

Understanding Microsoft Server and Azure Capabilities

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Microsoft Azure is a cloud-based platform build by Microsoft. It is a cloud service that is designed to bring new solutions to life. According to Microsoft (n.d.), get security from the ground up with Azure and backed by a team of professionals. Azure will operate seamlessly where you need it. It is built on your terms with the commitment of open source. And is ready for the future with continuous innovation. This will allow Microsoft Azure to be one of the best cloud-based services on the market.

Microsoft Azure provides its customers with different options with its services. These include on-premises, hybrid, and cloud AD DS. With the on-premises option, technologies on Azure could be provided by the cloud when they are used in a local environment. Certain types of on-premises are frequently used in Azure solutions. These include Windows Server 2022, SQL Server 2019, Exchange Server, Active Directory Domain Services in Windows Server 2016, and Host Integration Server, according to Microsoft 2023. Now with the hybrid option, or also known as cloud hybrid. Allows a computing environment that combines an on-premises datacenter. Which allows “data and applications to be shared between them,” (Microsoft, n.d., Paragraph 1). This will allow information of data and applications to be stored in both areas, the cloud and on-premises. Some areas they may be used in includes industries with highly sensitive data, such as banking or finances. This will allow data of certain types to be stored either in the cloud or as a physical machine. The final option, cloud Active Directory Domain Services allows customers to manage domain services without the need to deploy, manage, and patch domain controllers. Options that will allow this include, “AD DS managed domain lets you run legacy applications in the cloud that can't use modern authentication methods, or where you don't want directory lookups to always go back to an on-premises AD DS environment,” (Justinha, 2023,

Paragraph 2). What Azure AD DS allows is the use of legacy applications in the cloud whereas they cannot be used authentication methods. It will also directly allow lookups to go to a different premises in the AD DS environment. Options that could be used with this are applications services and virtual machines that can be used to connect to these domains.

Microsoft Azure comes with tools that could be used for its AD DS portion. These include Azure AD Connect, which according to billmath 2023, is a feature where it allows you to have a password hash synchronization with your AD passwords. Azure AD Domain Services, which is a fully managed domain service that provides many types of features for cloud and on-premises. Azure AD Connect Health allows for robust monitoring of the identity infrastructures, it also allows you to maintain a reliable connection to the Microsoft Online Services, according to billmath 2023. Azure AD Join allows for access to both cloud and on-premises apps and resources, according to MicrosoftGuyJFlo 2023. Finally, Azure AD Password Protection allows for protection against weak passwords and there many forms, it could also block variant specific to your organization, according to Justinha 2023. All the different tools that AD DS offer are quite different in their own way. What I mean by this is that some tools are meant to create strong passwords while others are used to allow users to access apps that are found both on-premises or in the cloud.

Looking at the features Azure provides; I think there will be some benefits with using this cloud-based service. The first benefit of using Azure is how convenient it will be to set it up, what I mean by this is that Azure could be used with the existing software we already have. Another benefit of using Microsoft Azure is the support you will receive with it, operate seamlessly when you need it, backed by professionals, and commitment to open source.

A job role I was able to find for this type of job was a Cloud Solutions Architect, what they are responsible for is design and implementation of the cloud-based solution. Skills that are needed to accomplish this job are the following: must have a strong understanding of cloud computing, and Azure architecture and design. Must also possess networking and security knowledge, programming and automation, and finally communication and collaboration.

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