In the Cloud, Identity is Control

> *"You can have all of the security features you want. But if I can convince the system I'm you, it's game over."*

Alex Weinert,
VP Director of Identity Security
Microsoft

When working with highly sensitive data, you don't just need an island, you need a **fortified island.**

Your fortress has requirements…

- Strongly controlled access to isolated systems

- Data is only accessible within the environment

- Controls on data movement in and out

- Strong monitoring with telemetry reporting to an external solution

- Automated configuration enforcement to prevent "drift"

The Azure Secure Research Environment

· Created in collaboration with U of Pittsburgh
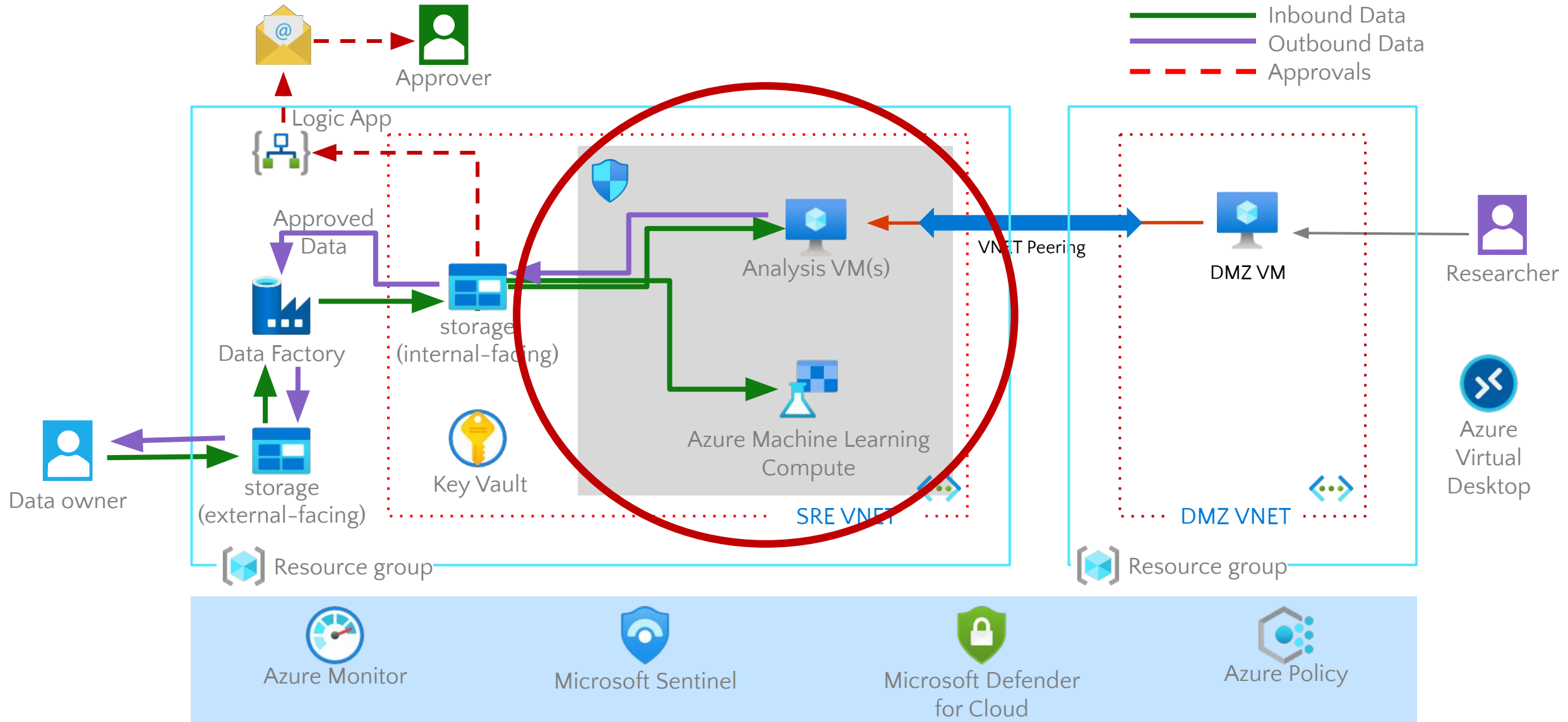· Control data movement
· Isolate compute resources

University of Pittsburgh

Microsoft

https://learn.microsoft.com/azure/architecture/example-scenario/ai/secure-compute-for-research

The Secure Research Environment Model

Inbound Data
Outbound Data
Approvals

Approver

Logic App

Approved Data

Data Factory

storage (internal-facing)

storage (external-facing)

Data owner

Key Vault

Analysis VM(s)

VNET Peering

Azure Machine Learning Compute

SRE VNET

DMZ VM

Researcher

Azure Virtual Desktop

DMZ VNET

Resource group

Resource group

Azure Monitor

Microsoft Sentinel

Microsoft Defender for Cloud

Azure Policy

Try it

· github.com/microsoft/Azure-SRE

· All you need is an Azure subscription

· Use the "Easy Button" from GitHub or download and deploy yourself
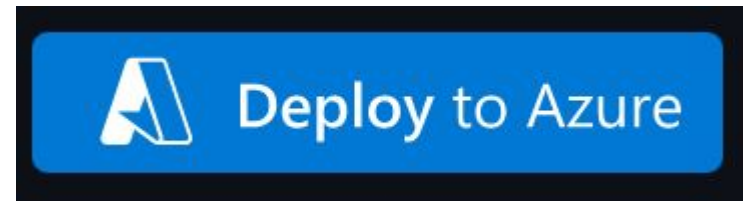
- On-demand webinar: <u>Simplify and automate research compliance responsibilities with Azure</u>

- <u>github.com/microsoft/Azure-SRE</u>

- "**From Zero to Secure Research Hero**" Azure Hour presentation, Aug 2020
  - Brian Pasquini and Jay Graham, U Pittsburgh

- Weekly **open office hours for research**
  - Staffed by US EDU CSAs & friends
  - **Wednesdays 3-4pm ET / noon-1pm PT**
  - **<u>aka.ms/edu/azureresearchofficehours</u>**
  - **We love hearing from PhD candidates and faculty!**

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