

Perfmon Data Collection Automation Using Logman

Prepared by

Data SQL Ninja Engineering Team (datasqlninja@microsoft.com)

Disclaimer

The High-Level Architecture, Migration Dispositions and guidelines in this document is developed in consultation and collaboration with Microsoft Corporation technical architects. Because Microsoft must respond to changing market conditions, this document should not be interpreted as an invitation to contract or a commitment on the part of Microsoft.

Microsoft has provided generic high-level guidance in this document with the understanding that MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE INFORMATION CONTAINED HEREIN.

This document is provided "as-is". Information and views expressed in this document, including URL and other Internet Web site references, may change without notice.

Some examples depicted herein are provided for illustration only and are fictitious. No real association or connection is intended or should be inferred.

This document does not provide you with any legal rights to any intellectual property in any Microsoft product. You may copy and use this document for your internal, reference purposes.

© 2019 Microsoft. All rights reserved.

Table of Contents

1	Introduction	۷.
2	Prerequisites	. [
	Logman Automation	
4	Appendices	. 7
5	Feedback and suggestions	. 8

1 Introduction

The purpose of this document is to collect Performance Monitor Data from SQL Server Farm. We discover and Assess 100's of SQL Server Instance, collecting Perfmon Data for baseline from this server's is very manual process, customer and we get into many issues for this collection.

This tool uses logman.exe to create the command which will create, start, stop and delete the performance counter set on the remote SQL Server Machine.

2 Prerequisites

In the excel sheet Named CounterList, add your counters separated by comma.

Default Counters

```
"\Memory\Available Mbytes",
"\LogicalDisk(*)\% Idle Time",
"\LogicalDisk(*)\Avg. Disk sec/Read",
"\LogicalDisk(*)\Avg. Disk sec/Transfer",
"\LogicalDisk(*)\Avg. Disk sec/Write",
"\Processor(*)\% Privileged Time",
"\Processor(*)\% Processor Time",
"\Processor(*)\% User Time",
"\<sqlinstance>:Databases(*)\Log Bytes Flushed/sec",
"\<sqlinstance>:Databases(*)\Log Growths",
"\<sqlinstance>:Databases(*)\Log Shrinks",
"\<sqlinstance>:Databases(*)\Log Truncations",
"\<sqlinstance>:Databases(*)\Log Truncations",
"\<sqlinstance>:Databases(*)\Percent Log Used"
```

If you want to add counters make sure we add in the above given format

- You must write SQL Instance as <sqlinstance>, which is the variable / place holder we have used in the excel for command generation.
- Each counter should be separated by comma and we should not have any extra spaces.

In LogmanAutomation You should maintain the list of Server and Instance Name in the below format for which you need to collect the perfmon logs,

Default Instance as **SQLServer** and Named Instance as **MSSQL\$Instance_Name**

ServerName	InstanceName
Server1	SQLServer
Server2	SQLServer
Server3	MSSQL\$SQLINST1
Server4	MSSQL\$SQLINST2
Server5	MSSQL\$SQLEXPRESS

3 Logman Automation

This Excel sheet creates commands for the following Logman Activity which can simply use as execution batch.

- Logman Create Counter
- Logman Start
- Logman Stop
- Logman Delete

You need to just drag the formula and depending on the CounterList and Server / Instance Name will generate the command for Logman.

Copy all the command and schedule / execute this as a Batch. Using this method, you can create, start, stop, and delete the perfmon counters on each remote server.

This method identifies multiple unique instances on each server and create the perf counter container accordingly.

This method also collects perfmon counters every 15 seconds and max file size up to 1024 MB. After every 1024 MB, it will create the new file in circular way and not override it.

- -f bincirc Specifies the log format for the data collector
- -v mmddhhmm
- -max 1024 Maximum log file size in MB or maximum number of records for SQL logs.
- -si 00:00:15 Specifies the sample interval for performance counter data collectors.

4 Appendices

Logman

https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/logman

Logman create counter

 $\underline{https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/logman-create-counter}$

Logman start and logman stop

https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/logman-start-stop

Logman Delete

 $\underline{https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/logman-delete}$

5 Feedback and suggestions

If you have feedback or suggestions for improving this data migration asset, please contact the Data SQL Ninja Engineering Team (datasqlninja@microsoft.com). Thanks for your support!

Note: For additional information about migrating various source databases to Azure, see the <u>Azure Database Migration Guide</u>.