

Azure Active Directory Authentication

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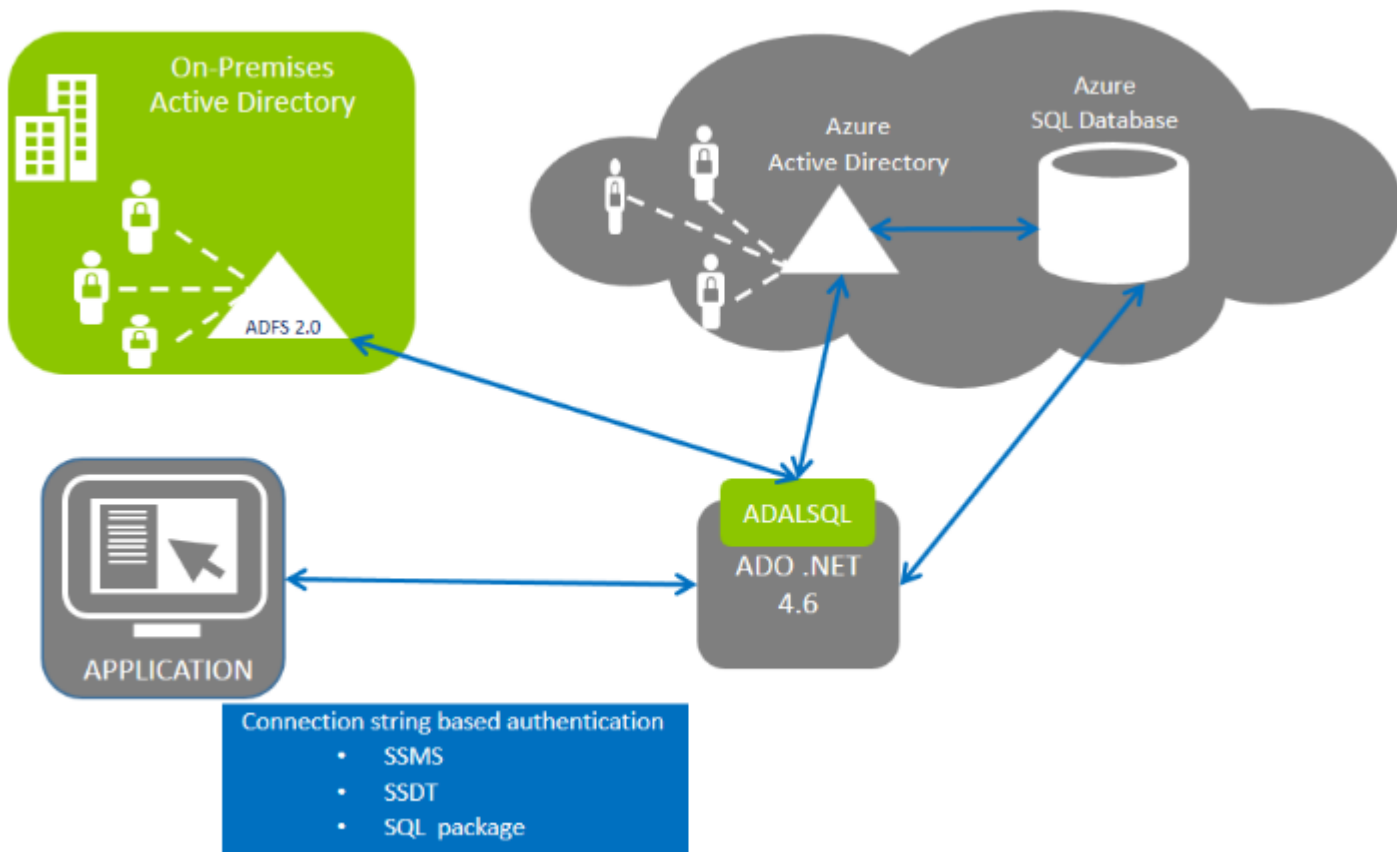
Introduction

AAD provides centralized user management to DBAs, and gives a person an ability to seamlessly log on to Azure SQL DB databases with user's AAD account (username/password, using integrated Windows authentication or with an AAD-issued access token) as specified in a database connection string. This provides a powerful alternative to SQL Authentication (*The only authentication method currently available in Azure SQL DB. It requires customers to provision and manage separate logins in each logical server and dealing with the associated password synchronization problem, Due to the lack of centralized account management*). This problem becomes even worse if customers use database-level (contained database) users.

Benefits

- Central management of identities of Azure SQL DB database users, which includes a more centralized and secure model for managing credentials of database uses.
- Ability to log on to a database using an AAD identity and a credential of one of the following types:
 - Username/password
 - Integrated authentication
 - An AAD-issued access token.
- Multi-Factor Authentication (MFA).
- Integration with On-Premise Active Directory.
- Single Sign-On (SSO) capabilities.
- This section contain security related material to handle AAD issues with Azure SQL Database.

How it works

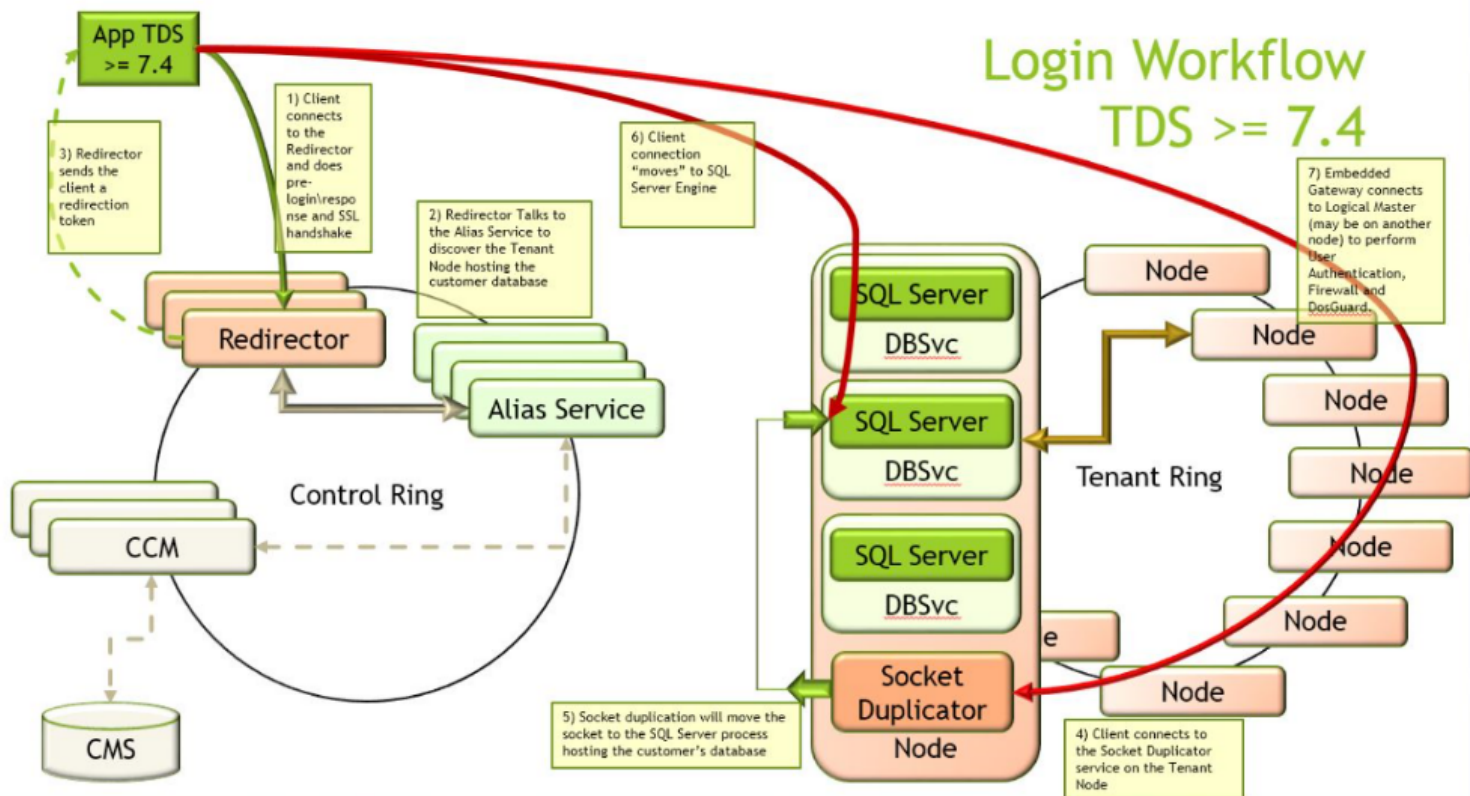


Required Tools

Installer	Link
Azure Powershell	Azure Powershell
.Net 4.6 or higher	.NET 4.7
AADA library for SQL Server	adalsql.msi for amd64 or adalsql.msi for x86
SSMS Latest Version	SQL Server Management Studio
SSDT Latest Version	SQL Server Data Tools for Visual Studio
Visual Studio	Visual Studio Downloads

AAD role in login path

Below is the connection flow works with SQL Authentication. Azure AD Authentication feature Integration starts at Step 7 to perform the user authentication. Below is a snippet of the diagram published in the above wiki which explains the SQL Authentication process.



Topics covered

- Azure Active Directory Overview
- [Active Directory Authentication - Detailed Architecture](#)
- [AAD Authentication Provisioning](#)
- Azure SQL DB AAD Examples
- Azure SQL DB AAD Troubleshooting
- Azure SQL DB AAD Collaboration
- Azure SQL DB AAD Source Inputs

How good have you found this content?

