



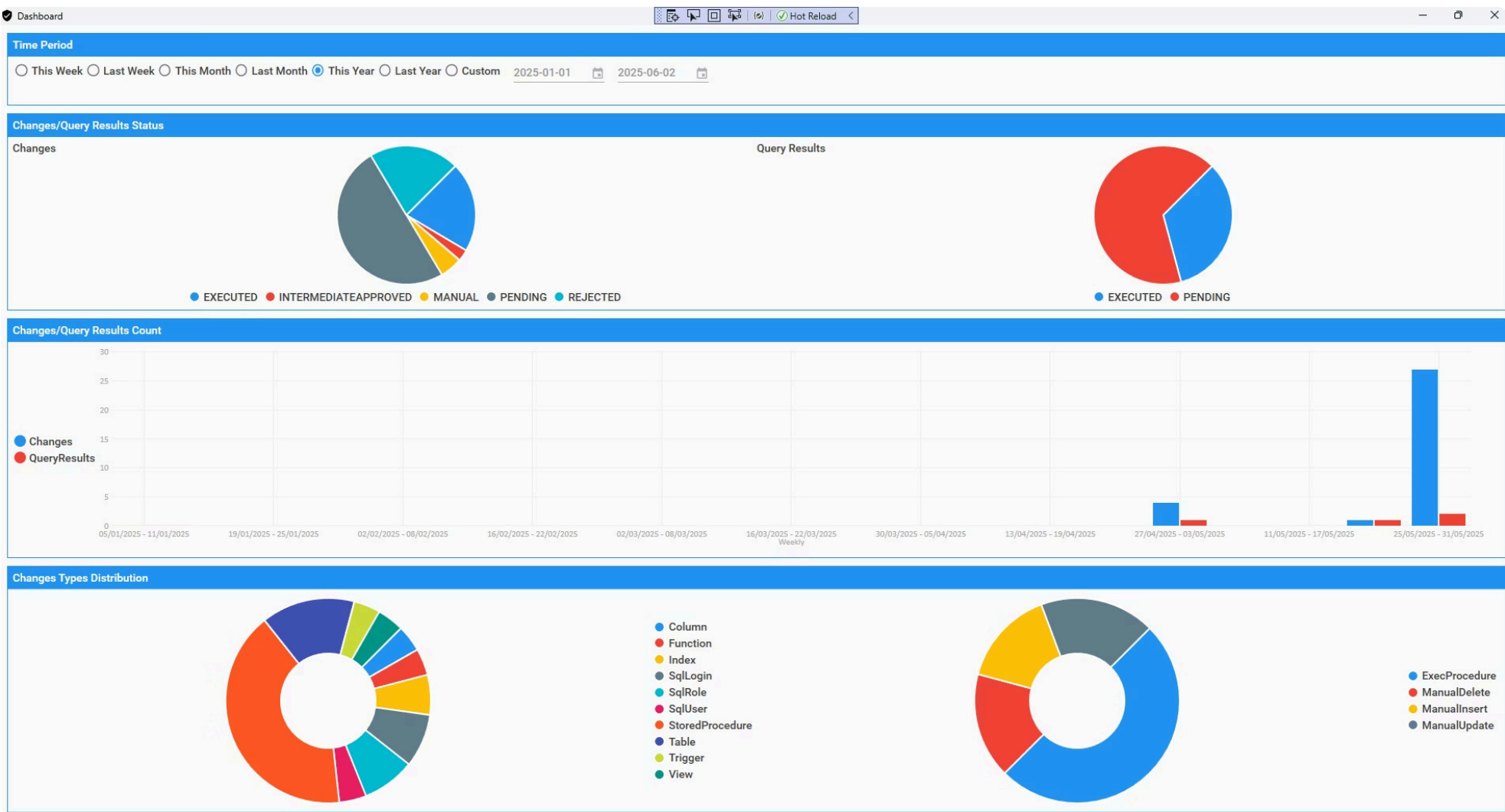
# SQL Change Guard

This project is a comprehensive solution designed for institutions with high security and regulatory requirements, enabling end-to-end management of SQL changes.

The system is built upon key capabilities such as detailed tracking of changes, automatic validation and feedback before deployment, controlled execution through approval mechanisms, and post-deployment impact analysis.

Additionally, it ensures secure transmission of query results and full transparency and auditability of all operations in line with data privacy principles.

In this way, both operational efficiency is increased and institutional risks are minimized.



# SQL Change Guard

It provides end-to-end management of deployment, validation, versioning, reporting, and query result handling.

Thanks to pre-deployment checks, you can eliminate the risk of manual errors and detect potential misuse even before the code goes live.

"This product can reduce your audit preparation time by allowing you to generate audit-ready reports of your SQL changes in seconds."

**Improved Control and Traceability:** Clear processes are established in which every change can be tracked from start to finish. Audit logs provide full traceability by showing who made what change and when.

**Reduction of Security Vulnerabilities:** Review and approval workflows help identify potentially risky changes early on, reducing the likelihood of security gaps.

**Meeting Compliance Requirements:** Many regulations and standards (such as ISO 27001, KVKK, GDPR) require change management processes to include specific controls. Process management and auditing help meet these requirements.

**Reduction of Data Breach Risks:** Defining and monitoring access to and processing of sensitive data significantly lowers the risk of unauthorized access and data leaks.

**Automatic Detection of Manual Data Changes:** The system can automatically detect manual data modifications, and requires the attachment of supporting documents (e.g., emails, Excel, Word files) as evidence at the time of request submission.

**Protection of Critical Objects:** To control access to critical objects such as accounts and users, these objects can be registered in the system (through a one-time input via the interface). If any such objects are encountered within a SQL change request, the system automatically triggers critical object access warnings.

Change List [Server=ASUSPC\SQLEXPRESS, User=ASUSPC\DomainUser1, Role=ChangeManager]

SQL Change Guard

Date From2025-01-01

Date To

Change Ticket

Keyword

StatusAll

My Requests

ClearFilter

Time elapsed since the last data refresh: 00:01:42

Change Id	Status	Waiting Time	Query Type	Server Name	Change Ticket	Created By	Created Date	Intermediate Approved By	Intermediate
57	EXECUTED		Change	ASUSPC\SQLEXPRESS	AAA-22222	ASUSPC\DomainUser1	02/06/2025 00:04:37		
56	EXECUTED		Change	ASUSPC\SQLEXPRESS	AAA-22222	ASUSPC\DomainUser1	02/06/2025 00:03:23		
55	PENDING	24:27:10	QueryResult	ASUSPC\SQLEXPRESS;ASUSPC\SQLEXPRESS01;ASUSPC\SQLEXPRESS02;	AAA-11111	ASUSPC\DomainUser1	01/06/2025 22:31:42		
54	PENDING	46:28:31	QueryResult	ASUSPC\SQLEXPRESS;ASUSPC\SQLEXPRESS01;	AAA-11111	ASUSPC\DomainUser1	01/06/2025 00:30:21		
53	PENDING	57:11:29	Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	31/05/2025 13:47:23		
52	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	31/05/2025 12:52:09		
51	EXECUTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	31/05/2025 11:14:26		
50	EXECUTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	31/05/2025 11:11:59		
49	PENDING	72:12:22	Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 22:46:30		
48	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	aaa	30/05/2025 18:07:55	ff	30/05/2025
47	MANUAL		Change	ASUSPC\SQLEXPRESS01	AAA-99999	ASUSPC\DomainUser1	30/05/2025 17:39:01		
46	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	DESKTOP-RHE2KI7\ASUS	30/05/2025 17:38:45	gggggg	30/05/2025
45	PENDING	94:10:01	Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 00:48:51		
44	INTERMEDIATEAPPROVED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 00:48:20	ASUSPC\DomainUser1	30/05/2025
43	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 00:22:12		
42	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 00:11:37	ASUSPC\DomainUser1	30/05/2025
41	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	30/05/2025 00:09:17		
40	PENDING	100:27:00	Change	ASUSPC\SQLEXPRESS	AAA-55555	ASUSPC\DomainUser1	29/05/2025 18:31:52		
39	PENDING	117:17:17	Change	ASUSPC\SQLEXPRESS	AAA-55555	ASUSPC\DomainUser1	29/05/2025 01:41:35		
38	PENDING	144:12:39	Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	27/05/2025 22:46:13		
37	PENDING	144:21:10	Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	27/05/2025 22:37:42		
36	REJECTED		Change	ASUSPC\SQLEXPRESS	AAA-99999	ASUSPC\DomainUser1	27/05/2025 21:25:39		
35	PENDING	166:16:32	Change	ASUSPC\SQLEXPRESS	BBB-11111	ASUSPC\DomainUser1	27/05/2025 00:42:20		
34	PENDING	182:59:24	Change	ASUSPC\SQLEXPRESS	AAA-22222	ASUSPC\DomainUser1	26/05/2025 07:59:28		
24	PENDING	183:24:24	Change	ASUSPC\SQLEXPRESS	AAA-55555	ASUSPC\DomainUser1	26/05/2025 07:34:28		
23	PENDING	183:49:24	Change	ASUSPC\SQLEXPRESS	AAA-55555	ASUSPC\DomainUser1	26/05/2025 07:09:28		

# Features of SQL Change Guard



## Intelligent Analysis

It extracts the operations and objects within the script, identifies which actions are intended during the request submission phase, and applies validations accordingly. Before the script moves to the production environment, it ensures all validations are met and, if there are any improper usages, provides warnings/errors requesting the change to be corrected.



## Detection of Request Dependencies

It detects objects within requests that have been or will be deployed to Test and Production environments, identifies if the same objects appear under different requests, and reports them. For example, for a stored procedure altered under two different workflows/tickets, the report includes the stored procedure name, workflow number, object name, performed statements (ALTER, DROP, etc.), and other related request details.



## Notification Mechanisms

Notification mechanisms ensure coordination between teams during the implementation processes of changes.



## Comprehensive Logging

It ensures that all performed actions (schema changes, querying, manual data modifications) are recorded.

It provides detailed report generation for all performed operations and identifies dependencies with other requests during different deployments.

There is also a separate control mechanism for manual data modification processes. If such a change is intended within a script, the user is required to attach supporting documents at the time of the request. The applied change can also be tracked in reports along with detailed information about the operation performed.

For queries executed from Test/Production environments, it offers an end-to-end solution (from query submission to data delivery to the requesting user). To comply with legal regulations such as KVKK and GDPR, it enables encrypted transmission of data at the time of delivery.

Each request is executed within a single transaction, and in case of any error during deployment, a rollback is performed to prevent any changes that could compromise data integrity.

# SQL Code Quality and Standards

SQL Change Guard automatically reviews your scripts and detects the warnings explained below at the time of change request submission, notifying you accordingly. The severity levels of these warnings (warning, error, information) can be adjusted or completely disabled if desired. Additionally, table and other object prefixes used can be easily modified from the application’s settings screen.

## Critical Warnings and Best Practices

### Table and Object Creation / Naming Standards

SQL Change Guard Warning	Description	Recommendation
Firstly, create temp table as CREATE TABLE statement!	Temporary tables should be created using CREATE TABLE.	Create temporary tables using the syntax: CREATE TABLE #TempTable (...).
Function names should start with	Function names should start with a standard prefix.	Example: Use a prefix like fn_.
Stored procedure names should start with	Stored procedure names should follow a standard naming convention.	Example: The use of the sp_ prefix is recommended.
Index names should start with	Index names should follow a standard format.	Example: Name them using the ix_ prefix.
Trigger names should start with	A standard prefix should be used in trigger naming.	Example: Start with the prefix tr_.
View names should start with	View names should follow a standard naming convention.	Example: The vw_ prefix is recommended.
Table/Columns extended properties missing!.	When creating tables or columns, entries should be made in the data dictionary.	A description should be entered into the data dictionary each time a table or column is created.



## 2. Query and Data Processing Principles

SQL Change Guard Warning	Description	Recommendation
Nolock should be used when accessing tables.	NOLOCK is recommended to prevent locking.	Use WITH (NOLOCK) in queries.
It is recommended to choose SELECT column names instead of (*).	Using SELECT * negatively impacts performance.	Select only the necessary columns.
It is recommended to write columns in INSERT statement.	Columns should be explicitly specified in INSERT statements.	Use the syntax: INSERT INTO table (col1, col2) VALUES (...).
WHERE condition missing.	There is a significant risk if an UPDATE or DELETE statement lacks a WHERE clause.	Add filters to prevent data loss.
TRUNCATE TABLE query block found!	The TRUNCATE TABLE command can cause data loss.	Use it with caution.

### 3. Transaction Management and Manual Commands

SQL Change Guard Warning	Description	Recommendation
Manual Begin Transaction statement found. Remove transaction usage.	Manual transaction management increases the risk of errors.	Centralize transaction control.
Manual Commit Transaction statement found. Remove transaction usage.	Manual use of commit should be minimized.	Automatic management should be preferred.
Manual Rollback Transaction statement found. Remove transaction usage.	Avoid manual use of rollback.	Avoid code clutter.
EXEC usage (May Contain Manual Data Modification Or Transaction Usage)	The EXEC command can include manual data modifications.	Carefully review its content.
SET NOCOUNT ON statement missing.	SET NOCOUNT ON improves query performance.	Be sure to include it at the beginning of the code.

## 4. Coding and Standards Warnings

SQL Change Guard Warning	Description	Recommendation
Cursor usage query block found!.	Using cursors reduces performance.	Use set-based operations whenever possible.
Procedure input params should start with	Input parameters should follow the naming standards.	Example: Use the prefix @in_.
Procedure output params should start with	There should be a standard naming convention for output parameters.	Example: The prefix @out_ is recommended.
It is recommended that the parameters be set to null by default.	Parameters should have a default value of NULL.	For flexible and error-resistant coding.



# Conclusion and Recommendations

Adhering to naming standards facilitates code readability and management.

Query writing rules are important for performance and data security.

Minimizing transactions and manual commands reduces the risk of errors.

Access to critical objects should be monitored and controlled.

These warnings are essential to enhance both application quality and operational security.



# SQL Standards Check

NEW Change

Notification Emails

Server ASUSPC\SQLEXPRESS

Change Ticket AAA-22222

Description 1\_ID\_CreateDate\_CreatedBy\_ExProp  
s

Related Evidence

Document	Size(KB)	Create Date	Modified Date
1.jpg	8.19	01/05/2025 20:03:03	01/05/2025 19:57:23

1\_ID\_CreateDate\_CreatedBy\_ExProps

```
16 CREATE TABLE [dbo].[Table1](
17     [ID] [int] /*IDENTITY(1,1)*/ NOT NULL,/*CheckTableColumnExists_Identity*/
18     Description [nvarchar](500) NOT NULL,
19     --CreateDate DATETIME NULL,/*CheckTableColumnExists_CreatedDate*/
20     --CreatedBy [nvarchar](50) NULL,/*CheckTableColumnExists_CreatedBy*/
21     LastModifiedDate DATETIME NULL,/*CheckTableColumnExists_LastModifiedDate*/
22     LastModifiedBy [nvarchar](50) NULL,/*CheckTableColumnExists_LastModifiedBy*/
23 )
24 GO
25 EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'Id Column' , @level0type=N'SCHEMA',@level0name=N'dbo', @level1ty
26 GO
27 EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'Description Column' , @level0type=N'SCHEMA',@level0name=N'dbo',
28 --GO
29 --EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value='Table1 Table' , @level0type=N'SCHEMA',@level0name='dbo', @level
30 --GO
31
32 GO
33 INSERT INTO Table1(ID,Description) VALUES(1,'Description_1')
34 INSERT INTO Table1(ID,Description) VALUES(2,'Description_2')
```

Script Name

Message

Detail

1_ID_CreateDate_CreatedBy_ExProps	Table/Columns extended properties missing!(TableName:Table1)	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table/Columns extended properties missing!(TableName:Table1;ColumnName:LastModifiedDate)	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table/Columns extended properties missing!(TableName:Table1;ColumnName:LastModifiedBy)	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Manual Data Modification Found!	Object : Table1, AccessType=INSERT
1_ID_CreateDate_CreatedBy_ExProps	Manual Data Modification Found!	Object : Table1, AccessType=INSERT

Validate Scripts ✓

Save

Cancel

EDIT Change [ Change Id=58 ]

Notification Emails

Server ASUSPC\SQLEXPRESS

Change Ticket AAA-22222

Description 1\_ID\_CreateDate\_CreatedBy\_ExProp  
s

Related Evidence

Drag file here to drop

1\_ID\_CreateDate\_CreatedBy\_ExProps

```
16 CREATE TABLE [dbo].[Table1](
17     [ID] [int] /*IDENTITY(1,1)*/ NOT NULL,/*CheckTableColumnExists_Identity*/
18     Description [nvarchar](500) NOT NULL,
19     --CreateDate DATETIME NULL,/*CheckTableColumnExists_CreatedDate*/
20     --CreatedBy [nvarchar](50) NULL,/*CheckTableColumnExists_CreatedBy*/
21     LastModifiedDate DATETIME NULL,/*CheckTableColumnExists_LastModifiedDate*/
22     LastModifiedBy [nvarchar](50) NULL,/*CheckTableColumnExists_LastModifiedBy*/
23 )
24 GO
25 EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'Id Column' , @level0type=N'SCHEMA',@level0name=N'dbo', @level1ty
26 GO
27 EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'Description Column' , @level0type=N'SCHEMA',@level0name=N'dbo',
28 --GO
29 --EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value='Table1 Table' , @level0type=N'SCHEMA',@level0name='dbo', @level
30 --GO
31
32 GO
33 INSERT INTO Table1(ID,Description) VALUES(1,'Description_1')
34 INSERT INTO Table1(ID,Description) VALUES(2,'Description_2')
```

Script Name

Message

Detail

1_ID_CreateDate_CreatedBy_ExProps	Dropping table.	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table does not have Identity column!.	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table does not have CreatedDate column!.	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table does not have CreatedBy column!.	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table/Columns extended properties missing!(TableName:Table1)	Schema : dbo,Object : Table1
1_ID_CreateDate_CreatedBy_ExProps	Table/Columns extended properties missing!(TableName:Table1;ColumnName:LastModifiedDate)	Schema : dbo,Object : Table1

Validate Scripts ✓

Save

Cancel

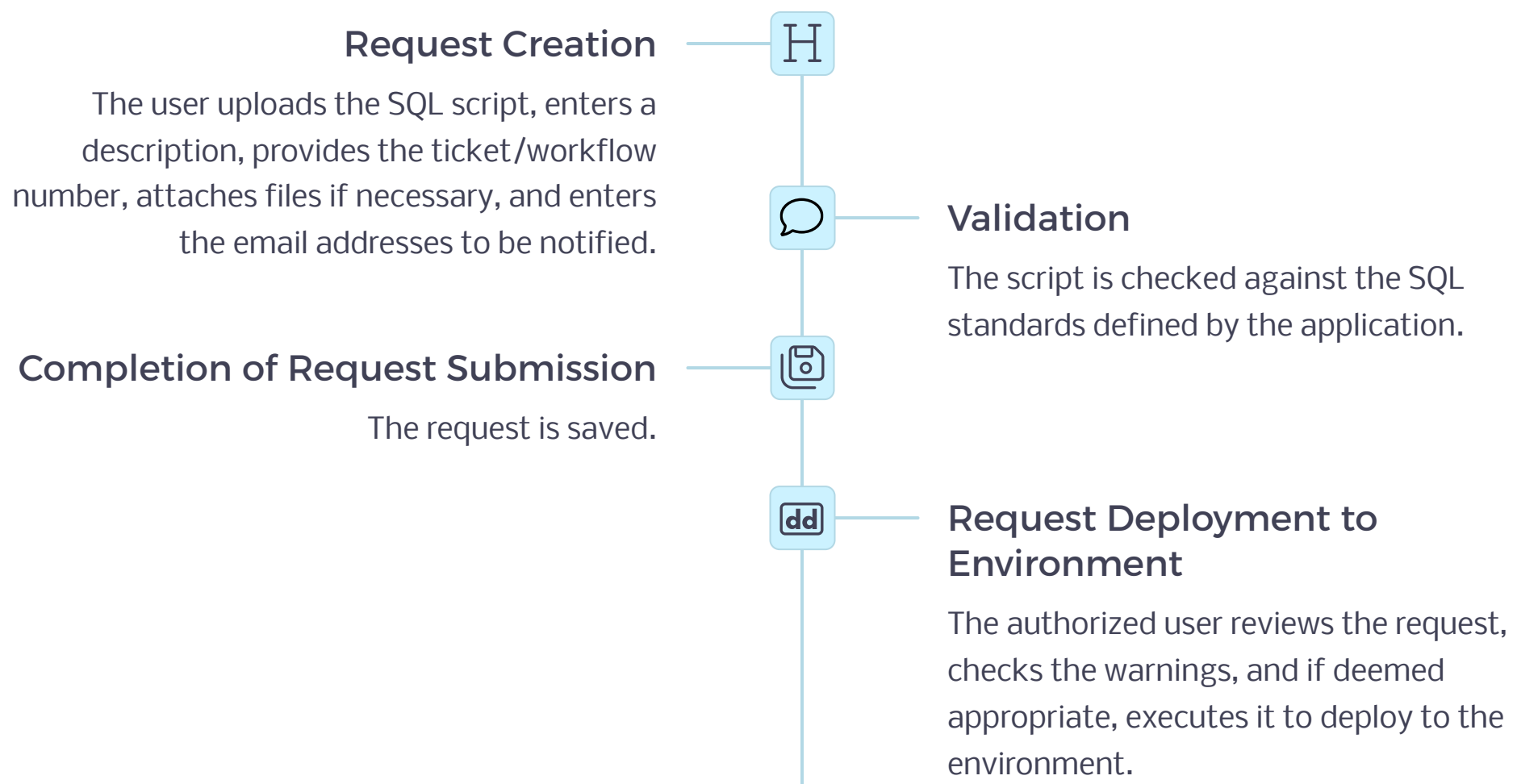
Data Modify Usage

Manual CRUD Operations Found,Count=2

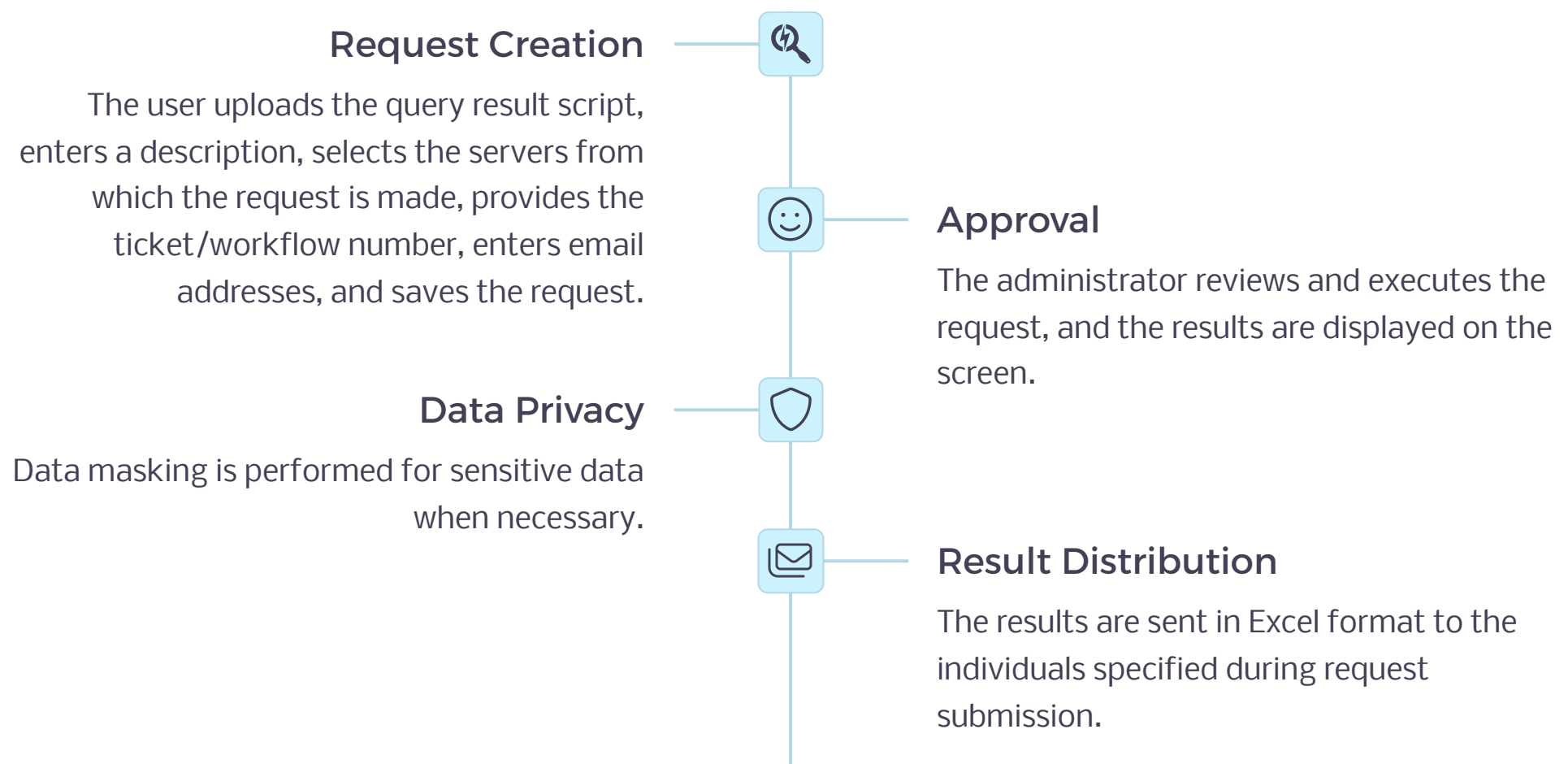
Proceeding without attaching supporting documentation may lead to audit issues. Do you still want to continue?

Yes No Cancel

# Change Request Process



# Query Result Request Process





# Query Result Request

EXECUTE Query Result[ ID=59 ]

Server

ASUSPC\SQLEXPRESS; ASUSPC\SQLEXPRESS01;

To

mail1@gmail.com mail2@gmail.com

CC

mail3@gmail.com

Change Ticket

AAA-11111

Description

QR 1 Sample Select

Result

ServerName:ASUSPC\SQLEXPRESS  
1 tables returned.  
ExecutionDelaySeconds:0 seconds.  
\*\*\*\*\*  
ServerName:ASUSPC\SQLEXPRESS01

1QR\_Sample\_Select

SQL Info Message

ASUSPC\SQLEXPRESS\_QR\_1

ASUSPC\SQLEXPRESS01\_QR\_1

<input checked="" type="checkbox"/> name	<input checked="" type="checkbox"/> TestColumnStr	<input type="checkbox"/> TestColumnInt	<input type="checkbox"/> TestColumnStr2	<input type="checkbox"/> TestColumnStr3
sysrscols	12345678	12345678	Test data lorem ipsumsysrscols	Test2 data lorem ipsumSYSTEM_TABLE
sysrowsets	12345678	12345678	Test data lorem ipsumsysrowsets	Test2 data lorem ipsumSYSTEM_TABLE
sysclones	12345678	12345678	Test data lorem ipsumsysclones	Test2 data lorem ipsumSYSTEM_TABLE
sysallocunits	12345678	12345678	Test data lorem ipsumsysallocunits	Test2 data lorem ipsumSYSTEM_TABLE
sysfiles1	12345678	12345678	Test data lorem ipsumsysfiles1	Test2 data lorem ipsumSYSTEM_TABLE
sysseobjvalues	12345678	12345678	Test data lorem ipsumsysseobjvalues	Test2 data lorem ipsumSYSTEM_TABLE
syspriorities	12345678	12345678	Test data lorem ipsumsyspriorities	Test2 data lorem ipsumSYSTEM_TABLE
sysdbfrag	12345678	12345678	Test data lorem ipsumsysdbfrag	Test2 data lorem ipsumSYSTEM_TABLE
sysfgfrag	12345678	12345678	Test data lorem ipsumsysfgfrag	Test2 data lorem ipsumSYSTEM_TABLE
sysdbfiles	12345678	12345678	Test data lorem ipsumsysdbfiles	Test2 data lorem ipsumSYSTEM_TABLE
syspru	12345678	12345678	Test data lorem ipsumsyspru	Test2 data lorem ipsumSYSTEM_TABLE
sysbrickfiles	12345678	12345678	Test data lorem ipsumsysbrickfiles	Test2 data lorem ipsumSYSTEM_TABLE
sysphfg	12345678	12345678	Test data lorem ipsumsysphfg	Test2 data lorem ipsumSYSTEM_TABLE
sysprufiles	12345678	12345678	Test data lorem ipsumsysprufiles	Test2 data lorem ipsumSYSTEM_TABLE
sysftinds	12345678	12345678	Test data lorem ipsumsysftinds	Test2 data lorem ipsumSYSTEM_TABLE
sysowpore	12345678	12345678	Test data lorem ipsumsysowpore	Test2 data lorem ipsumSYSTEM_TABLE

Query Timeout

300

Corrupt

Cancel

EXECUTE Query Result[ ID=59 ]

Server

ASUSPC\SQLEXPRESS; ASUSPC\SQLEXPRESS01;

To

mail1@gmail.com mail2@gmail.com

CC

mail3@gmail.com

Change Ticket

AAA-11111

Description

QR 1 Sample Select

Result

ServerName:ASUSPC\SQLEXPRESS  
1 tables returned.  
ExecutionDelaySeconds:0 seconds.  
\*\*\*\*\*  
ServerName:ASUSPC\SQLEXPRESS01

1QR\_Sample\_Select

SQL Info Message

ASUSPC\SQLEXPRESS\_QR\_1

ASUSPC\SQLEXPRESS01\_QR\_1

<input checked="" type="checkbox"/> name	<input checked="" type="checkbox"/> TestColumnStr	<input type="checkbox"/> TestColumnInt	<input type="checkbox"/> TestColumnStr2	<input checked="" type="checkbox"/> TestColumnStr3
rlssoscy	54837162	12345678	Test data lorem ipsumsysrscols	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
twsosressy	54837162	12345678	Test data lorem ipsumsysrowsets	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
celssnsoy	54837162	12345678	Test data lorem ipsumsysclones	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
conitslalsyus	54837162	12345678	Test data lorem ipsumsysallocunits	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
fsi1sesly	54837162	12345678	Test data lorem ipsumsysfiles1	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
beulsjvesosyas	54837162	12345678	Test data lorem ipsumsysseobjvalues	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
rotiesiprsyis	54837162	12345678	Test data lorem ipsumsyspriorities	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
dabgsrsfy	54837162	12345678	Test data lorem ipsumsysdbfrag	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
faggsrsfy	54837162	12345678	Test data lorem ipsumsysfgfrag	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
efsbdsldsiy	54837162	12345678	Test data lorem ipsumsysdbfiles	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
surspy	54837162	12345678	Test data lorem ipsumsyspru	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
kcilesibrsyfs	54837162	12345678	Test data lorem ipsumsysbrickfiles	mBEassAEY2tieTT_mpaM Sle Lruo TtSd
spgfsyhy	54837162	12345678	Test data lorem ipsumsysphfg	mBEassAEY2tieTT_mpaM Sle Lruo TtSd

Query Timeout

300

Send

Cancel

## Dependent Change Tickets

Requests Detail

Security Operations Audit Report

Manual Data Changes

Object Change Frequency

Data Modify Change Frequency

Event Log Report

ChangeTicket

ObjectName

Detailed Report



Clear

Filter

ChangeId	ChangeTicket	ScriptName	ModificationStatus	ExecutionDate	ExecutedBy	Servername	DatabaseName	Object Name	Statement	Item Count : 38
5	AAA-44444	3_NamingStanda	MANUAL	01/05/2025 22:28:18	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	AfterUpdate_Table	CreateOrAlterTriggerStatement	
35	BBB-11111	3_NamingStanda	PENDING			ASUSPC\SQLEXPRESS	DBTest	AfterUpdate_Table	CreateOrAlterTriggerStatement	
8	AAA-55555	6_DropObjectCor	PENDING			ASUSPC\SQLEXPRESS	DBTest	fnTest99	DropFunctionStatement	
35	BBB-11111	6_DropObjectCor	PENDING			ASUSPC\SQLEXPRESS	DBTest	fnTest99	DropFunctionStatement	
11	BBB-11111	1_Workflow_BBB	PENDING			ASUSPC\SQLEXPRESS	DBTest	spObj1	CreateOrAlterProcedureStatement	
12	BBB-22222	2_Workflow_BBB	PENDING			ASUSPC\SQLEXPRESS	DBTest	spObj1	CreateOrAlterProcedureStatement	
14	BBB-11111	4_Workflow_BBB	EXECUTED	27/05/2025 21:27:45	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	spObj1	CreateOrAlterProcedureStatement	
22	BBB-11111	4_Workflow_BBB	PENDING			ASUSPC\SQLEXPRESS	DBTest	spObj1	CreateOrAlterProcedureStatement	
11	BBB-11111	1_Workflow_BBB	PENDING			ASUSPC\SQLEXPRESS	DBTest	spObj2	CreateOrAlterProcedureStatement	
13	BBB-33333	3 Workflow BBB	PENDING			ASUSPC\SQLEXPRESS	DBTest	soObj2	CreateOrAlterProcedureStatement	

## Dependent Change Tickets Report

Report of Dependent Requests and Their Related Objects

Dependent Change Tickets  
Requests Detail  
[Security Operations Audit Report](#)  
Manual Data Changes  
Object Change Frequency  
Data Modify Change Frequency  
Event Log Report

Start Date  End Date  ObjectName

[Clear](#)[Filter](#)

ChangeId	ChangeTicket	ExecutionDate	ExecutedBy	Servername	DatabaseName	ObjectName	Statement	PermissionUser	PermissionExec	Item Count : 20
										PermissionSelect
10	AAA-55555	20/05/2025 14:37:17	ASUSPC\DomainUser	ASUSPC\SQLEXPRESS	DBTest	testrole1	DropRoleStatement		False	False
10	AAA-55555	20/05/2025 14:37:17	ASUSPC\DomainUser	ASUSPC\SQLEXPRESS	DBTest	testuser1	DropLoginStatement		False	False
10	AAA-55555	20/05/2025 14:37:17	ASUSPC\DomainUser	ASUSPC\SQLEXPRESS	DBTest	testrole1	CreateRoleStatement		False	False
10	AAA-55555	20/05/2025 14:37:17	ASUSPC\DomainUser	ASUSPC\SQLEXPRESS	master	testuser1	CreateLoginStatement		False	False
10	AAA-55555	20/05/2025 14:37:17	ASUSPC\DomainUser	ASUSPC\SQLEXPRESS	master	testuser1	CreateUserStatement		False	False
35	BBB-11111			ASUSPC\SQLEXPRESS	DBTest	testrole1	DropRoleStatement		False	False
35	BBB-11111			ASUSPC\SQLEXPRESS	DBTest	testuser1	DropLoginStatement		False	False
35	BBB-11111			ASUSPC\SQLEXPRESS	DBTest	testrole1	CreateRoleStatement		False	False
35	BBB-11111			ASUSPC\SQLEXPRESS	master	testuser1	CreateLoginStatement		False	False
35	BBB-11111			ASUSPC\SQLEXPRESS	master	testuser1	CreateUserStatement		False	False

## Security Operations Audit Report

Detailed Reports of Users, Roles, and Login Information



Reports - [Manual Data Changes]

Dependent Change Tickets

Requests Detail

Security Operations Audit Report

Manual Data Changes

Object Change Frequency

Data Modify Change Frequency

Event Log Report

Start Date

2025-01-01

End Date

2025-06-02

ObjectName

Clear

Filter

Changeld	ChangeTicket	Description	ExecutionDate	ExecutedBy	Servername	DatabaseNa	ObjectName	Statement	Item Count : 70 ObjectAccessType
3	AAA-22222	1_ID_Creat	01/05/2025 22:24:26	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	sp_addextendedproperty	ExecutableProcedureReference	EXEC
3	AAA-22222	1_ID_Creat	01/05/2025 22:24:26	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	sp_addextendedproperty	ExecutableProcedureReference	EXEC
3	AAA-22222	1_ID_Creat	01/05/2025 22:24:26	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	Table1	NamedTableReference	INSERT
3	AAA-22222	1_ID_Creat	01/05/2025 22:24:26	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	Table1	NamedTableReference	INSERT
4	AAA-33333	2_INT0_No	01/05/2025 22:28:04	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	DBTest	Table1	NamedTableReference	INSERT
6	AAA-55555	4_DELETE_I			ASUSPC\SQLEXPRESS	DBTest	Table1	NamedTableReference	UPDATE
6	AAA-55555	4_DELETE_I			ASUSPC\SQLEXPRESS	DBTest	Table1	NamedTableReference	DELETE
6	AAA-55555	4_DELETE_I			ASUSPC\SQLEXPRESS	DBTest	Test_Cursor	ExecutableProcedureReference	EXEC
10	AAA-55555	8_Role_Use	20/05/2025 14:37:17	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	master	sp_addrolemember	ExecutableProcedureReference	EXEC
10	AAA-55555	8_Role_Use	20/05/2025 14:37:17	ASUSPC\DomainUser1	ASUSPC\SQLEXPRESS	master	sp_addsrvrolemember	ExecutableProcedureReference	EXEC

## Manual Data Changes Report

Detailed Report of Manually Executed Operations (INSERT/UPDATE/DELETE/EXEC)

[Dependent Change Tickets](#)[Requests Detail](#)[Security Operations Audit Report](#)[Manual Data Changes](#)[Object Change Frequency](#)[Data Modify Change Frequency](#)[Event Log Report](#)

Start Date 2025-01-01

End Date 2025-06-02

Environment

ObjectName

Clear

Filter

Environment	DatabaseName	SchemaName	ObjectType	ObjectName	UniqueChangeTicketCount	UniqueChangeRequestCount	LastChangeDate
TEST	DBTest	dbo	Table	Table1	2	4	02/06/2025 00:04:42
TEST	DBTest	dbo	Trigger	AfterUpdate_Table1	1	1	01/05/2025 22:28:18
TEST	DBTest	dbo	View	v_Table1	1	1	01/05/2025 22:28:18
TEST	master	dbo	SqlLogin	testuser1	1	1	20/05/2025 14:37:17
TEST	master	dbo	SqlUser	testuser1	1	1	20/05/2025 14:37:17
PROD	DBTest	dbo	StoredProcedure	Test_Sandbox	1	1	30/05/2025 18:24:35
TEST	DBTest	dbo	Function	TestFunction	1	1	01/05/2025 22:28:18
TEST	DBTest	dbo	Index	IX_Table1_Description	1	1	01/05/2025 22:28:18
TEST	DBTest	dbo	SqlLogin	testuser1	1	1	20/05/2025 14:37:17
TEST	DBTest	dbo	SqlRole	testrole1	1	1	20/05/2025 14:37:17

Item Count : 14

## Object Change Frequency Report

Object Change Frequency Report



[Dependent Change Tickets](#)[Requests Detail](#)[Security Operations Audit Report](#)[Manual Data Changes](#)[Object Change Frequency](#)[Data Modify Change Frequency](#)[Event Log Report](#)

Start Date 2025-01-01



End Date 2025-06-02



Environment

ObjectName

Clear

Filter

Environment	DatabaseName	SchemaName	ObjectType	ObjectName	UniqueChangeTicketCount	UniqueChangeRequestCount	LastModifyDate
TEST	DBTest	dbo	ManualInsert	Table1	2	4	02/06/2025 00:04:42
TEST	DBTest	sys	ExecProcedure	sp_addextendedproperty	1	3	02/06/2025 00:04:42
TEST	master		ExecProcedure	sp_addsrvrolemember	1	1	20/05/2025 14:37:17
TEST	master	dbo	ExecProcedure	sp_addrolemember	1	1	20/05/2025 14:37:17
TEST	DBTest	dbo	ManualUpdate	Table1	1	1	31/05/2025 11:21:51
PROD	DBTest	dbo	ManualDelete	KKKK	1	1	30/05/2025 18:24:35
PROD	DBTest	dbo	ManualUpdate	KKKK	1	1	30/05/2025 18:24:35

## Data Modify Change Frequency Report

Frequency Report of Manually Executed Operations (INSERT/UPDATE/DELETE/EXEC)

Clear

Filter

												Item Count : 9
Cha	QueryType	ChangeStat	ChangeTicket	Servername	Environment	Database	ObjectName	ObjectType	AccessedDate	AccessedBy	ObjectAccessType	Statement
78	Change	PENDING	AAA-99999	ASUSPC\SQLE	TEST	DBTest	spCriticalObject	StoredProcedure	09/06/2025 22:08:42	ASUSPC\DomainUser1	StoredProcedure	AlterProcedureStatement
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	TEST	Dbtest	tblCriticalObject	Table	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	NamedTableReference
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	TEST	DBTest	vwCriticalObject	View	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	NamedTableReference
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	TEST	dbtest	fnCriticalObjectTbl	Function	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	SchemaObjectFunctionTable
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	TEST	DBTest	spCriticalObject	StoredProcedure	08/06/2025 16:44:05	ASUSPC\DomainUser1	ExecProcedure	ExecutableProcedureReferer
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	PROD	Dbtest	tblCriticalObject	Table	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	NamedTableReference
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	PROD	DBTest	vwCriticalObject	View	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	NamedTableReference
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	PROD	dbtest	fnCriticalObjectTbl	Function	08/06/2025 16:44:05	ASUSPC\DomainUser1	ManualSelect	SchemaObjectFunctionTable
77	QueryResult	PENDING	AAA-11111	ASUSPC\SQLE	PROD	DBTest	spCriticalObject	StoredProcedure	08/06/2025 16:44:05	ASUSPC\DomainUser1	ExecProcedure	ExecutableProcedureReferer

## Critical Objects Access Report

Generates reports on accesses to objects defined in the Settings > Critical Objects screen.

# Key Problems Addressed by Our Solution



## Challenges in Enforcing SQL Standards

The difficulty of manually verifying documented or undocumented, widely accepted or organization-specific standards within changes to be made.



## Team Coordination

Lack of coordination between teams during the implementation of changes.



## Rollback Issues

Issues with rollback in case of any problems during change implementation.



## Access and Logging Issues

Authorization and access controls. Difficulty in recording and logging all changes and queries performed on databases.

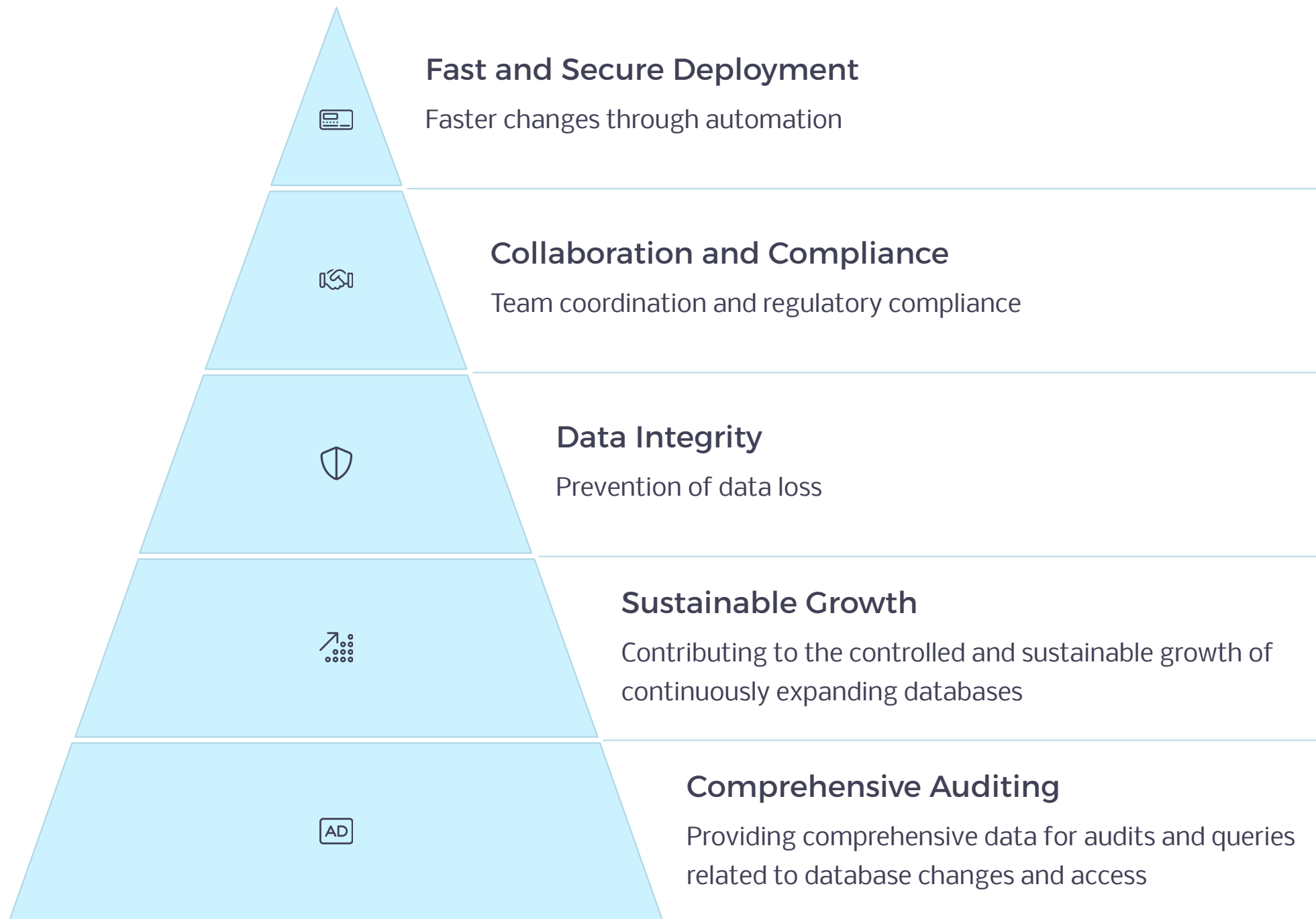
Manual data modification process management and dependency management between different requests are also among the key challenges.

## KVKK and GDPR Compliance Challenges

In Turkey, organizations are generally required to comply with KVKK regulations.

If a Turkish company provides services to individuals located in the EU, it may also be obligated to comply with GDPR for those activities.

# Benefits



The SQL Change Guard system significantly improves organizations' data management processes by ensuring database changes are made securely, controlled, and traceably. The system reduces the workload of technical teams while also facilitating compliance with legal regulations.