

Azure SQL Server Managed Instance & IaaS Migration High Level Planning Workbook

This workbook was developed to assist with SQL modernisation and migration planning. It is intended to be used during initial discussions and function as a high level record of modernisation of applications and their databases.

1 – Decision Flow

Use this decision tree to assess and determine the target state and platform fit for your application and database.

2 – Per DB Decision

Starting with the application and Database Migration Assessment (DMA) results work through the Decision Flow tree. Record your decisions and what will be required to migrate to your application to your selected platform.

3 – Database Map

Prioritise and map out the end state to assist with sizing and planning.

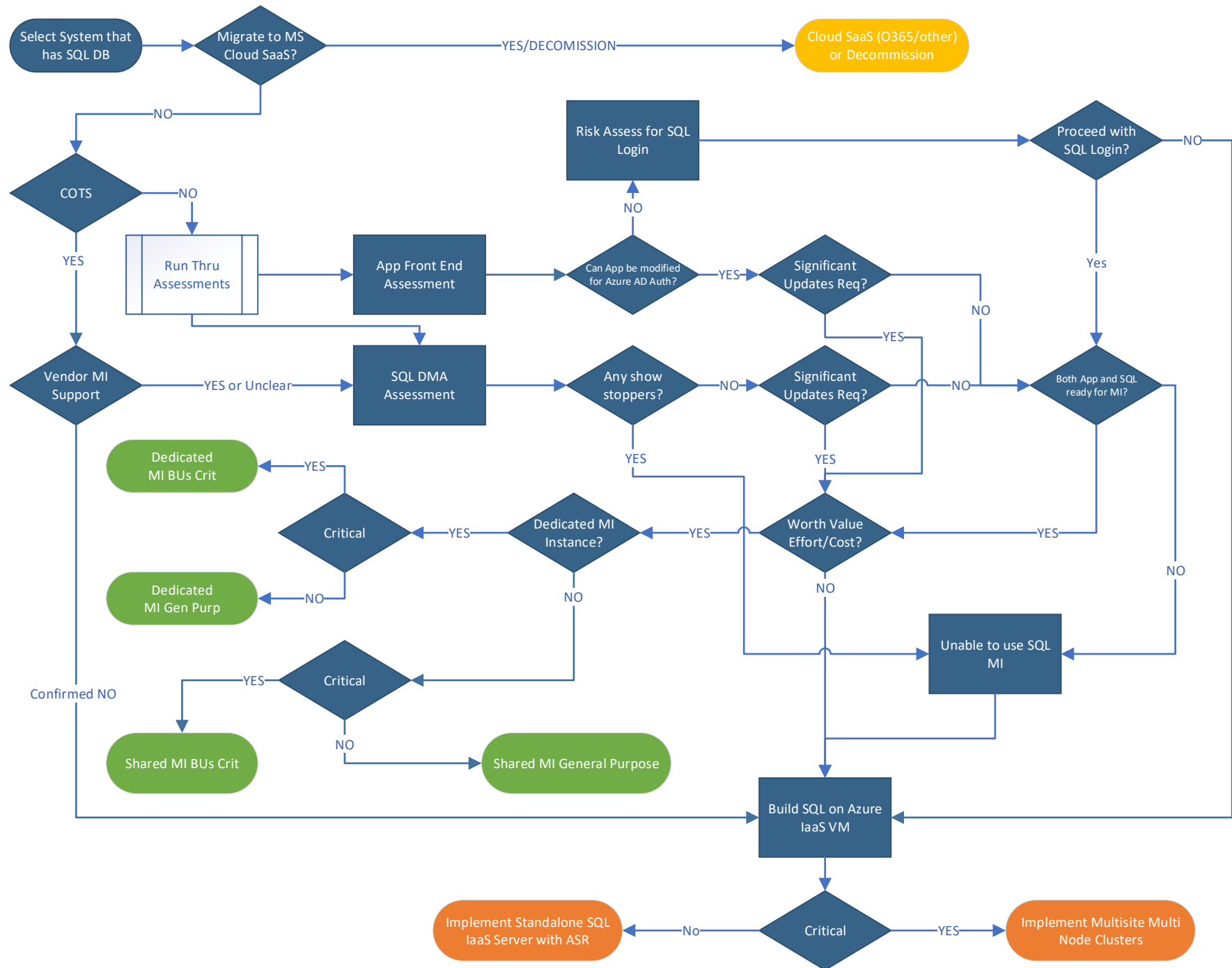
4 – Migration Process

An overview of how the migration process may work - who does what when.

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David Graham – Cloud Migration Consultant – Peppertree

Azure SQL MI vs Azure IaaS Decision Tree



High Level SQL Migration Plan - **EXAMPLE**

Database / App		App Front End	Database Eval (DMA)	Vendor	Effort/Risk Recommendation	End State
Inhouse Developed Apps	Critical Apps • App 1 • App 2 • ...	Modify App to allow Azure AD and update connection string	Passed DMA		Modify Front End Move DB to MI	Move to Critical SQL MI
	Non Critical Apps • App 1 • App 2 • ...		MI Failed Filestream unsupported		Migrate to IaaS SQL	DB Server 1 SQL Instance 1 Not Clustered Shared Instance
	Non Critical Apps • App 3 • App 4 • ...	Modify App to allow Azure AD and update connection string	MI Failed Polybase unsupported		Refactor Polybase to OPENROWSET	Move to Critical SQL MI
COTS Products	COTS APP 1	Front end Connection string cannot be changed. Use SQL Login	Passed DMA	Not Officially Supported, but advised it "should" work.	Accept Risk and move to MI to gain RPO / RTO benefits not otherwise achievable	Move to Critical SQL MI
	COTS APP 2			Microsoft explicitly advise not to use on SQL Azure in any form		DB Server 1 SQL Instance 2 Not Clustered Dedicated Instance
	COTS APP 3			Fully Supported		Move to GP SQL MI
	COTS APP 4	Upgrade to version that supports Azure AD	Passed DMA	Fully Supported		Move to Critical SQL MI
	COTS APP 5		Oracle Database		Migrate using MS SQL Server Migration Assistant (SSMA)	Move to Critical SQL MI
	COTS APP 6	Front end Connection string cannot be changed. Use SQL Login	Passed DMA	Fully Supported		Move to GP SQL MI
	COTS APP 7		Oracle Database	Vendor Provides Azure SQL Alternative	Migrate data using Azure Data Factory (ADF)	Move to GP SQL MI
Cloud Ready Apps	Sharepoint					Migrate to Sharepoint Online
	CRM					Move to Dynamics Online
	TFS	All Apps to be replaced by equivalent SaaS offering in Microsoft Office 365				Move to DEVOPs
	Email Archive / EV					Move to Exchange Online
Apps not to Migrate	Citrix					Replacing with Microsoft Online App Portal
	Symantec AV					Replacing with Microsoft Defender and EDR
	SCOM	Migrating to Cloud Offering within another App. These apps/DB's will no longer be required				Replacing with Azure Monitoring
	Blackberry					Replace with Outlook App with Intune
	ADFS					Replace with B2C and Azure AD PTA

Multi Site – Multi
Node Cluster IaaS

Standalone SQL IaaS
Server with ASR

Dedicated
MI BC

Dedicated
MI GP

Shared MI BC

Shared MI GP

HAGPCLUSTER01

Instance 1
• Application 1
• DB 1
• DB 2
• Application 2
• DB 1
• DB 2
Instance 2
• Application 1
• DB 1
• DB 2

SAGPSERVER01

Instance 1
• Application 1
• DB 1
• DB 2
• Application 2
• DB 1
• DB 2
Instance 2
• Application 1
• DB 1
• DB 2

BCMI<APP>01

Application
• DB 1
• DB 2

GPMI<APP>01

Application
• DB 1
• DB 2

BCMISHARED01

Application 1
• DB 1
• DB 2
Application 2
• DB 1
• DB 2

GPMISHARED01

Application 1
• DB 1
• DB 2
Application 2
• DB 1
• DB 2

HAGPCLUSTER02

Instance 1
• Application 1
• DB 1
• DB 2
• Application 2
• DB 1
• DB 2
Instance 2
• Application 1
• DB 1
• DB 2

SAGPSERVER02

Instance 1
• Application 1
• DB 1
• DB 2
• Application 2
• DB 1
• DB 2
Instance 2
• Application 1
• DB 1
• DB 2

BCMI<APP>02

Application
• DB 1
• DB 2

GPMI<APP>02

Application
• DB 1
• DB 2

BCMISHARED02

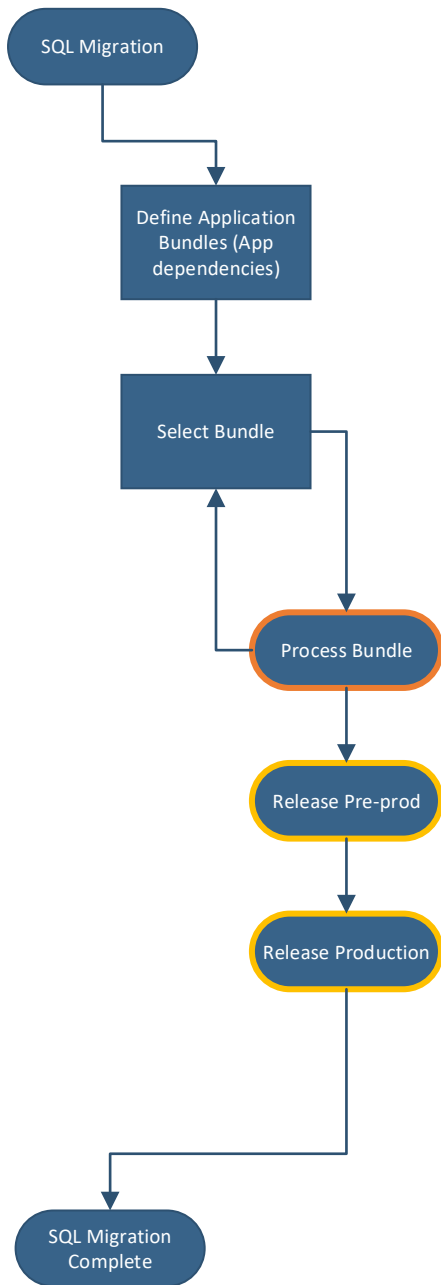
Application 1
• DB 1
• DB 2
Application 2
• DB 1
• DB 2

GPMISHARED02

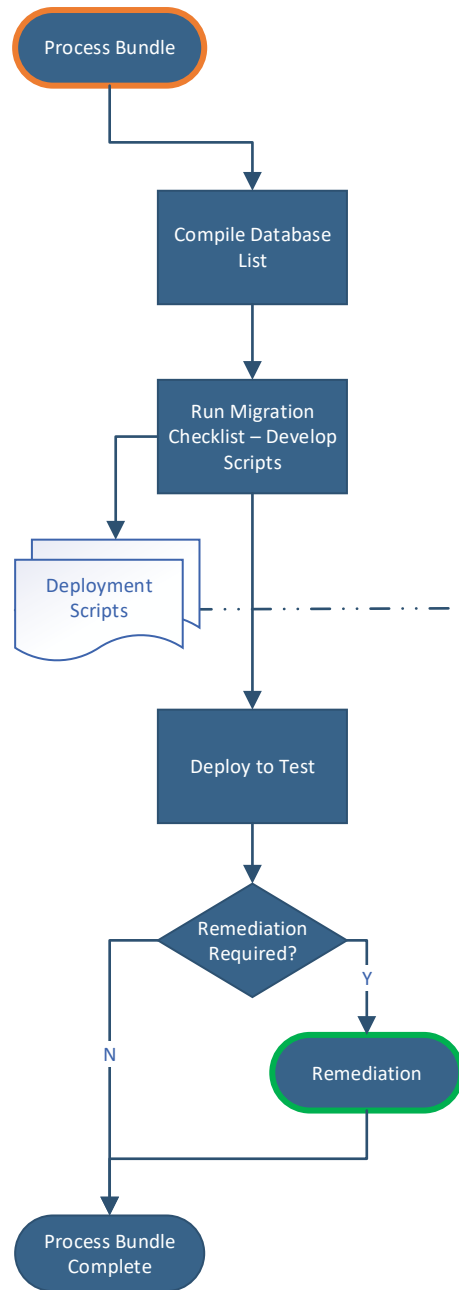
Application 1
• DB 1
• DB 2
Application 2
• DB 1
• DB 2

Azure SQL Migration - High Level Process Flow

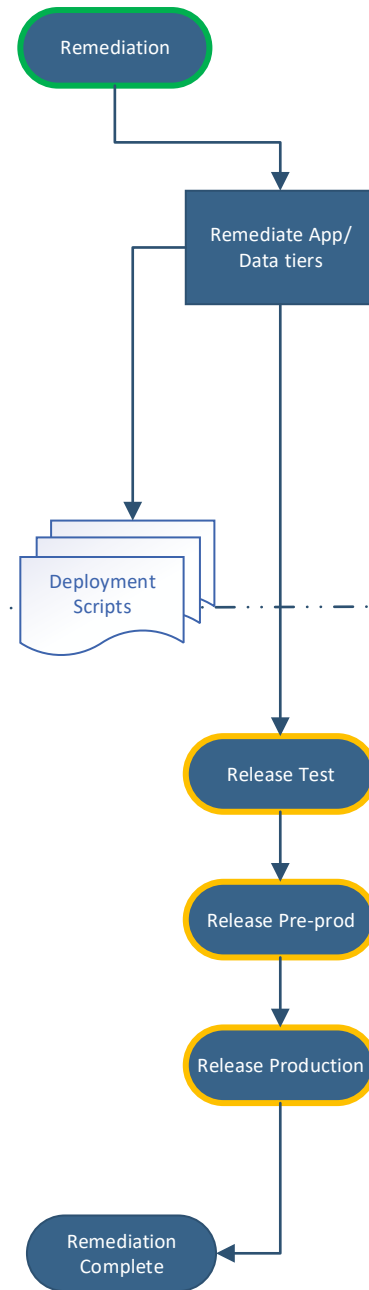
Planning Team



SQL Team



App Development



App Support

