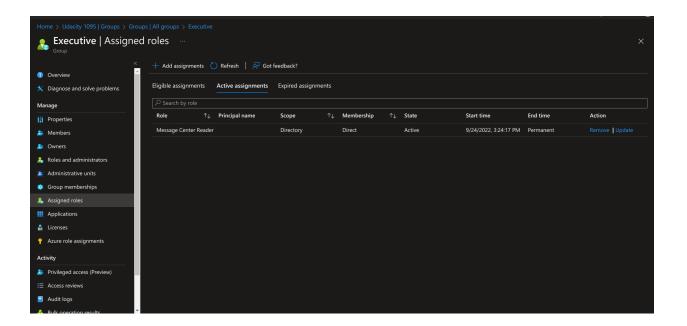
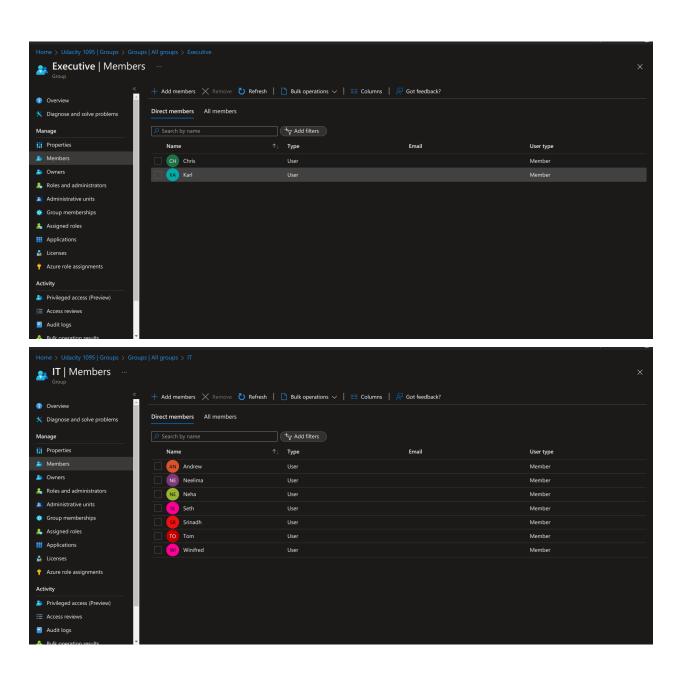
Attention students:

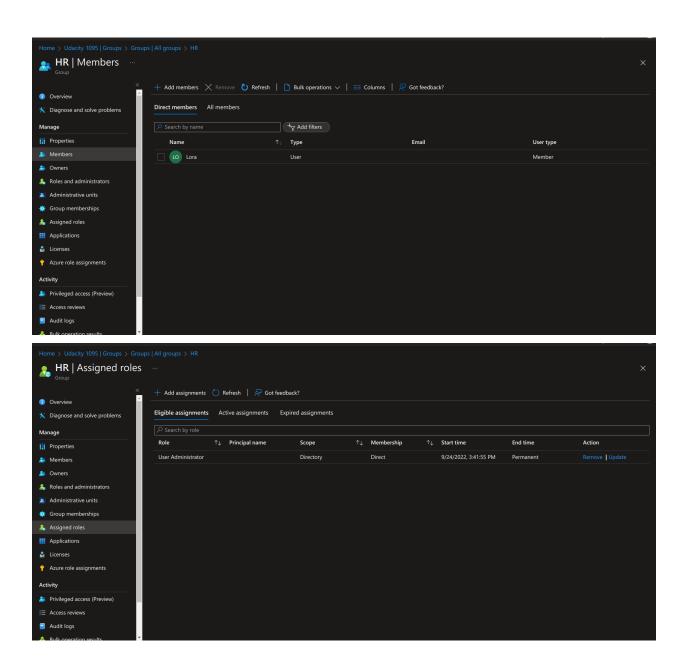
In order to demonstrate successful completion of all components in the project, please use screenshot(s) to show each <u>completed</u> action step as specified on the instructions page.

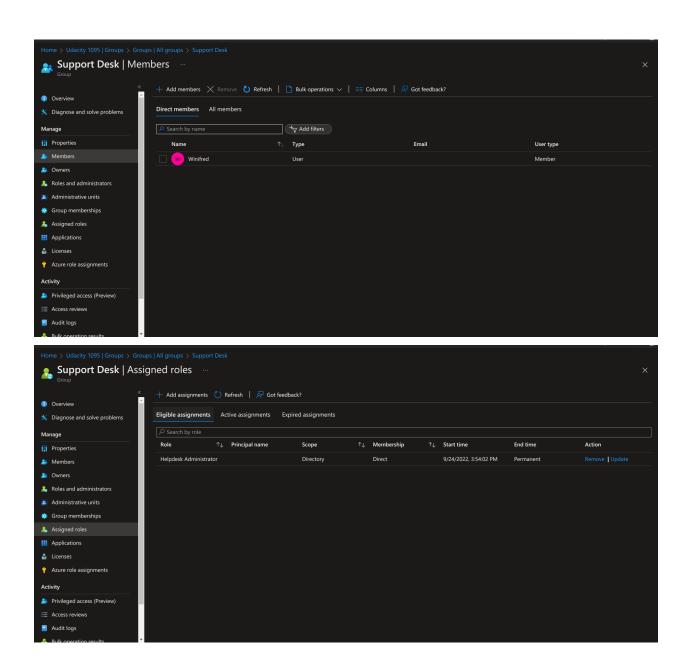
Identity and Access Management

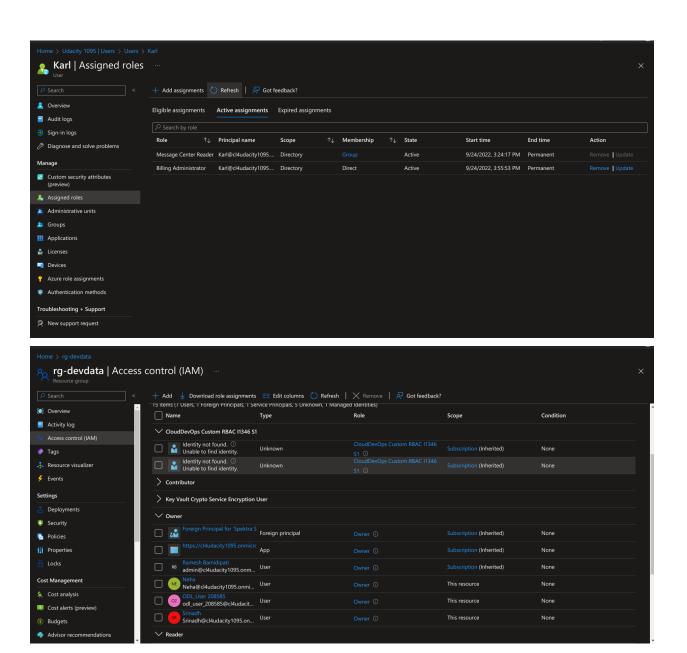
- 1. Proof of Assigned roles and AD assignments
 - a. Andrew
 - b. Chris
 - c. Karl
 - d. Lora
 - e. Neelima
 - f. Neha
 - g. Seth
 - h. Srinadh
 - i. Tom
 - j. Winifred

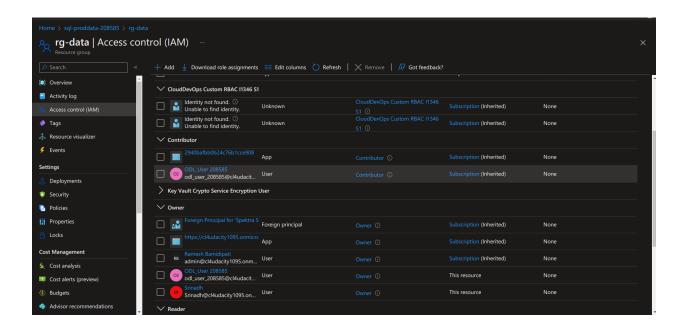






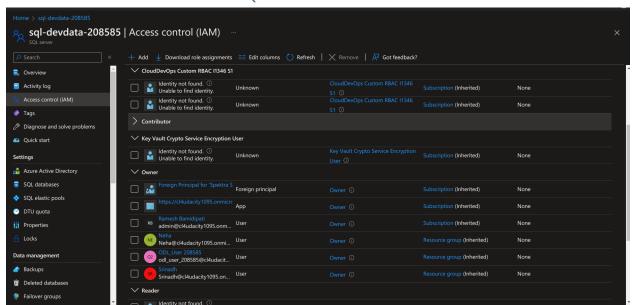


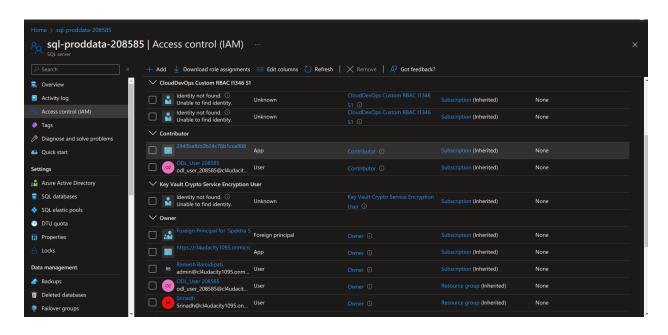


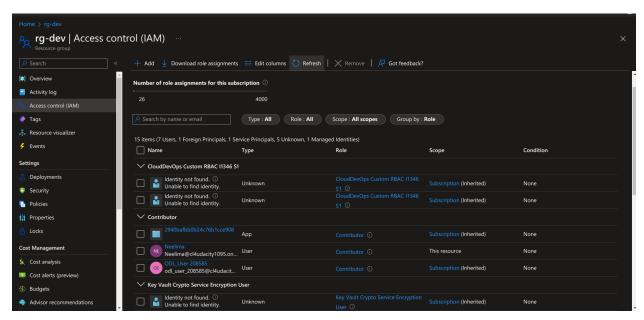


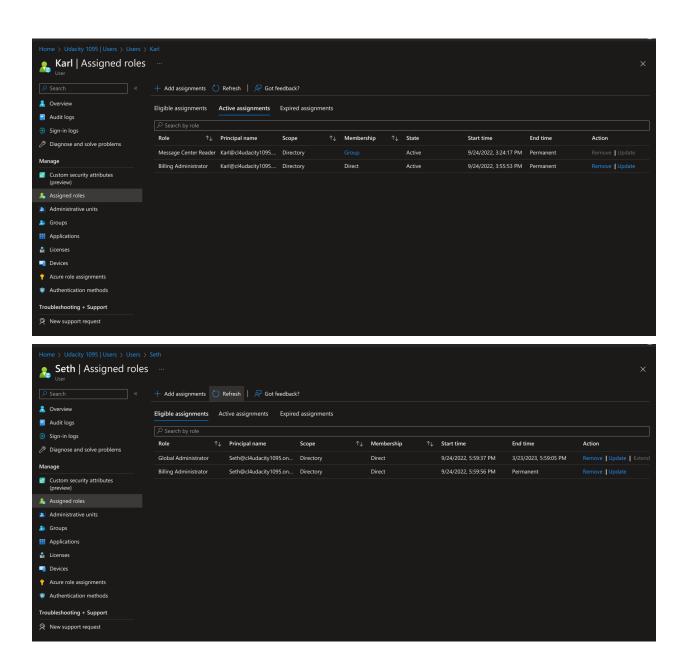
V2:

Owner Access to Dev and Prod SQL Servers:

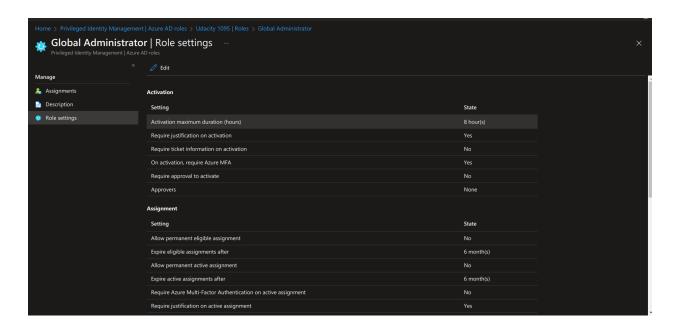




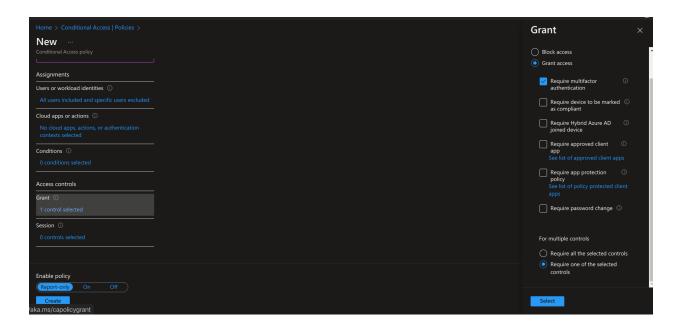




2. Proof of Global Administrator setting with duration, eligibility, expiration



3. Proof of Conditional Access policy all users



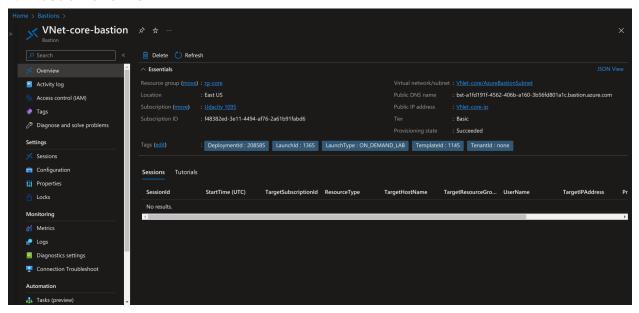
4. Proof of Multi-factor authentication(14 days, Charlotte office info)

ар	p passwords (learn more)
<!--</th--><th>Allow users to create app passwords to sign in to non-browser apps Do not allow users to create app passwords to sign in to non-browser apps</th>	Allow users to create app passwords to sign in to non-browser apps Do not allow users to create app passwords to sign in to non-browser apps
tru	sted ips (learn more)
~	Skip multi-factor authentication for requests from federated users on my intranet
Sk	rip multi-factor authentication for requests from following range of IP address subnets
143	3.52.0.0/24
ve	rification options (learn more)
	hods available to users: Call to phone Text message to phone Notification through mobile app Verification code from mobile app or hardware token
rer	member multi-factor authentication on trusted device (learn more)
~	Allow users to remember multi-factor authentication on devices they trust (between one to 365 days) Number of days users can trust devices for 14 NOTE: For the optimal user experience, we recommend using Conditional Access sign-in frequency to extend session lifetimes on trusted devices, locations, or low risk sessions as an alternative to 'Remember MFA on a trusted device' settings. If using 'Remember MFA on a trusted device,' be sure to extend the duration to 90 cmore days. Learn more about reauthentication prompts.

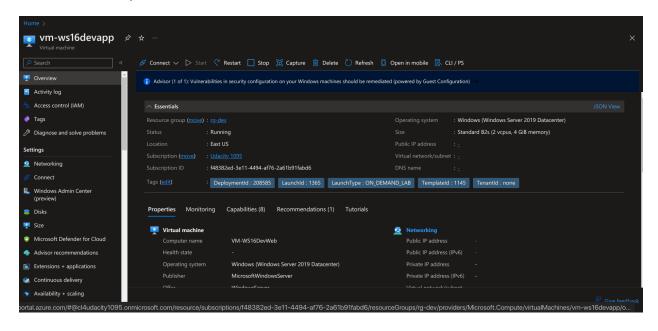
save

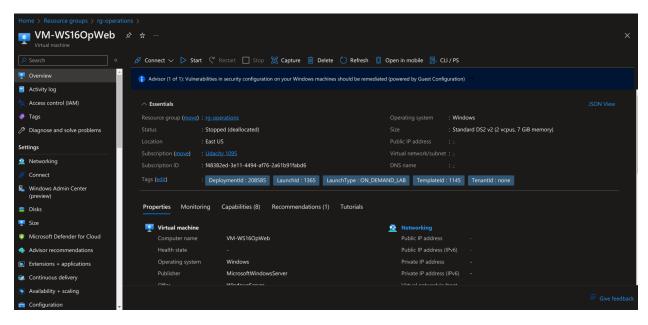
Network Security

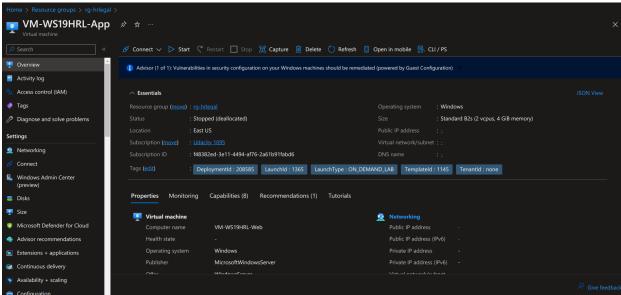
1. Bastion overview

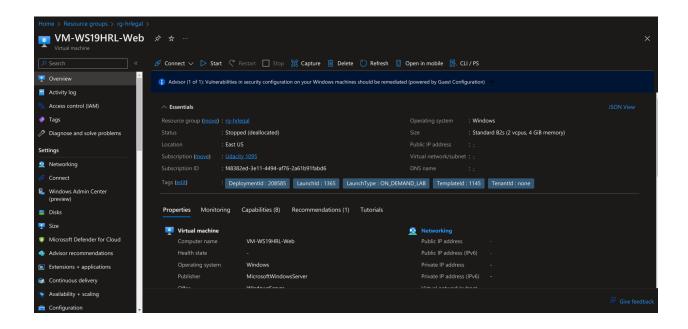


2. Proof of public IP addresses removed



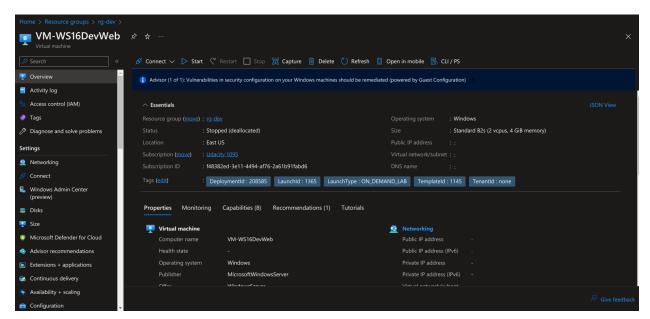






V2:

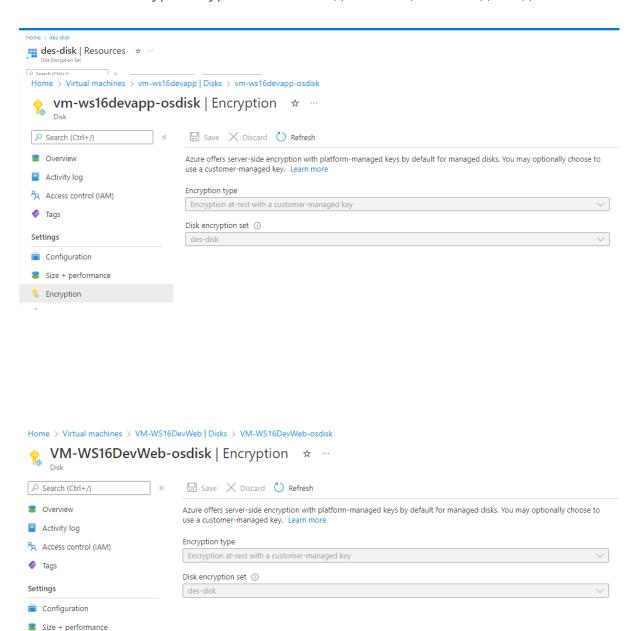
Removed public ip address from VM-WS16DevWeb

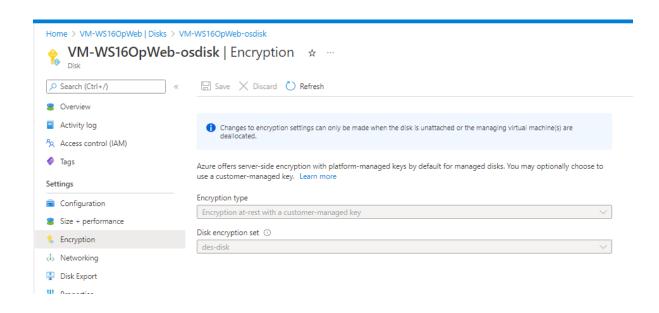


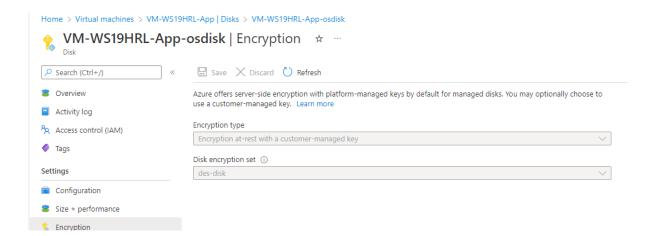
Data and Encryption

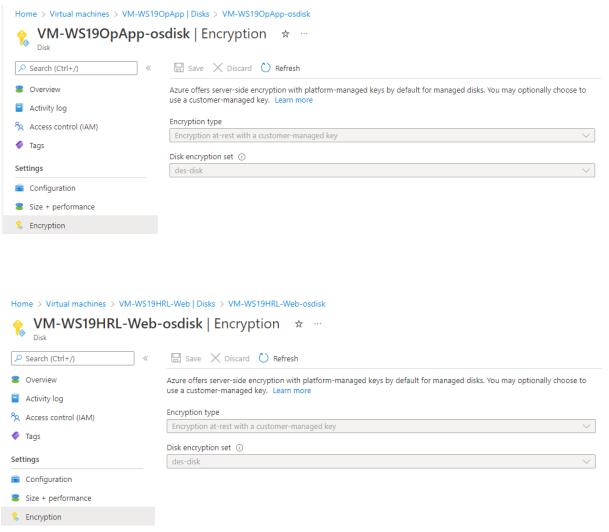
Encryption

1. Proof of Encryption types for VM (devapp, DevWeb, OpWeb, HRL-App, OPApp, HRL-Web)

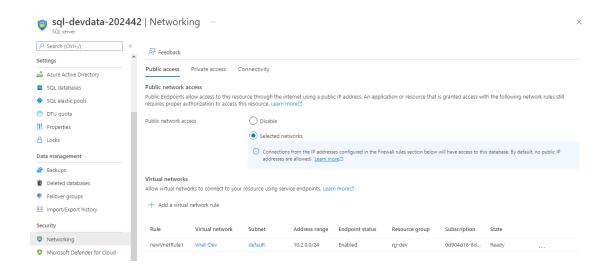


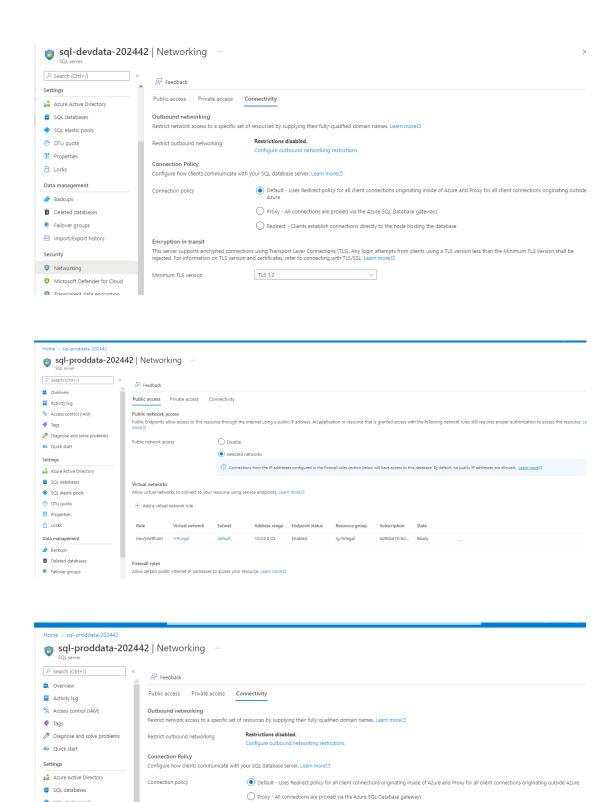






- 2. Firewalls and virtual networks page
 - a. Proof of no public access and TLS for SQL servers(prod, dev)





Redirect - Clients establish connections directly to the node hosting the database

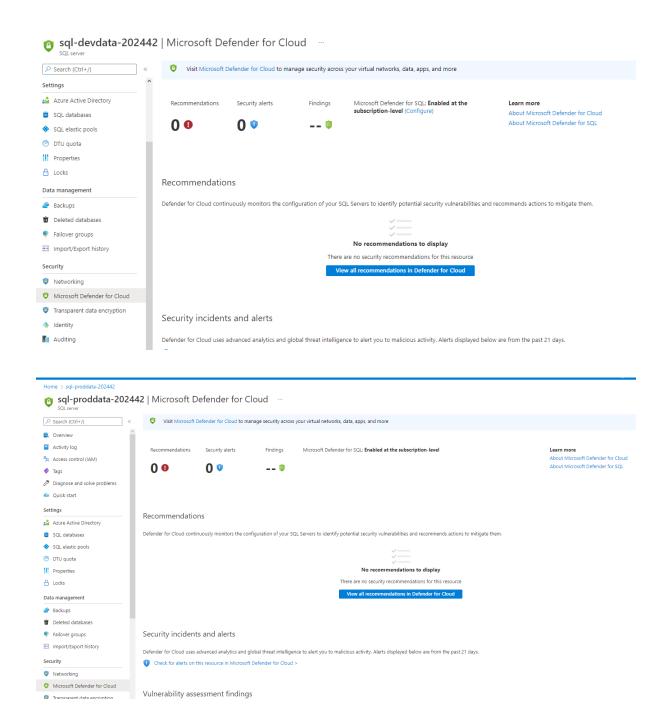
This server supports encrypted connections using Transport Layer Connections (TLS). Any login attempts from clients using a TLS version less than the Minimum TLS Version shall be rejected. For ir to connecting with TLS/SSL Learn moreC

3. Proof of Azure Defender SQL server enabled(prod, dev)

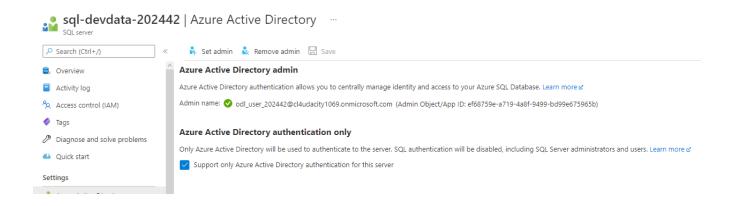
SQL elastic pools

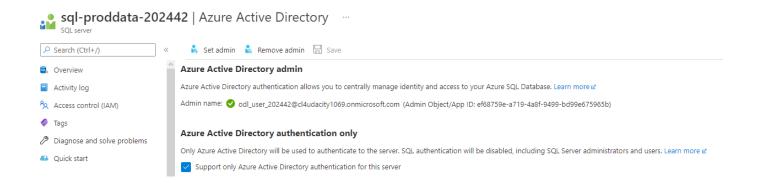
Data management

DTU quota Properties



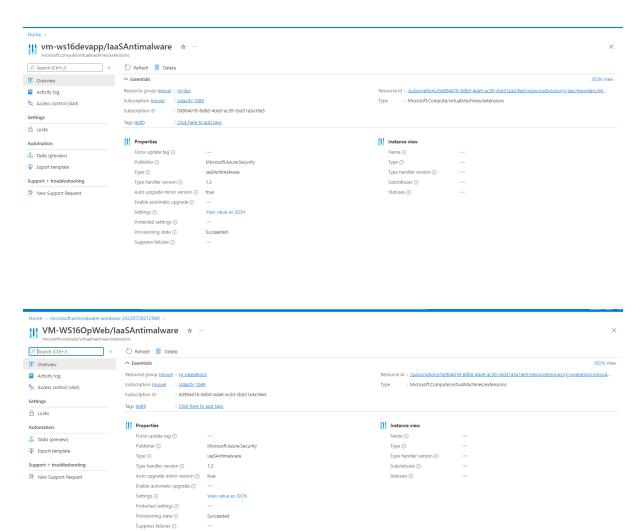
4. Proof of Azure AD authentication for SQL enabled(prod, dev)

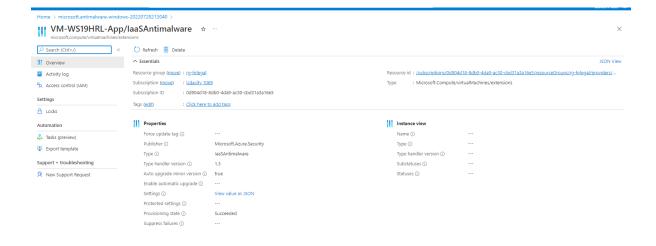


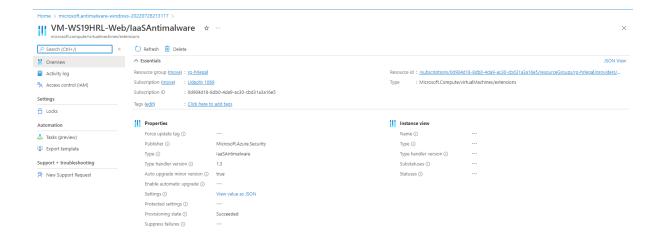


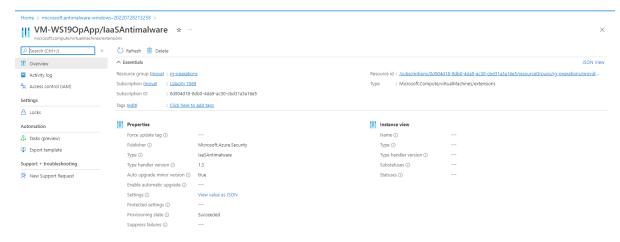
Cloud Protection

1. Proof of IaaSAntimalware enabled (devapp,DevWeb,OpApp,HRL-Web, HRL-App,OpWeb)



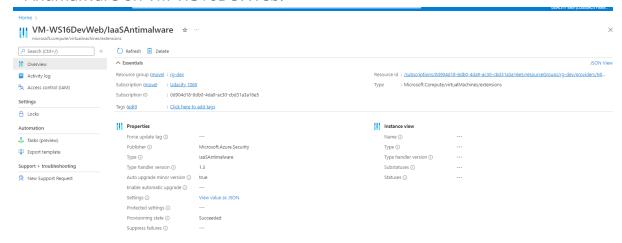




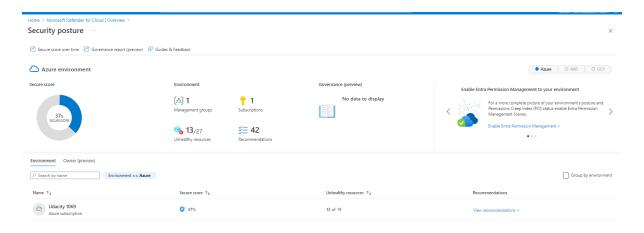


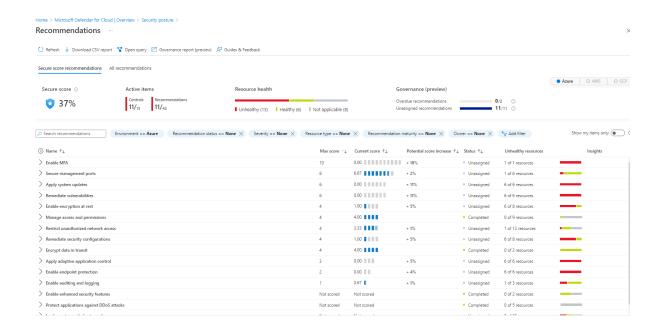
V2:

Antimalware on VM-WS16DevWeb:



2. Recommendations





→ Multi-Factor Authentication (MFA) is a method used to authenticate our identity.

It is often stated as a combination of two or more forms of

- What you know,
- What you have
- What you are
- → Multi-Factor Authentication has become commonplace in everyday life for most of us. It is so common we often use it without even realizing it. Banking is the most common use. When you use an ATM, you often use a card and a PIN. Your credit cards now have a chip that confirms the number on the card belongs to that chip and hasn't been duplicated onto a false card.



Multi Factor Authentication is not set up for user account Ramesh Bamidipati.

User accounts requiring MFA

Enable MFA for the following user accounts:

Ramesh Bamidipati

→ Other 2 top remediations are "Apply system updates" and "Remediate vulnerabilities". Both of them

have a score of 0/6.

- → System Updates are crucial as hackers are constantly searching for their way in by any means.
- → Security patches are constantly released for systems so keeping them up to date ensures that one cannot use that as an advantage to gain access to something



We should install the log analytics agent on all of our VMs.

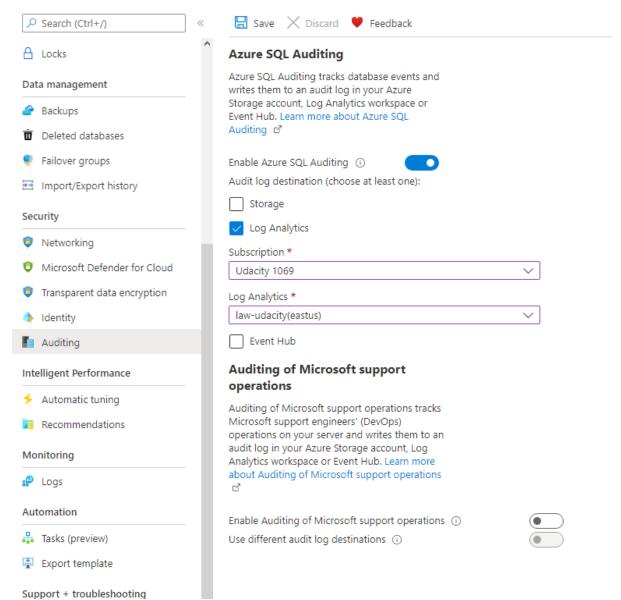
And we should install vulnerability assessment tools on our VMs.

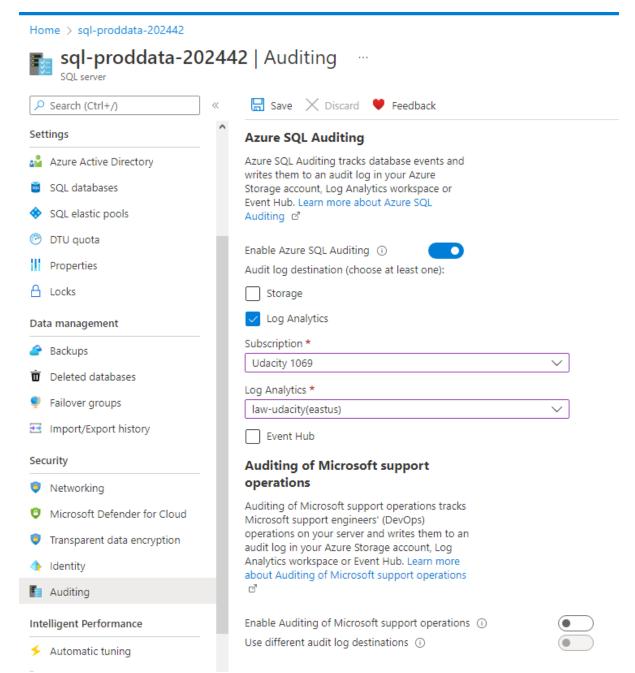
→ Log analytics also clarify patterns that relate to performance. Reviewing logs from data sources helps determine trends, allows for greater understanding of user behavior, and improves search functionality of application issues.

Monitoring

1. Proof of Azure SQL auditing with Log analytics (devdata, proddata)

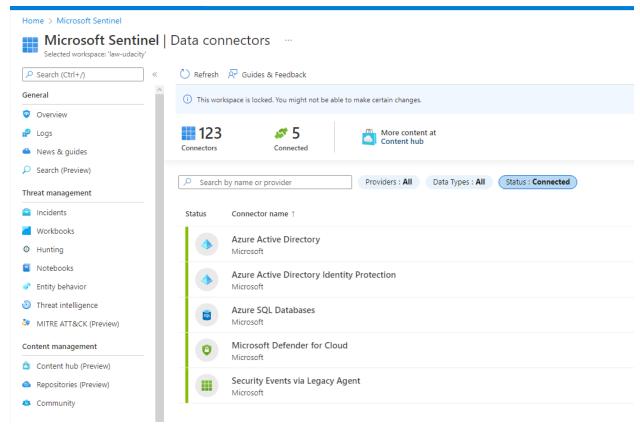






2. Proof of Sentinel connectors (2+)

Adding Azure AD Connector to Sentinel:



Compliance

1. Proof of NIST SP 800-53 rev4 policy added

