

ПРИЛОЖЕНИЕ Б

/* Generated by Enterprise Architect Version 13.0 */

/* Created On: 16-ноя-2025 18:00:00 */

/* DBMS: SQL Server 2012 */

/* Drop Foreign Key Constraints */

```
IF OBJECT_ID(N'FK_LEADS_Managers', N'F') IS NOT NULL ALTER TABLE [LEADS]
DROP CONSTRAINT [FK_LEADS_Managers];
```

GO

```
IF OBJECT_ID(N'FK_LEADS_LeadStatuses', N'F') IS NOT NULL ALTER TABLE [LEADS]
DROP CONSTRAINT [FK_LEADS_LeadStatuses];
```

GO

```
IF OBJECT_ID(N'FK_LEADS_Qualifications', N'F') IS NOT NULL ALTER TABLE [LEADS]
DROP CONSTRAINT [FK_LEADS_Qualifications];
```

GO

```
IF OBJECT_ID(N'FK_LeadHistory_Leads', N'F') IS NOT NULL ALTER TABLE
[LEAD_HISTORY] DROP CONSTRAINT [FK_LeadHistory_Leads];
```

GO

```
IF OBJECT_ID(N'[LEAD_HISTORY]', N'U') IS NOT NULL DROP TABLE
[LEAD_HISTORY];
```

GO

```
IF OBJECT_ID(N'[LEADS]', N'U') IS NOT NULL DROP TABLE [LEADS];
```

GO

```
IF OBJECT_ID(N'[CUSTOMERS]', N'U') IS NOT NULL DROP TABLE [CUSTOMERS];
```

GO

```
IF OBJECT_ID(N'[MANAGERS]', N'U') IS NOT NULL DROP TABLE [MANAGERS];
```

GO

```
IF OBJECT_ID(N'[QUALIFICATIONS]', N'U') IS NOT NULL DROP TABLE
[QUALIFICATIONS];
```

GO

```
IF OBJECT_ID(N'[LEAD_STATUSES]', N'U') IS NOT NULL DROP TABLE
[LEAD_STATUSES];
```

GO

```
CREATE TABLE [MANAGERS]
```

```
(
```

```
  [manager_id] INT IDENTITY(1,1) NOT NULL,
```

```
[manager_name] VARCHAR(100) NOT NULL,  
[manager_login] VARCHAR(30) UNIQUE NOT NULL,  
[manager_phone_work] VARCHAR(50) NULL,  
[manager_role] VARCHAR(50) NOT NULL  
)  
GO
```

```
CREATE TABLE [LEAD_STATUSES]  
(  
[status_id] INT IDENTITY(1,1) NOT NULL,  
[status_name] VARCHAR(50) NOT NULL,  
[stage_order] INT NOT NULL,  
[status_description] VARCHAR(255) NULL  
)  
GO
```

```
CREATE TABLE [QUALIFICATIONS]  
(  
[qual_id] INT IDENTITY(1,1) NOT NULL,  
[qual_name] VARCHAR(50) NOT NULL,  
[priority_level] INT NULL,  
[target_revenue_usd] DECIMAL(10,2) NULL,  
[required_actions] TEXT NULL  
)  
GO
```

```
CREATE TABLE [CUSTOMERS]  
(  
[customer_id] INT IDENTITY(1,1) NOT NULL,  
[client_name_full] VARCHAR(100) NOT NULL,  
[customer_email] VARCHAR(100) UNIQUE NOT NULL,  
[customer_inn] VARCHAR(20) UNIQUE NULL,  
[kpp] VARCHAR(20) NULL,  
[legal_address] TEXT NULL,  
[contract_number] VARCHAR(50) NULL  
)  
GO
```

```
CREATE TABLE [LEADS]  
(
```

```
[lead_id] INT IDENTITY(1,1) NOT NULL,  
[contact_name] VARCHAR(100) NOT NULL,  
[contact_email] VARCHAR(100) NOT NULL,  
[contact_phone] VARCHAR(100) NULL,  
[source_channel] VARCHAR(50) NOT NULL,  
[creation_date] DATETIME NOT NULL,  
[manager_id] INT NULL,  
[status_id] INT NOT NULL,  
[qual_id] INT NOT NULL  
)  
GO
```

```
CREATE TABLE [LEAD_HISTORY]  
(  
    [history_id] INT IDENTITY(1,1) NOT NULL,  
    [change_date] DATETIME NOT NULL,  
    [field_changed] VARCHAR(50) NOT NULL,  
    [old_value] VARCHAR(100) NULL,  
    [new_value] VARCHAR(100) NULL,  
    [lead_id] INT NOT NULL  
)  
GO
```

```
ALTER TABLE [MANAGERS] ADD CONSTRAINT [PK_Managers] PRIMARY KEY  
CLUSTERED ([manager_id] ASC)
```

```
GO
```

```
ALTER TABLE [LEAD_STATUSES] ADD CONSTRAINT [PK_LeadStatuses] PRIMARY  
KEY CLUSTERED ([status_id] ASC)
```

```
GO
```

```
ALTER TABLE [QUALIFICATIONS] ADD CONSTRAINT [PK_Qualifications] PRIMARY  
KEY CLUSTERED ([qual_id] ASC)
```

```
GO
```

```
ALTER TABLE [CUSTOMERS] ADD CONSTRAINT [PK_Customers] PRIMARY KEY  
CLUSTERED ([customer_id] ASC)
```

```
GO
```

```
ALTER TABLE [LEADS] ADD CONSTRAINT [PK_Leads] PRIMARY KEY CLUSTERED  
([lead_id] ASC)
```

```
GO
```

```
ALTER TABLE [LEAD_HISTORY] ADD CONSTRAINT [PK_LeadHistory] PRIMARY KEY  
CLUSTERED ([history_id] ASC)
```

GO

```
ALTER TABLE [LEADS] ADD CONSTRAINT [FK_LEADS_Managers]
FOREIGN KEY ([manager_id]) REFERENCES [MANAGERS] ([manager_id]) ON DELETE NO
ACTION ON UPDATE NO ACTION
```

GO

```
ALTER TABLE [LEADS] ADD CONSTRAINT [FK_LEADS_LeadStatuses]
FOREIGN KEY ([status_id]) REFERENCES [LEAD_STATUSES] ([status_id]) ON DELETE
NO ACTION ON UPDATE NO ACTION
```

GO

```
ALTER TABLE [LEADS] ADD CONSTRAINT [FK_LEADS_Qualifications]
FOREIGN KEY ([qual_id]) REFERENCES [QUALIFICATIONS] ([qual_id]) ON DELETE NO
ACTION ON UPDATE NO ACTION
```

GO

```
ALTER TABLE [LEAD_HISTORY] ADD CONSTRAINT [FK_LeadHistory_Leads]
FOREIGN KEY ([lead_id]) REFERENCES [LEADS] ([lead_id]) ON DELETE CASCADE ON
UPDATE NO ACTION
```

GO

```
CREATE TRIGGER trg_PreventStatusChange
```

```
ON LEADS
```

```
FOR UPDATE AS
```

```
BEGIN
```

```
-- Предполагаем, что статус ID=3 соответствует "Квалифицирован"
```

```
IF EXISTS (
```

```
    SELECT *
```

```
    FROM inserted i
```

```
    JOIN deleted d ON i.lead_id = d.lead_id
```

```
    WHERE d.status_id = 3 AND i.status_id <> 3
```

```
)
```

```
BEGIN
```

```
    PRINT 'Запрещено откатывать статус "Квалифицирован" для сохранения истории.'
```

```
    ROLLBACK TRAN
```

```
END
```

```
END
```

GO

```
CREATE PROC prLeadManagerStatusInfo
```

```
@LeadID INT
```

```
AS
```

```
SELECT
    LS.status_name,
    M.manager_name
FROM LEADS L
JOIN LEAD_STATUSES LS ON L.status_id = LS.status_id
JOIN MANAGERS M ON L.manager_id = M.manager_id
WHERE L.lead_id = @LeadID
GO
```