM Monday, March 11, 2024

### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PKP C	CALL_SK	int	4	NOT NULL	1 - 1	
FK	FK_CUSTOMER_SK	int	4	NULL allowed		
FK	FK_CALLDETAILS_SK	int	4	NOT NULL		
FK	FK_AGENT_SK	int	4	NULL allowed		
	HANDLING_TIME	decimal(18,0)	9	NULL allowed		
	SATISIFACTION_RATE	int	4	NULL allowed		
	created_at	datetime	8	NULL allowed		(getdate())

### Indexes

Key	Name	Key Columns	Unique
PK	PKFACT_CALF84FCC8D6876DAB2	CALL_SK	True

### Foreign Keys

Name	Columns	
FK_AGENT	FK_AGENT_SK->[dbo].[DIM_AGENT].[AGENT_SK]	
FK_CALL_DETAILS	FK_CALLDETAILS_SK->[dbo].[DIM_CALL_DETAILS].[CALLDETAILS_SK]	
FK_CUSTOMER_call	FK_CUSTOMER_SK->[dbo].[DIM_CUSTOMER].[CUSTOMER_SK]	

```
CREATE TABLE [dbo].[FACT_CALL]

(

[CALL_SK] [int] NOT NULL IDENTITY(1, 1),

[FK_CUSTOMER_SK] [int] NULL,

[FK_CALLDETAILS_SK] [int] NOT NULL,

[FK_AGENT_SK] [int] NULL,

[HANDLING_TIME] [decimal] (18, 0) NULL,

[SATISIFACTION_RATE] [int] NULL,
```

```
[created_at] [datetime] NULL CONSTRAINT [DF_FACT_CALL_creat_70DDC3D8] DEFAULT (getdate())

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[FACT_CALL] ADD CONSTRAINT [PK_FACT_CAL_F84FCC8D6876DAB2] PRIMARY KEY

CLUSTERED ([CALL_SK]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[FACT_CALL] ADD CONSTRAINT [FK_AGENT] FOREIGN KEY ([FK_AGENT_SK]) REFERENCES
[dbo].[DIM_AGENT] ([AGENT_SK])

GO

ALTER TABLE [dbo].[FACT_CALL] ADD CONSTRAINT [FK_CALL_DETAILS] FOREIGN KEY ([FK_CALLDETAILS_SK])

GO

ALTER TABLE [dbo].[FACT_CALL] ADD CONSTRAINT [FK_CUSTOMER_call] FOREIGN KEY ([FK_CUSTOMER_SK])

GO

ALTER TABLE [dbo].[FACT_CALL] ADD CONSTRAINT [FK_CUSTOMER_call] FOREIGN KEY ([FK_CUSTOMER_SK])

REFERENCES [dbo].[DIM_CUSTOMER] ([CUSTOMER_SK])

GO
```

#### Uses

[dbo].[DIM\_AGENT]
[dbo].[DIM\_CALL\_DETAILS]
[dbo].[DIM\_CUSTOMER]

# **■** [dbo].[FACT\_CUSTOMER\_EXPENSES\_AND\_REVENUE]

### **Properties**

Property	Value
Row Count (~)	6861
Created	3:54:48 PM Thursday, March 7, 2024
Last Modified	2:52:03 AM Tuesday, March 12, 2024

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity	Default
PK <mark>P</mark>	FACT_CUSTOMER_SK	int	4	NOT NULL	1 - 1	
F	FK_OFFERS_SK	int	4	NULL allowed		
FK	FK_NOTIFICATION_SK	int	4	NULL allowed		
FK	FK_SERVICESID_SK	int	4	NULL allowed		
FK	FK_LOCATION_ID_SK	int	4	NULL allowed		
FK	FK_CUSTOMER_SK	int	4	NULL allowed		
	TOTAL_LONG_DESTINCE_CHARGES	float	8	NULL allowed		
	MONTHLY_CHARGES	float	8	NULL allowed		
	MONTHLY_GB	int	4	NULL allowed		
	INTERNET_USAGE	int	4	NULL allowed		
	TOTAL_CHARGES	float	8	NULL allowed		
	TOTAL_REFAND	float	8	NULL allowed		
	TOTAL_EXTRA_DATA_CHARGES	int	4	NULL allowed		
	QUOTA	int	4	NULL allowed		
F	FK_PaymentMethod_SK	int	4	NULL allowed		
	created_at	datetime	8	NULL allowed		(getdate())

### Indexes

Key	Name	Key Columns	Unique



FACT\_CUSTOMER\_SK

True

#### Foreign Keys

Name	Columns
FK_CUSTOMER	FK_CUSTOMER_SK->[dbo].[DIM CUSTOMER].[CUSTOMER_SK]
FK_FACT_CUSTOMER_EXPENSES_AND_REVENUE DIM_LOCATION	FK_LOCATION_ID_SK->[dbo].[DIM LOCATION].[LOCATION_ID_SK]
FK_FACT_CUSTOMER_EXPENSES_AND_REVENUE DIM_NOTIFICATION	FK_NOTIFICATION_SK->[dbo].[DIM NOTIFICATION].[NOTIFICATION_SK]
FK_FACT_CUSTOMER_EXPENSES_AND_REVENUE DIM_PAYMENT_METHOD	FK_PaymentMethod_SK->[dbo].[DIM_PAYMENT METHOD].[PAYMENT_METHOD_ID_SK]
FK_OFFERS	FK_OFFERS_SK->[dbo].[DIM_OFFERS].[OFFERS_SK]
FK_SERVICES	FK_SERVICESID_SK->[dbo].[DIM SERVICES].[SERVICESID_SK]

```
CREATE TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE]
[FACT CUSTOMER SK] [int] NOT NULL IDENTITY(1, 1),
[FK OFFERS SK] [int] NULL,
[FK NOTIFICATION SK] [int] NULL,
[FK SERVICESID SK] [int] NULL,
[FK_LOCATION_ID_SK] [int] NULL,
[FK CUSTOMER SK] [int] NULL,
[TOTAL LONG DESTINCE CHARGES] [float] NULL,
[MONTHLY CHARGES] [float] NULL,
[MONTHLY GB] [int] NULL,
[INTERNET USAGE] [int] NULL,
[TOTAL CHARGES] [float] NULL,
[TOTAL REFAND] [float] NULL,
[TOTAL EXTRA DATA CHARGES] [int] NULL,
[QUOTA] [int] NULL,
[FK PaymentMethod SK] [int] NULL,
[created at] [datetime] NULL CONSTRAINT [DF FACT CUST creat 71D1E811] DEFAULT (getdate())
) ON [PRIMARY]
ALTER TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE] ADD CONSTRAINT [PK FACT -
CUS 8B6D2C886804C59B] PRIMARY KEY CLUSTERED ([FACT CUSTOMER SK]) ON [PRIMARY]
ALTER TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE] ADD CONSTRAINT [FK CUSTOMER] FOREIGN
KEY ([FK CUSTOMER SK]) REFERENCES [dbo].[DIM CUSTOMER] ([CUSTOMER SK])
ALTER TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE] ADD CONSTRAINT [FK FACT CUSTOMER -
EXPENSES_AND_REVENUE_DIM_LOCATION] FOREIGN KEY ([FK_LOCATION_ID_SK]) REFERENCES [dbo].[DIM_-
LOCATION] ([LOCATION ID SK])
ALTER TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE] ADD CONSTRAINT [FK FACT CUSTOMER -
EXPENSES AND REVENUE DIM NOTIFICATION] FOREIGN KEY ([FK NOTIFICATION SK]) REFERENCES
[dbo].[DIM NOTIFICATION] ([NOTIFICATION SK])
ALTER TABLE [dbo].[FACT CUSTOMER EXPENSES AND REVENUE] ADD CONSTRAINT [FK FACT CUSTOMER -
```

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```
EXPENSES_AND_REVENUE_DIM_PAYMENT_METHOD] FOREIGN KEY ([FK_PaymentMethod_SK]) REFERENCES [dbo].[DIM_PAYMENT_METHOD] ([PAYMENT_METHOD_ID_SK])

GO

ALTER TABLE [dbo].[FACT_CUSTOMER_EXPENSES_AND_REVENUE] ADD CONSTRAINT [FK_OFFERS] FOREIGN KEY ([FK_OFFERS_SK]) REFERENCES [dbo].[DIM_OFFERS] ([OFFERS_SK])

GO

ALTER TABLE [dbo].[FACT_CUSTOMER_EXPENSES_AND_REVENUE] ADD CONSTRAINT [FK_SERVICES] FOREIGN KEY ([FK_SERVICESID_SK]) REFERENCES [dbo].[DIM_SERVICES] ([SERVICESID_SK])

GO
```

#### Uses

[dbo].[DIM\_CUSTOMER]
[dbo].[DIM\_LOCATION]
[dbo].[DIM\_NOTIFICATION]
[dbo].[DIM\_OFFERS]
[dbo].[DIM\_PAYMENT\_METHOD]
[dbo].[DIM\_SERVICES]

# **1** Users

# Objects

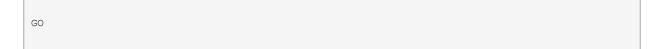
Name	
dbo	
guest	



Property	Value
Туре	WindowsUser
Login Name	DESKTOP-H75QVJ9\M.C.C
Default Schema	dbo

## **Database Level Permissions**

Туре	Action
CONNECT	Grant





Property	Value
Туре	SqlUser
Default Schema	guest

## SQL Script

GO

# ♣ 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

# ♣4 db\_owner

### **Properties**

Property	Value
Owner	dbo

# ♣ db\_securityadmin

### **Properties**

Property	Value
Owner	dbo

# ♣♣ public

Property	Value
Owner	dbo