



Where is My SQL Agent?

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Data Professional

Microsoft Data Platform MVP. 14 Years working with Microsoft Data Platform. Microsoft and MongoDB certified. Worked in ecommerce, healthcare and finance industry.

Giving Back

Board member NESQL user group and PASS DBA virtual group. Organizer of Boston SQL Saturday. Frequent speaker at local and virtual user groups, SQL Saturdays, and azure events.

When Not Working

Running – One 26.2 and many 13.1 miles. Learning US history. Shuttling 3 kids.

Use of SQL Server Agent

Integrity
Checks

Index
Maintenance

Update
Statistics

Purge Old data

Track Blocking

Collecting
WMI

Long Running
Queries

Wait Statistics

Collecting
DMV





On-Premise

VS.



Cloud

On-Premise

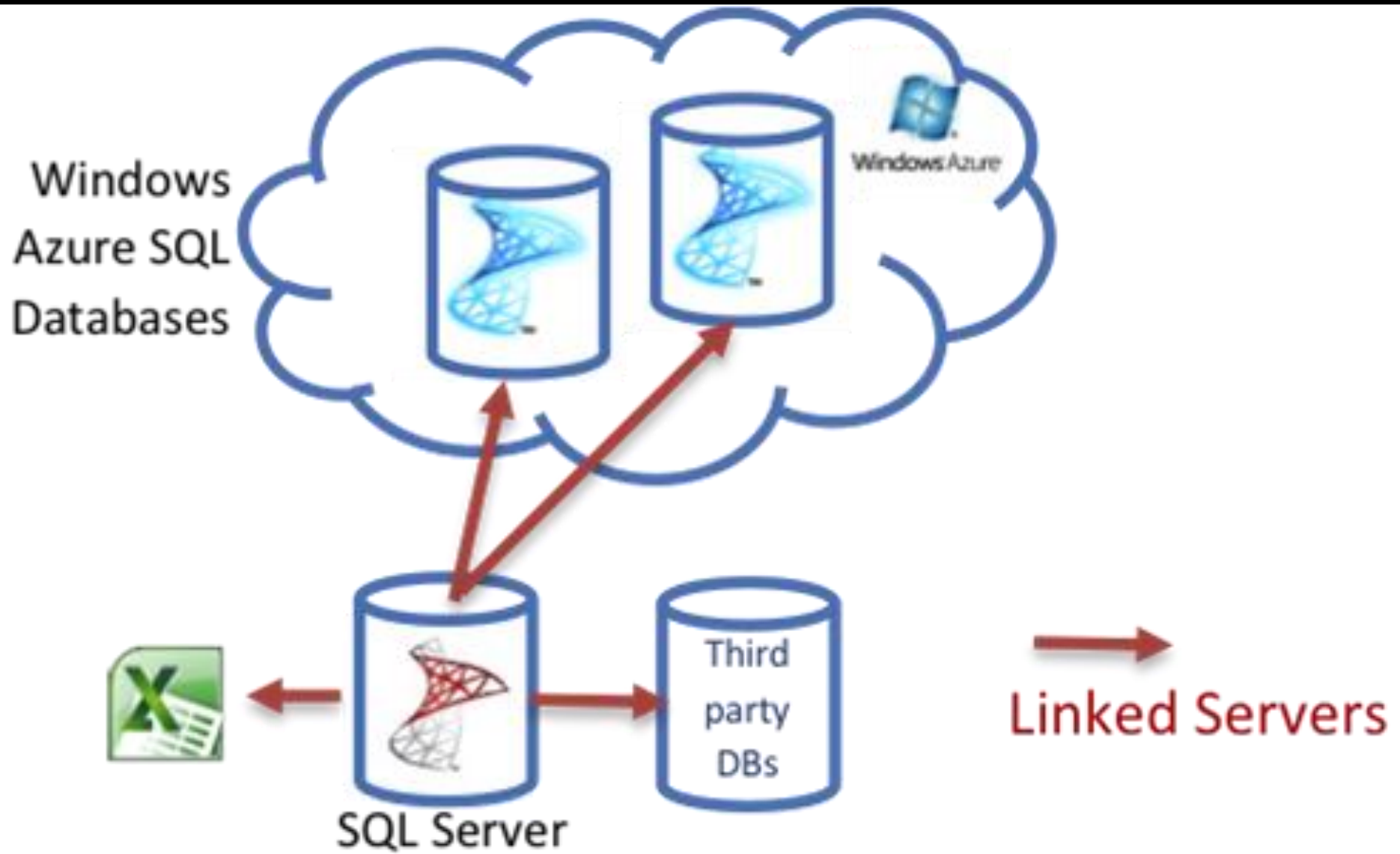
- Linked Server
- PowerShell/
Windows
Scheduler
- 3rd Party
Scheduler

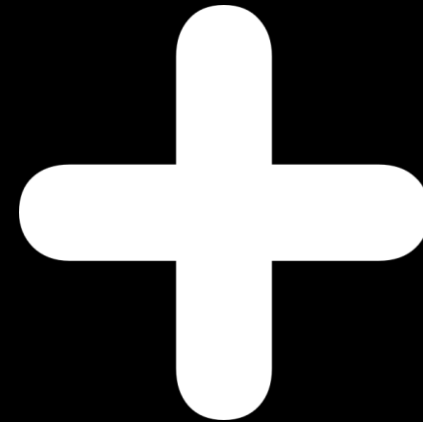
Azure-IaaS

- SQL Server on
Azure VM
- PowerShell/Azure
VM Windows
Scheduler

Azure-PaaS

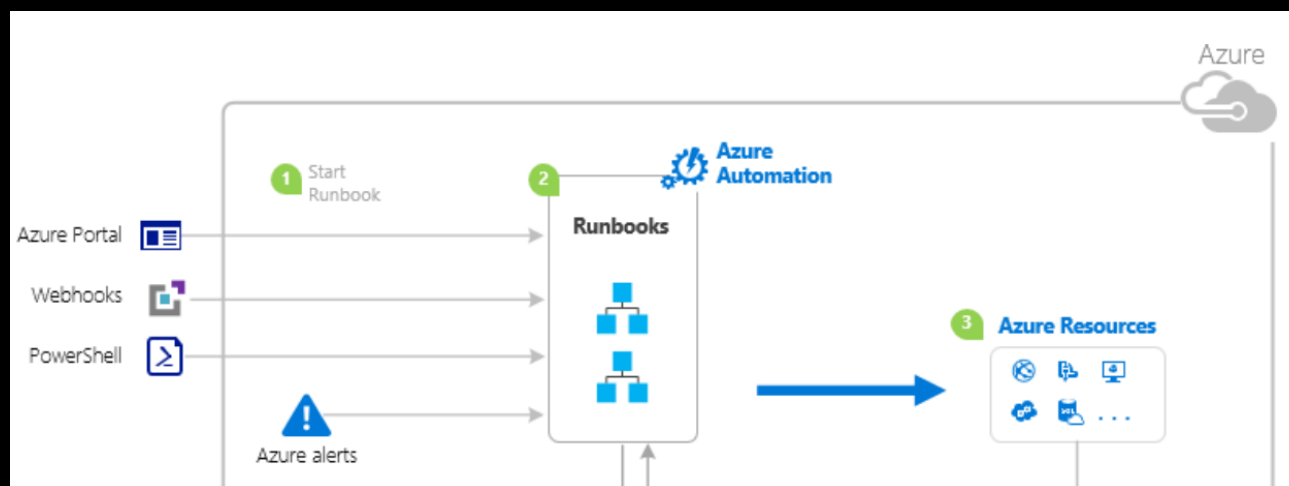
- Azure
Automation
- Azure Function
- Elastic Job Agents
- Web Jobs





<https://www.fullstackpython.com/powershell.html>

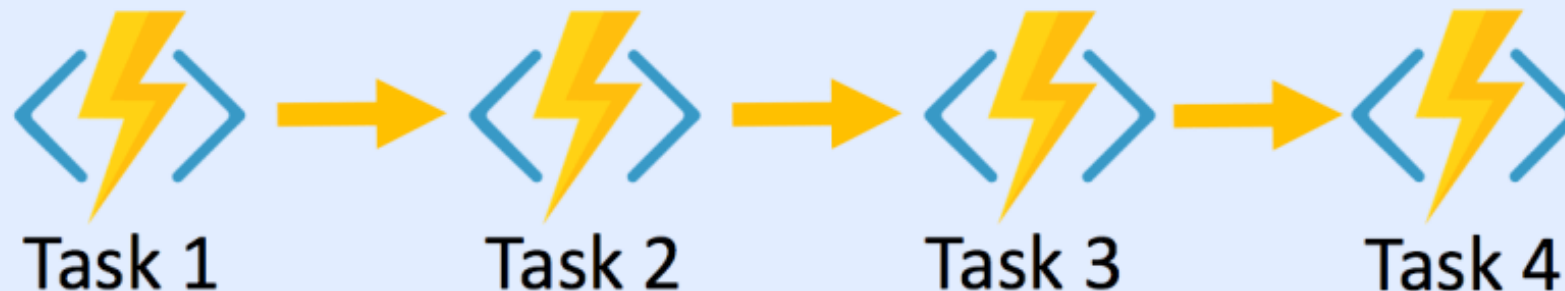
<https://www.adamtheautomator.com/create-jenkins-jnlp-scheduled-tasks-powershell-dsc/>





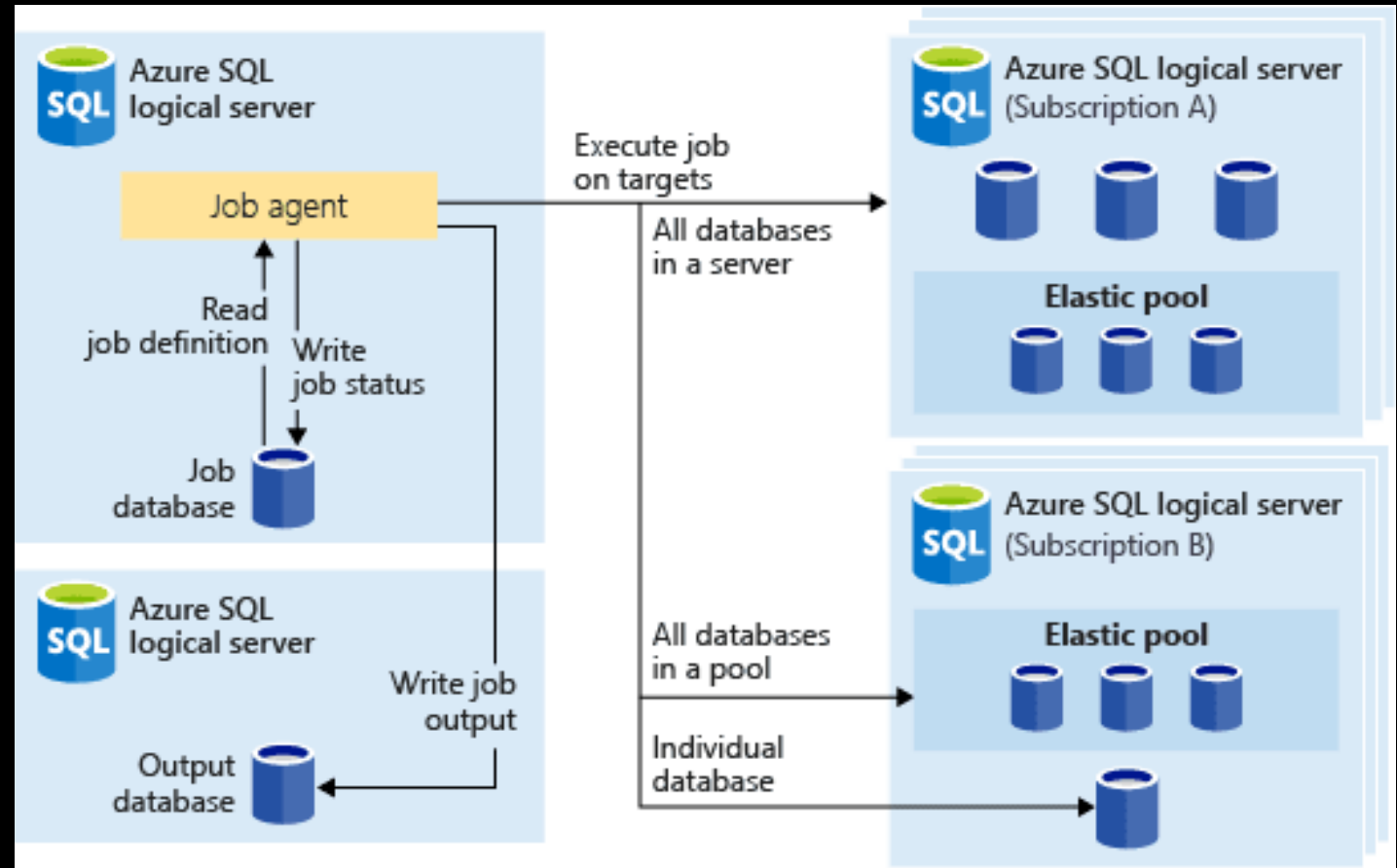
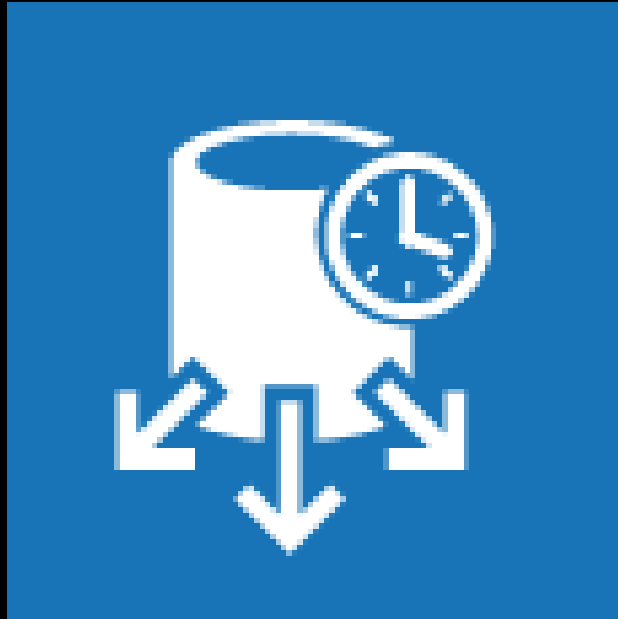
- Choice of language
- Pay per Use
- Max run time 10 minutes
- Bring your own dependencies
- Simplified integration
- Development flexibility
- Open source

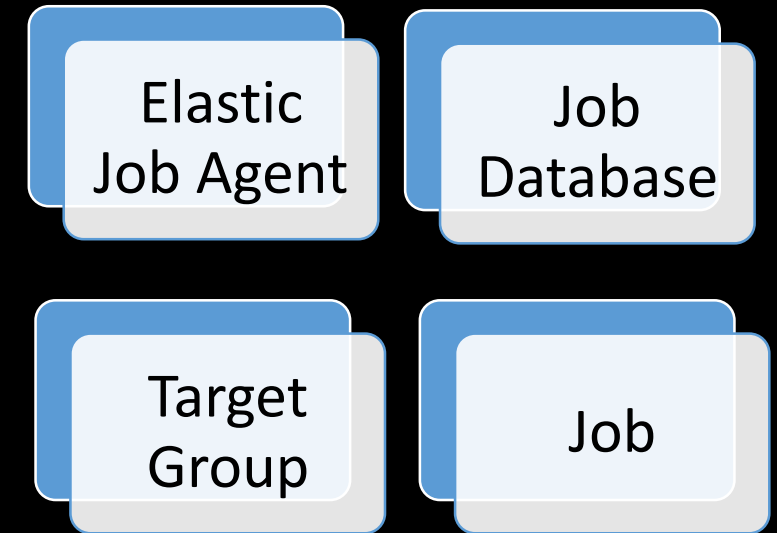
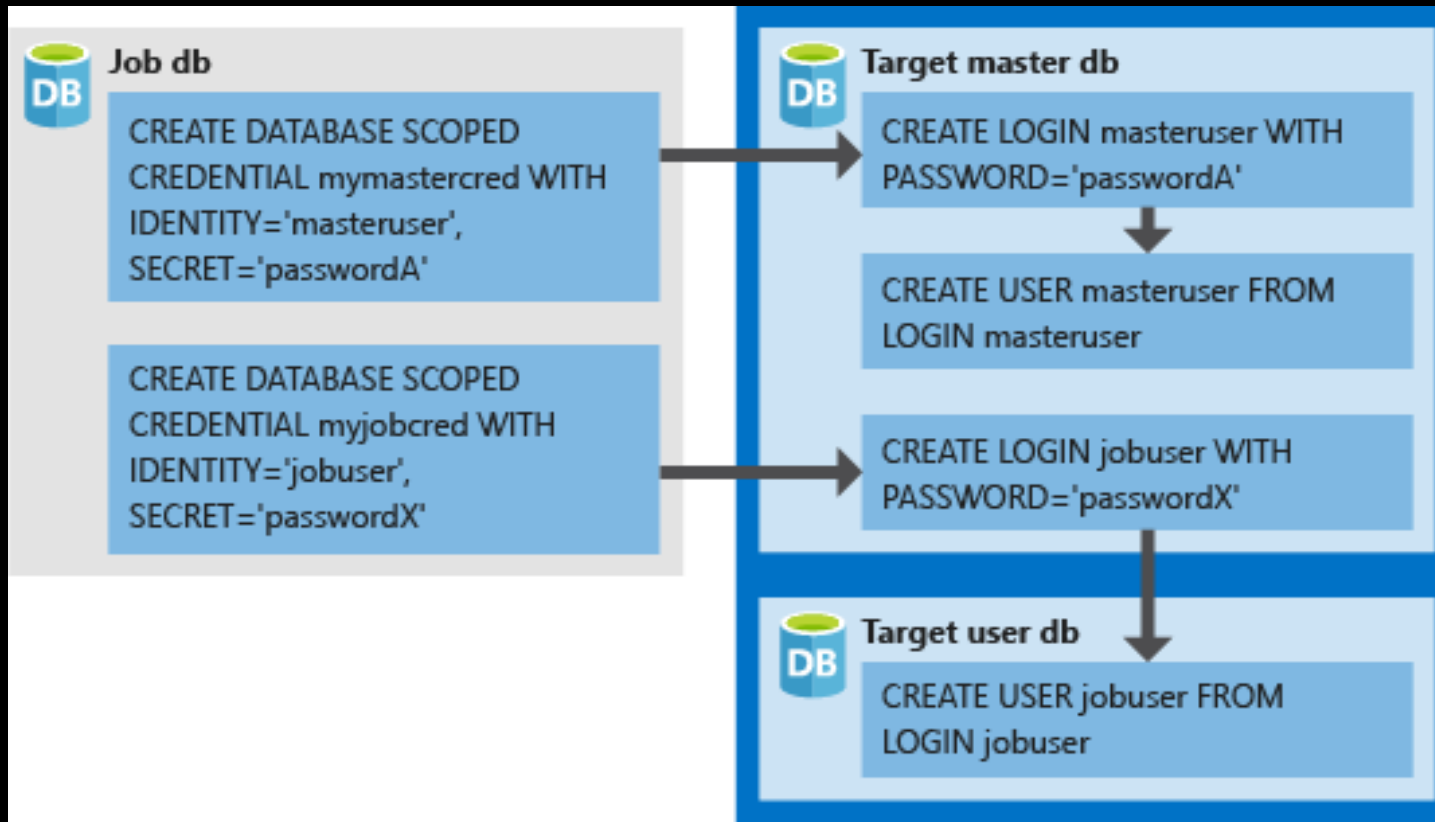
Serverless Workflow

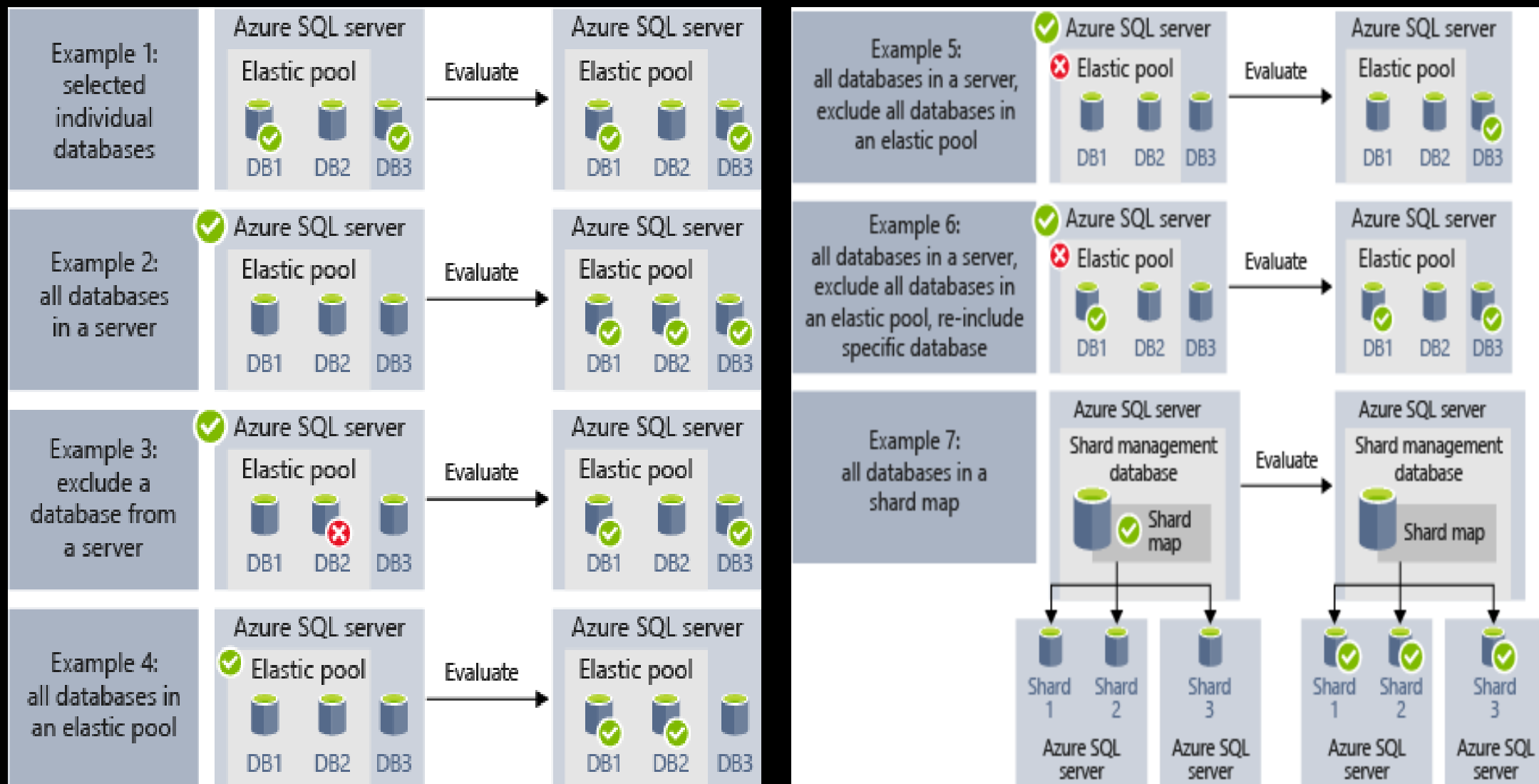


New In Functions

- Business-critical apps with no cold start and network isolation
 - 60 minutes run time
 - No cold start
 - Up to 100 instances
- Serverless automation with PowerShell in GA
 - Automatic management of PS Module







<https://docs.microsoft.com/en-us/azure/sql-database/sql-database-job-automation-overview>

Tables

- System Tables
- External Tables
- GraphTables
- jobs_internal.__MigrationHistory
- jobs_internal.command_data
- jobs_internal.job_cancellations
- jobs_internal.job_executions
- jobs_internal.job_task_executions
- jobs_internal.job_versions
- jobs_internal.jobs
- jobs_internal.jobstep_data
- jobs_internal.jobsteps
- jobs_internal.script_batches
- jobs_internal.target_associations
- jobs_internal.target_group_memberships

Views

- System Views
- jobs.job_executions
- jobs.job_versions
- jobs.jobs
- jobs.jobstep_versions
- jobs.jobsteps
- jobs.target_group_members
- jobs.target_groups
- jobs_internal.current_job_version_number
- jobs_internal.database_credentials
- jobs_internal.target_group_members_json
- jobs_internal.visible_jobs
- jobs_internal.visible_target_groups
- jobs_internal.visible_targets_formatted

Stored Procedures

- System Stored Procedures
- jobs.sp_add_job
- jobs.sp_add_jobstep
- jobs.sp_add_target_group
- jobs.sp_add_target_group_member
- jobs.sp_delete_job
- jobs.sp_delete_jobstep
- jobs.sp_delete_target_group
- jobs.sp_delete_target_group_member
- jobs.sp_purge_jobhistory
- jobs.sp_start_job
- jobs.sp_stop_job
- jobs.sp_update_job
- jobs.sp_update_jobstep
- jobs_internal.sp_add_job_version



VS Code 1.48.2

SQL2019 CU7

SSMS 18.6

PS 7.*

Wrap UP

Multiple
Options

Hybrid
Model

Multiple
Language

Know
Limitations

Scalability

Be Flexible

Resource

- [Automate management tasks using database jobs](#)
- [Creating a Linked Server to an Azure SQL Database](#)
- [An introduction to Azure Automation](#)
- [Azure Automation runbook types](#)
- [Azure Functions Documentation](#)
- [An introduction to Azure Functions](#)
- [Use Transact-SQL \(T-SQL\) to create and manage Elastic Database Jobs](#)
- [Choose the right integration and automation services in Azure](#)



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