





## Tony

Has been virtualized for seventeen years. He has been architecting and building solutions for organizations large and small. Tony is also a senior principal technical marketing engineer at Dell focused on software defined storage. He is an adjunct professor at K-State teaching systems administration and managing a small lab. Discover more at wondernerd.net











## Agenda

- Overview
- Limitations & Constraints
- Traditional Approaches
- A Better Solution
- Design
- Stumbling Blocks
- Where we are at
- The Future



Please See me following the session for questions



## Overview CMST-180 Intro to Database Systems



Administration of AI DB Workloads



Provide management experience



Isolated environment



Both traditional and global student base



Small class to start (8 to 10 Students)



Minimal IT resources





# Organizational Constraints No Budget



**Trial Only** 



Existing Equipment



Accessible From University VPN



8-10 students



Ubuntu & Windows



Promote Learning



## Traditional Approaches – Don't Work!









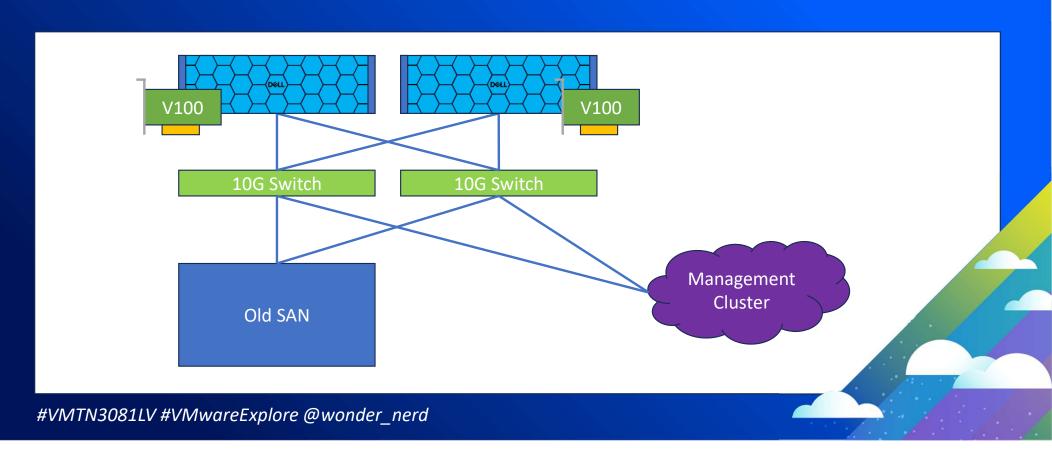
### A Beter Solution – VMware Horizon

- Virtual Desktops
- Templates
- Isolation
- Choice of OS
- Slice of GPU
- Better GPU utilization



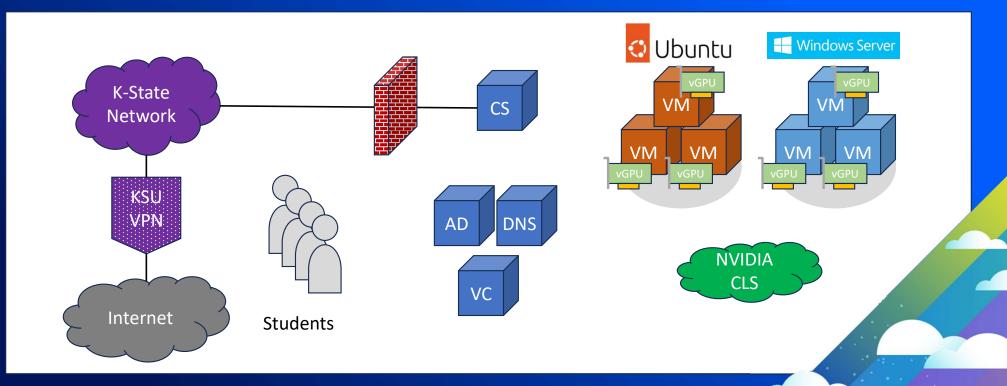


## What We Architected - Physical



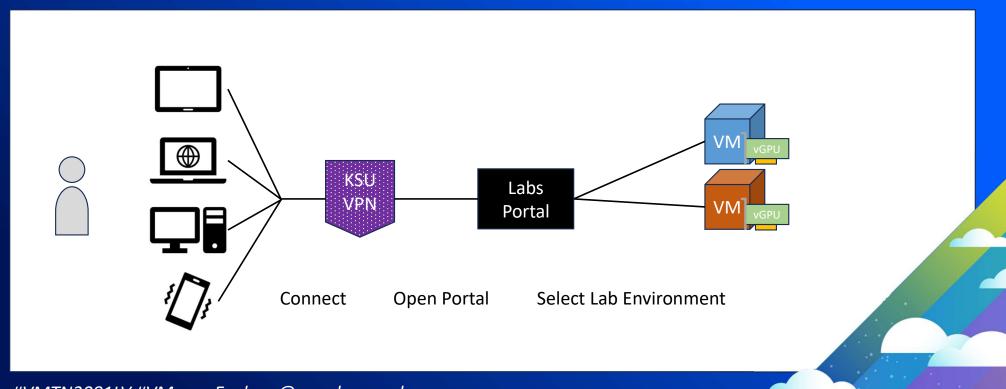


## What We Architected - Logical





## **Student Experience**





## **Stumbling Blocks**

- Licensed as NVIDIA AI Enterprise != vWS
- A100s No Display Heads
- No Linked Clones
- Active Directory/DNS





#### **Current State**

- Environment's built
- Configuring Base Database Instances
- Configuring Templates
- Fixing some DNS issues
- Working with K-State IT on Name Resolution







#### **Future State**



**Expand to more Classes** 



**NVIDIA AI Enterprise license** 



**VMware Horizon license** 



Additional Hosts/GPUs



**Faster Network** 



## Thank You!

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