# Redback Operations: Viability Assessment Entra ID

#### Overview

Microsoft Entra ID, formerly known as Active Directory, is a cloud-based identity and access management solution that offers comprehensive features to enhance security and streamline operations. This assessment evaluates the viability of implementing Entra ID for Redback Operations, focusing on the benefits, costs, and potential impacts on the organization's security posture and operational efficiency.

One of the primary benefits of Entra ID is its robust security features. By enabling Multi-Factor Authentication (MFA), Redback can significantly bolster its security posture. MFA adds an extra layer of protection, requiring users to provide additional verification beyond just a password, which helps prevent unauthorized access. Additionally, Entra ID's Conditional Access capabilities allow the company to define specific access policies based on various conditions such as user location, device type, or role, thus providing more granular control over who can access what resources and under what circumstances. The Smart Lockout feature further enhances security by automatically locking accounts after several unsuccessful login attempts, thereby mitigating the risk of brute-force attacks.

Entra ID also contributes to operational efficiency by simplifying and automating many identity and access management tasks. The platform supports seamless user provisioning and deprovisioning between on-premises Active Directory and cloud-based applications, reducing the administrative overhead associated with manual user management. The self-service password reset feature empowers users to manage their passwords independently, which not only improves user experience but also reduces the workload on IT support teams. Furthermore, Entra ID's integration capabilities allow for the central management of both cloud and onpremises resources, streamlining processes and improving overall operational efficiency.

Another significant advantage of Entra ID is its scalability and flexibility. The platform is designed to support both Business-to-Business (B2B) and Business-to-Customer (B2C) scenarios, making it versatile enough to manage external users such as partners and customers. This capability ensures that Redback can maintain control over its corporate data while facilitating secure collaboration with external parties. Entra ID also offers hybrid identity management through Microsoft Entra Connect and Connect Health, enabling a unified approach to identity management that spans both on-premises and cloud environments. This flexibility is crucial for accommodating Redback's growth and evolving business needs.

#### **Features**

The table below summarizes the key features offered by Entra ID:

Category	Description	
Application	Management of cloud and on-premises apps using Application Proxy,	
management	single sign-on, the My Apps portal, and Software as a Service (SaaS)	
	apps.	
Authentication	Microsoft Entra self-service password reset, Multifactor	
	Authentication, custom banned password list, and smart lockout.	
Microsoft Entra ID	Build apps that sign in all Microsoft identities, get tokens to call	
for developers	Microsoft Graph, other Microsoft APIs, or custom APIs.	
Business-to-	Ability to manage guest users and external partners, while	
Business (B2B)	maintaining control over your own corporate data.	
Business-to-	Customize and control how users sign up, sign in, and manage their	
Customer (B2C)	profiles when using your apps.	
Conditional Access	Manage access to your cloud apps.	
Device Management	nent Manage how your cloud or on-premises devices access your	
	corporate data.	
Domain services	Join Azure virtual machines to a domain without using domain	
	controllers.	
Enterprise users	Manage license assignments, access to apps, and set up delegates	
	using groups and administrator roles.	
Hybrid identity	Use Microsoft Entra Connect and Connect Health to provide a single	
	user identity for authentication and authorization to all resources,	
	regardless of location (cloud or on-premises).	

Table 1 Which features work in Microsoft Entra ID? (Microsoft, 2024.)

# Licensing

Microsoft offers a range of licensing options for Entra ID, including three paid tier subscriptions and a free tier that provides basic services. The cost of implementing Entra ID is largely driven by licensing. This is due to, an ongoing subscription fee if you'd like to make the most out of the solution.

Microsoft Entra ID	Microsoft Entra ID P1	Microsoft Entra ID P2
Free		
Free	AU\$9.00	AU\$13.50
	user/month	user/month

Table 2. Microsoft Entra Plans & Pricing (Microsoft, 2024.)

The free tier includes essential features such as user and group management, on-premises directory synchronization, basic reporting, self-service password changes for cloud users, and single sign-on across Azure, Microsoft 365, and various popular SaaS applications. The paid tiers offer additional functionalities, including advanced security reports, more detailed access control options (P1), and identity protection (P2). It's important for Redback to carefully assess its specific needs and choose a subscription tier that aligns with its requirements, ensuring both cost-effectiveness and access to necessary features.

## **Implementation**

The implementation process begins with creating a new tenant specifically for Redback, which serves as the central hub for managing users and resources. The next step is to configure a global administrator account, granting overarching control over the Entra ID environment. To ensure efficient resource management and streamlined access control creating groups based on user roles within the company will enable admins a holistic view to granting and revoking access. Implementing role-based access management ensures that employees have the necessary permissions to perform their duties without overexposing sensitive information. This approach not only enhances security but also simplifies the management of access rights as roles and responsibilities change over time.

# Integration

A key advantage of Entra ID is its ability to integrate seamlessly with Windows Server Active Directory if chosen for deployment. This integration facilitates the centralized management of both on-premises and cloud resources, providing a unified identity and access management solution. It also ensures that users have a consistent experience regardless of whether they are accessing on-premises applications or cloud-based services.

#### Conclusion

The implementation of Microsoft Entra ID at Redback offers significant benefits, including enhanced security, operational efficiency, and scalability. By leveraging Entra ID's comprehensive features, Redback can improve its security posture, streamline identity and access management, and reduce administrative overhead. The assessment indicates that Entra ID is a viable solution that aligns with Redback's strategic objectives, providing a robust and scalable platform for managing identities and access in a secure and efficient manner.

## References

Microsoft, 2024. What is Microsoft Entra ID? | Which features work in Microsoft Entra ID? https://learn.microsoft.com/en-au/entra/fundamentals/whatis

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