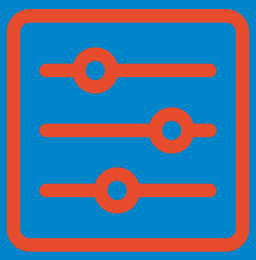
UiPath



ORCHESTRATOR

ADMINISTRATION AND MAINTENANCE

Summary

SQL Server Backup, Integrity Check, and Index and Statistics Maintenance

Please see this github project, which contains links to the documentation, to learn about and use SQL Server Maintenance Solution - a set of scripts for running backups, integrity checks, and index and statistics maintenance on all the Microsoft SQL Server editions, starting with 2005.

Creating a Separate Database for Saving Items before Deletion

Create new database: UiPathArchive

Creating backup tables:

Creating a backup table, ArchiveLogs, with the same structure as Logs

```
select * into [UiPathArchive].[dbo].[ArchiveLogs] from [UiPah].[dbo].[Logs] where 1 = 2
```

Creating a backup table, ArchiveQueueItems, with the same structure as QueueItems

```
select * into [UiPathArchive].[dbo].[ArchiveQueueItems] from [UiPah].[dbo].[QueueItems] where 1 = 2
```

Before deleting the data in Logs and QueueItems, copy it to the corresponding Archive tables.

Deleting Old Data - Queue Items

To delete old successfully processed queue items, for example those that are older than 45 days, use the following query, which can be run manually or scheduled as a SQL Server Job. A different number of days can be set by simply replacing the number 45 in the last line with the desired number.
Optionally, include the TenantId.

```
DELETE FROM [UiPath].[dbo].[QueueItems]
/*
0 = new, 1 = in progress, 2 = failed,
3 = success, 4 = invalid, 5 = retried
*/
where status = 3
--and ReviewStatus != 0
--and TenantId = 1 -- default tenant
and ProcessingExceptionId is null
and DateDiff(day,CreationTime, GetDate()) > 45
```

Deleting Old Data - Logged Messages

To delete the messages of the "Info" level that are older than 45 days, run or schedule a SQL Server Job with the following script. To delete the messages older than a different number of days, simply replace the number 45 in the last line with the desired number.
Optionally, include the TenantId.
Additionally, comment out the "and level = 2" line to delete messages regardless of their log level.

```
DELETE FROM [UiPath].[dbo].[Logs]
/*
0 = Verbose, 1 = Trace, 2 = Info,
3 = Warn, 4 = Error, 5 = Fatal
*/
where 1=1
and level = 2
-- and TenantId = 1 -- default tenant
and DateDiff(day, TimeStamp, GetDate()) > 45
```

Deleting Old Data - Elasticsearch

Orchestrator stores monthly indices for each tenant. If the old indices in Elasticsearch are kept even if they are not used in searches or reports, the Elasticsearch performance and the memory consumption are affected. For that reason, it is recommended to delete old indices.
Use the Elastic-Delete-Data.ps1 PowerShell script to delete indices. Please note that entire indices are removed, not only partial index data. For example, if we go back 91 days from the current date, we reach 23rd April, so the entire index for the month of April is kept, and the first deleted index is the one for March, followed by the one for February, and so on.

Usage
Elastic-Delete-Data.ps1 [-daysToKeep] <int> [-elasticURL] <string> [[-tenantName] <string>] [[-elasticUser] <string>] [[-elasticPassword] <string>]
The daysToKeep and elasticURL parameters are mandatory.
If no specific tenant name is provided, "default" is assumed.
If X-Pack is installed and enabled, the script needs to authenticate to Elasticsearch. Provide the username and the password using the corresponding arguments.

Examples:

```
.\Elastic-Delete-Data.ps1 -daysToKeep 91 -elasticURL http://elasticserver:9200
.\Elastic-Delete-Data.ps1 -daysToKeep 60 -elasticURL http://elasticserver:9200
-tenantName rpacoe
.\Elastic-Delete-Data.ps1 -daysToKeep 91 -elasticURL http://elasticserver:9200
-elasticUser superuser -elasticPassword secret01
```

Backup database

Implement regular backups of the SQL Server database.
Perform full backups weekly, and incremental backups daily.
The recommendation is to use the DatabaseBackup stored procedure that is created using the award-winning script at this location.