

First Responder Kit (FRK) Automation Installation & Usage Guide

Overview

This guide explains how to install and use the First Responder Kit (FRK) automation script to deploy a SQL Server performance monitoring solution. The script installs jobs, configures monitoring, handles exports, and ensures everything is hardened and idempotent.

Prerequisites

1. SQL Server Requirements

- SQL Server 2012 or later
- SQL Server Agent must be running
- PowerShell access with SqlServer module installed

2. Account Permissions

- A SQL login with sysadmin privileges to execute this script
- A **dedicated job owner** (not sa, unless testing), must exist in `sys.server_principals`

3. Folder Setup

- Ensure the export folder (e.g., `D:\SQL_Exports`) exists and is writable by the SQL Agent service account

4. Tools

- First Responder Kit procedures (Blitz, BlitzFirst, BlitzCache, BlitzWho, BlitzIndex) must already be present in master database.
 - Download from: <https://github.com/BrentOzarULTD/SQL-Server-First-Responder-Kit>
 - Once downloaded, execute the [Install-All-Scripts.sql](#) script in SSMS to install all necessary stored procedures into the master database.
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Installation Instructions

Step 1: Open SSMS

Open SQL Server Management Studio (SSMS) as a sysadmin user.

Step 2: Modify Configuration Block

In the script section:

```
INSERT INTO #FRK_Config VALUES
(
    N'DBAtools', -- FRK target database
    30,          -- Retention in days (minimum 7)
    N'sa',       -- Job owner (replace with dedicated account)
    N'Database Maintenance (FRK)',
    N'D:\SQL_Exports' -- Export Location
);
```

Replace:

- DBAtools with the desired database name
- sa with the actual job owner
- D:\SQL_Exports with a valid directory path

Step 3: Execute the Script

Run the entire script in a single session.

The script will:

- Create the monitoring database if not present
- Add job categories
- Drop and recreate any existing FRK jobs
- Create FRK_JobExecutionLog table in msdb
- Deploy 5 jobs:
 - **Daily Health Check** (2:00 AM daily)
 - **Peak Hour Performance Snapshot** (10:30 AM & 2:30 PM)
 - **Weekly Index Analysis** (Sunday 10:00 PM)
 - **Weekly Data Cleanup** (Saturday 11:00 PM)
 - **Manual Export to CSV** (on-demand only)

If an error occurs, the script will automatically roll back all changes.

Job Overview & Execution Schedule

Job Name	Purpose	Schedule
FRK - Daily Health Check	Blitz, BlitzFirst, BlitzCache, BlitzWho	Daily @ 2:00 AM
FRK - Peak Hour Performance	BlitzFirst + BlitzWho (short sample)	10:30 AM & 2:30 PM
FRK - Weekly Index Analysis	BlitzIndex deep dive	Sunday @ 10:00 PM
FRK - Weekly Data Cleanup	Retention-based cleanup (≥ 7 days)	Saturday @ 11:00 PM
FRK - Export Raw Data Locally	Exports all Blitz* tables to CSV	Manual

Using the Export Job

1. Prerequisite

Ensure PowerShell has the SqlServer module installed:

```
Install-Module SqlServer -Scope CurrentUser
```

2. Running the Export Job

Go to SQL Server Agent > Jobs > **FRK - Export Raw Data Locally** > Right-click > **Start Job at Step**.

Exports are stored in:

```
D:\SQL_Exports\RawExport_YYYYMMDD\*.csv
```

Monitoring & Logs

- All job runs are tracked in msdb.dbo.FRK_JobExecutionLog
- Table structure:

```
JobLogID INT IDENTITY
JobName NVARCHAR(128)
StepName NVARCHAR(128)
StartTime DATETIME2
EndTime DATETIME2
Success BIT
ErrorMessage NVARCHAR(MAX)
```

- Query failed jobs:

```
SELECT * FROM msdb.dbo.FRK_JobExecutionLog WHERE Success = 0;
```

Re-running the Script

The script is fully **idempotent**. You may re-run it safely to:

- Add a new server
- Reset or clean job schedules
- Update retention period or export path

Troubleshooting Tips

Issue	Resolution
Configured service account does not exist	Create login using CREATE LOGIN and assign appropriate role
Export job fails	Ensure PowerShell can run scripts, and that SQL Agent has permission to the export folder
No data exported	Ensure Blitz* procedures are called and tables created during job runs
