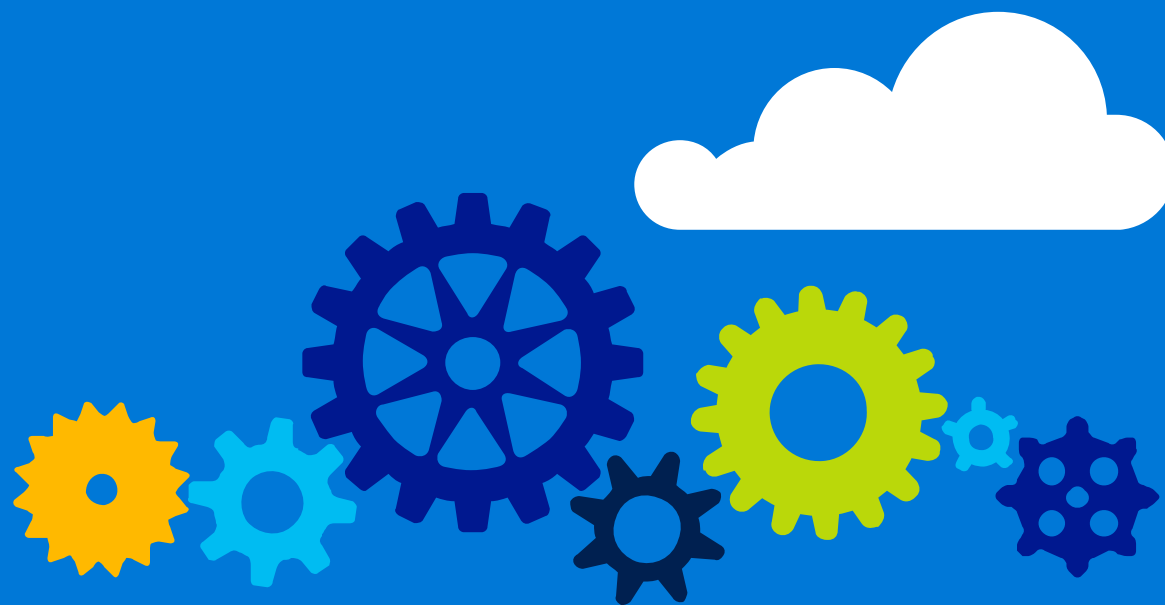




# Data SQL Ninja Engineering Team

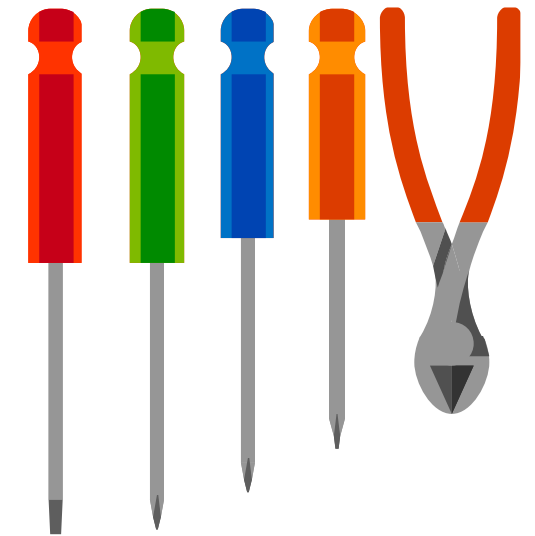
Workload Assessment Tool  
Overview and Guidance



Data SQL Ninja Engineering Team

# Overview of Tool

- Provides suggested “best fit” target platforms, cloud readiness and application/database remediation level for a given workload based
- Calculation is based on a set of 41 questions across 12 categories
- Each of the 41 questions has a prescribed set of possible answers based on drop-down controls
- Built using Excel and VBA. Provides a simple, one-click calculation and report generation
- Greatly helps to accelerate large estate assessments by providing automated and uniform target platform decision process
- Generated report can be placed into assessment findings decks for migration assessment engagements
- Can provided structured approach and process for customer migration workshops



# Report Considerations

Target platforms considered include:

## On-Premises

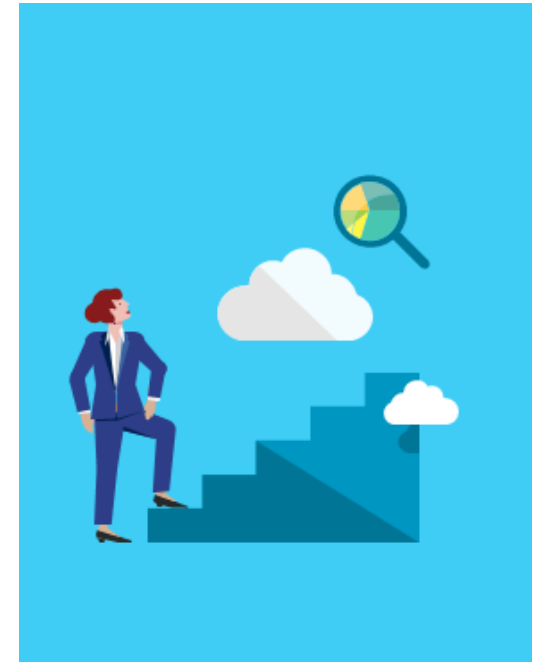
- SQL Server
- SQL Server On Linux

## Azure

- SQL Server IaaS
- SQL Server On Linux IaaS
- Azure SQL DB
- Azure SQL DB – Elastic Pools
- Azure SQL Managed Instance
- Azure SQL Data Warehouse

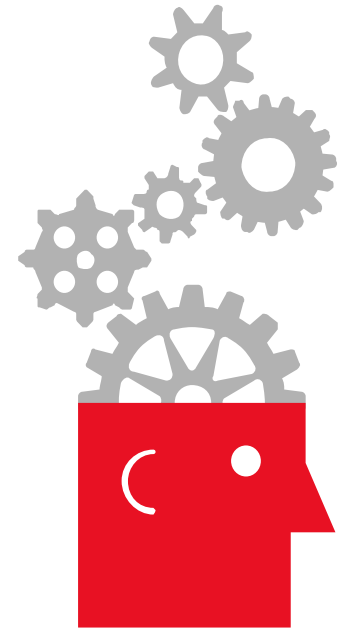
Application and Database Level of Remediation Levels include:

- **Very Simple:** App and database can be moved into target workload with minimal translation and re-write
- **Simple:** Some application code updates and database object conversion
- **Moderate:** Data Access Layer re-work on application, non-trivial database object conversion
- **Extensive:** Substantial application code re-writing and data access layer code updates. Plus substantial database object conversion and translation.



# Calculation Methodology

- For each workload, at the start of the calculation process, it is assumed any platform is possible
- Each question will impact the predicted feasibility of each target platform and update the overall feasibility of a given target platform for a given workload
- The same logic is used for remediation as well. The tool assumes at the start that the workload will be a lift and shift, then as it runs through the question analysis, the overall remediation will be increased based on the answers to certain questions.
- The lower the number, the more feasible that platform is
- Calculated numbers range from 0 (most feasible) to 3 (least feasible)



# Question Sheet

## Example Screen Shot

Workload Assessment Model Template - DMU v1.4.xlsm - Excel

Jonathon Frost

Share

File Home Insert Page Layout Formulas Data Review View Developer Add-ins Help Power Pivot Team

Clipboard Font Alignment Protection Number Styles Cells Editing

C8 Desktop App Client Plus Server

Sensitivity: General

	A	B	C	D	E	F	G	H	I
1	Calculate Report								
2									
3									
4		Application Architecture				Application - Data Access Layer			
5	Application Name	Is system application focused or data warehouse focused?	What is the application type?	Is moderate to extensive application refactoring (re-writing the application) acceptable?	Should the application need to be modified for a new cloud platform, are application experts, application documentation, and application source code readily available?	What is the data access layer? ORM Framework (Entity, iBatis)	What are the data providers?	Are there any LOB data types present?	Is system having cursor based vs set based operations?
6	App1	Data Warehouse Focus	Script/Process Only	Yes	Yes	Entity	JDBC	No	Set Based
7	App2	Application Focus	Web-App	Yes	Yes	Entity	OleDb	Yes	Set Based
8	App3	Data Warehouse Focus	Desktop App Client Plus Server		Unknown	Interwoven into Business Logic Code	Mixed	No	Cursor Based
9	App4	Application Focus	Web-App	Not Applicable	No	iBatis	ODBC	No	Set Based
10	App5	Application Focus	Desktop App Client Plus Server		Yes	Other	JDBC	No	Set Based
11			Mobile Based App						
12			Script/Process Only						
13									
14									

# Automated Findings Report Dashboard

## Example Screen Shot

Workload Assessment Model Template - DMJ v1.4.xlsm - Excel

Sensitivity: General															
Target Platform & Remediation Report															
Note: Report data presented here is suggestion based on limited data point inputs from question sheet. This tool is simply an assistant, further manual investigation and decision making is needing to identify true best fit target platform.															
Application Name															
Azure															
SQL DB: Azure SQL Database (Singleton)															
SQL DB - Elastic Pools: Azure SQL Database Elastic Pools															
SQL MI: Azure SQL Managed Instance															
SQL DW: Azure SQL Data Warehouse															
SQL VM IaaS: SQL Server 2017 on a Virtual Machine in Azure															
SQL Linux VM IaaS: SQL Server 2017 on Linux on a Linux Virtual Machine in Azure															
On-Premises															
Level of Remediation															
Very Simple: App and database can be moved into target workload with minimal translation and re-write															
Simple: Some application code updates and database object conversion															
Moderate: Data Access Layer re-work on application, non-trivial database object conversion															
Extensive: Substantial application code re-writing and data access layer code updates. Plus substantial database object conversion and translation.															
Cloud															
Estimated DWUs (If applicable for Azure SQL DW Workloads)															
SQL DB															
SQL DB - Elastic Pools															
SQL MI															
SQL DW															
SQL VM IaaS															
SQL Linux VM IaaS															
SQL Server															
SQL Server Linux															
Very Simple															
Simple															
Moderate															
Extensive															
Cloud Possible															
Estimated DWUs															
App1															
App2															
App3															
App4															
App5															

# Project Plan Schedule

(Note: dates are estimates only)

