

# SQL Performance Analyzer

Sara Performance Analyzer is a window's based application which helps you in troubleshooting SQL Server issues. The application performs health check on various parameters and provide a full report for your SQL Server. The tool provides detailed information on below parameters

- Hardware
- Disk Status
- Services
- Instance
- DB Configuration
- Backup Status
- Temp DB Status
- Performance
- Job related information

The screenshot displays the SARA application interface, which is a Windows-based tool for SQL Server performance analysis. The interface is divided into several sections:

- Server Selection:** Includes options for "Browse Network", "Browse Server", and "Enter Your Selection". The "Enter Your Selection" field shows "583.amr.corp.intel.com\SQLE13180".
- Authentication:** Includes radio buttons for "SQL Authentication", "Run as account", and "Integrated". The "Integrated" option is selected. There are fields for "Login" and "Password", and buttons for "Process" and "Clear".
- Populate Databases:** A dropdown menu.
- Populate Tables:** A dropdown menu.
- Process DB:** A button.
- Hardware Details:** A table showing hardware information for the selected server.
- Database Performance:** A table showing performance metrics for various databases.
- Memory & CPU I/O:** A table showing memory and CPU I/O statistics.

The "Hardware Details" table shows the following data:

CaptureDate	HardwareName	ServerName	Version	Domain	ProductType	TotalPhysicalCPU	TotalCores	Hyperthreading	TotalLogicalCPUs	CPUType	RiscQueue
6/6/2016 7:31 AM	HardwareDetails	583.amr.corp.intel.com	Windows NT 6.1	amr.corp.intel.com	Product OL380 G6	2	8	Y	16	Intel(R) Xeon(R) ...	2.67

The "Database Performance" table shows the following data:

Database_name	captured_page_size	MB
master	2093284	16384
model	128408	1008
tempdb	70680	562
msdb	52214	407
test_om	18370	81
reporting	6830	53
Label	1502	11

The "Memory & CPU I/O" table shows the following data:

SERVER_NAME	CAPTURE_DATE	Name	CPU Time	CPU_Per%
583.amr.corp.intel.com	6/6/2016 7:31 AM	master	108811	0.03
583.amr.corp.intel.com	6/6/2016 7:31 AM	model	128889	0.00
583.amr.corp.intel.com	6/6/2016 7:31 AM	tempdb	164861	0.00
583.amr.corp.intel.com	6/6/2016 7:31 AM	msdb	62945	0.00
583.amr.corp.intel.com	6/6/2016 7:31 AM	test_om	40543	0.00
583.amr.corp.intel.com	6/6/2016 7:31 AM	Label	1088237	0.03
583.amr.corp.intel.com	6/6/2016 7:31 AM	reporting	119888	0.00

SARA

Required Statistics Populated from Server: [View Details](#)

Server Selection: ☐ Browse Network ☐ Browse Server ☐ Enter Your Selection

Authentication: ☐ SQL Authentication ☐ Run as account ☒ Integrated

Populate Databases:

Logins:  Password:  Process:  Clear:

Hardware | Disk Status | Running Services & Utilization | Instance Configuration | DB Configuration | Installed Applications | Backup Status | HA Solution Status | TEMPDB Status | I/O Statistics | SQL Performance | DB File Allocation

Total Running Services:

ServiceName	ServiceOwner	ServiceStartType	ServiceBinary
MSSQLBOL001	sa	DEMAND_START	C:\Program Files\Microsoft SQL Server\90\Tools\BOL\sqlservr.exe
MSSQLBOL002	sa	DEMAND_START	C:\Program Files\Microsoft SQL Server\90\Tools\BOL\sqlservr.exe
MSSQLFOL001	NT AUTHORITY\SYSTEM	DEMAND_START	C:\Program Files\Microsoft SQL Server\90\Tools\FOL\sqlservr.exe
MSSQLFOL002	NT AUTHORITY\SYSTEM	DEMAND_START	C:\Program Files\Microsoft SQL Server\90\Tools\FOL\sqlservr.exe

EventTime: 6/6/2016 7:26 AM

EventTime	SQLProcessName	SystemIdle	OtherProcessName
6/6/2016 7:26 AM	sqlservr	98	2
6/6/2016 7:26 AM	sqlservr	98	2
6/6/2016 7:27 AM	sqlservr	97	3
6/6/2016 7:26 AM	sqlservr	94	6
6/6/2016 7:26 AM	sqlservr	95	5

SQL\_CPU%: 100.00

SQL_CPU%	IdlePer%	Other_CPU%
100.00	97.76625	2.23375

Last\_SQL\_Pending: 6/6/2016 12:16

Online\_Duration: 2 days 07:14:17

Path: C:\Program Files\Microsoft SQL Server\90\Tools\FOL\sqlservr.exe

Allocated(SizeMB): 24865

Used(SizeMB): 2303

TOTAL\_MEMORY: Available (MB): 406

Used (MB): 24380

Memory & CPU | DB | Backup History | Restore History | Job Failed 24 Hour | DASHBOARD

DatabaseName	cached_pages_kb	MB
master	200324	16354
model	139408	1089
tempdb	70630	552
msdb	52214	407
test_ym	10270	81
reporting	6830	53
Label	1902	11

SERVER_NAME	CAPTURE_DATE	Name	CPU Time (MS)	CPU_Per%
FWWSTC001	6/6/2016 7:31 AM	Focus03	1088611	0.83
FWWSTC001	6/6/2016 7:31 AM	interfacePD	120889	0.90
FWWSTC001	6/6/2016 7:31 AM	test_ym	164561	0.90
FWWSTC001	6/6/2016 7:31 AM	DummyReplicate	62548	0.90
FWWSTC001	6/6/2016 7:31 AM	model	48543	0.90
FWWSTC001	6/6/2016 7:31 AM	Label	1068337	0.83
FWWSTC001	6/6/2016 7:31 AM	test_ym03	115028	0.90

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DatabaseName	Name	PhysicalName	AngLatency	AngReadLatency	AngWriteLatency	AngWriteLatencyStatus
interface	interface_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\interface_data.mdf	98	98	7	Excellent
Focus	Focus_data	T:\MSSQL13_00\SQL1\MSSQL\DATA\FocusData\Focus_data.mdf	68	64	18	Fair
DCULT	DCULT	R:\MSSQL13_00\SQL1\MSSQL\DATA\DCULT_data.mdf	62	76	44	Fair
INTEL_GLOBAL	INTEL_GLOBAL	R:\MSSQL13_00\SQL1\MSSQL\DATA\INTEL_GLOBAL_data.mdf	51	66	33	Fair
interface03	interface03_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\interface03_data.mdf	43	32	46	Fair
test_ym	test_ym_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\test_ym_data.mdf	40	52	19	Fair
msdb	msdb_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\msdb_data.mdf	36	40	9	Excellent
FocusPD	FocusPD_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\FocusPD_data.mdf	32	49	12	Fair
reporting	reporting_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\reporting_data.mdf	32	32	6	Excellent
FocusA	FocusA_data	R:\MSSQL13_00\SQL1\MSSQL\DATA\FocusA_data.mdf	26	36	12	Fair
dba	dba	R:\MSSQL13_00\SQL1\MSSQL\DATA\dba_data.mdf	22	26	7	Excellent

Memory & CPU | DB | Backup History | Restore History | Job Failed 24 Hour | DASHBOARD

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FWWSTC001	6/6/2016 7:31 AM	model	48543	0.90
FWWSTC001	6/6/2016 7:31 AM	Label	1068337	0.83
FWWSTC001	6/6/2016 7:31 AM	test_ym03	115028	0.90

Download the zip file and extract all the file in folder and run setup.exe. This will install application with name SARA your machine.

How to run and pre-requisites for this application

- You must be SYSADMIN on SQL Server and Server Admin on Machine to run this application
- Application enables XP\_Cmdshell to execute some command and then disable it accordingly so test this in your DEV and Test environment before executing it on production
- Use SQL Authentication OR Integrated option
- Enter Server Name
- Select Authentication
- Click Process

This application will take around 1-3 minutes to finish all test and then displays result in Data Grid.