



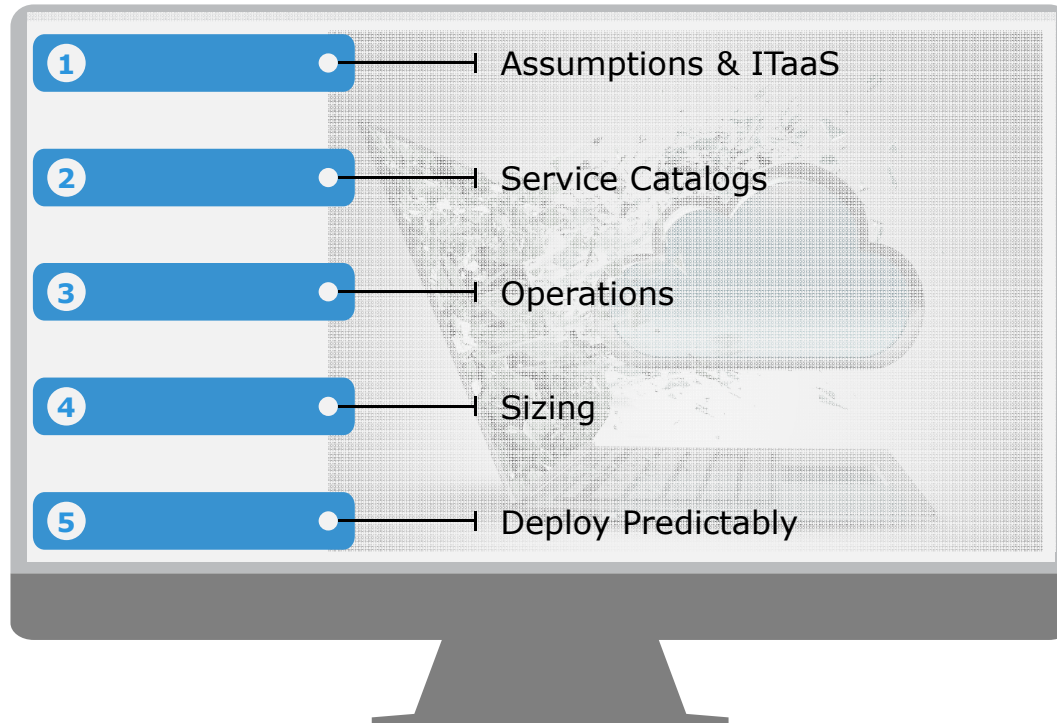
# S6245 – IT-as-a-Service With Visually Intensive VDI

TONY FOSTER – PRINCIPAL TECHNICAL MARKETING ENGINEER

#GTC #S6245



# AGENDA



# ASSUMPTIONS

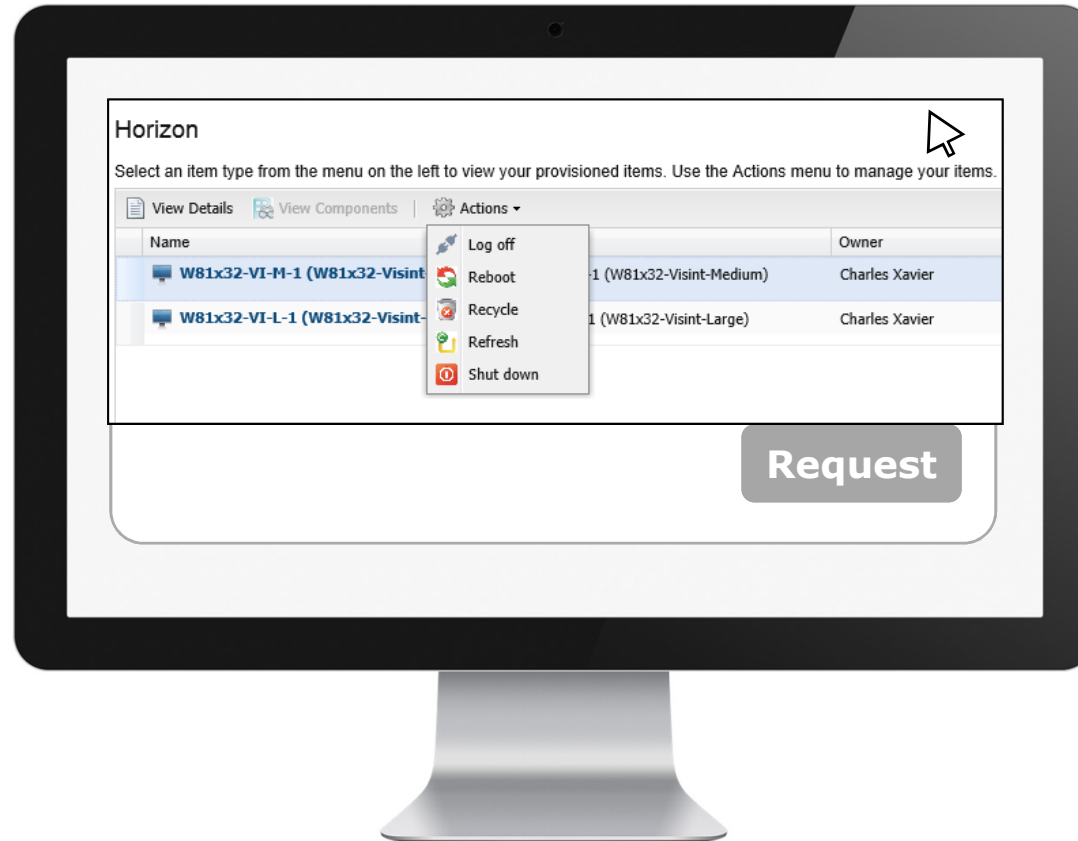
- ✓ **Virtualization Platform:** VMware vSphere
- ✓ **Cloud Architecture:** Private Cloud Leveraging VMware vRealize Suite
- ✓ **Service Catalog:** VMware vRealize Automation
- ✓ **Desktop Platform:** VMware Horizon View
- ✓ **Workloads:** Visually Intensive Users using vGPUs

# IT-as-a-Service (ITaaS)

IT-as-a-Service = Optimizing IT Production for Business

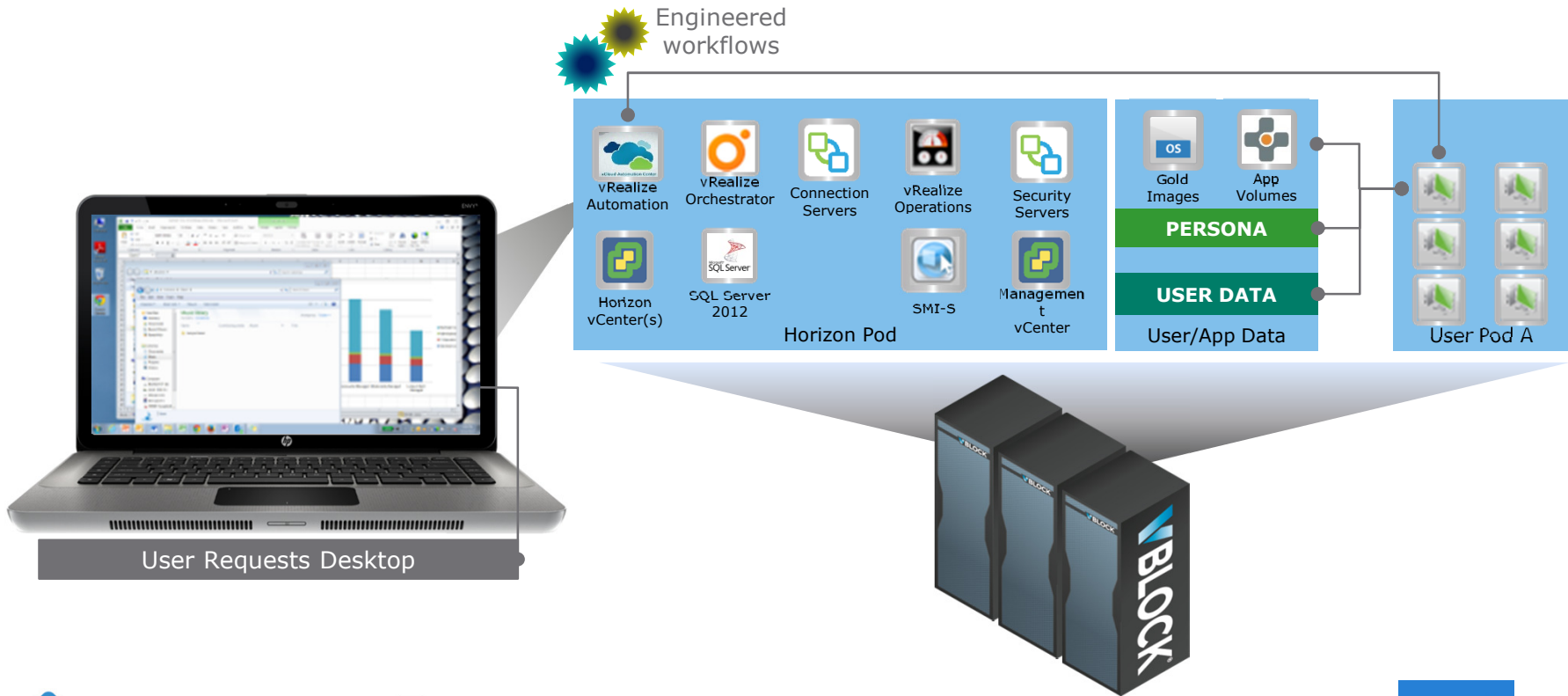


# SERVICE CATALOG



# EMPOWERING END USERS

## REQUEST A WORKSPACE



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# BALANCING

Cost, Performance, and Usability

- Cost

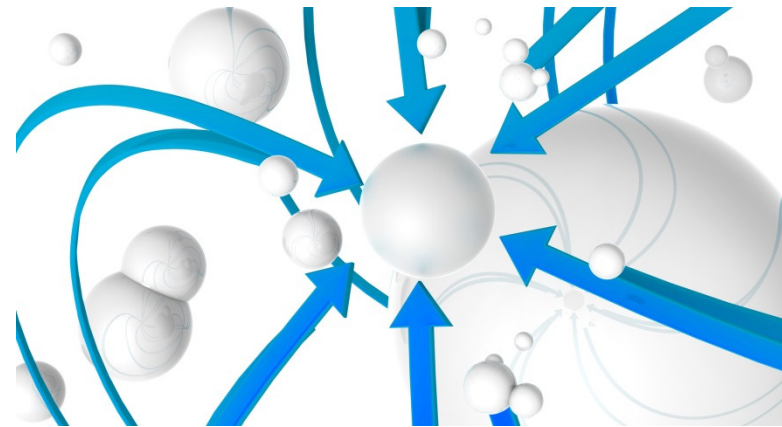
- Initially Comparable to Physical
- Future Cost Decrease
  - Hardware Upgrades
  - OS Upgrades
  - Downtime

- Performance

- Shared User Load
- Dedicated Resources

- Usability

- Delivered On Demand
- Self Service
- Mobility



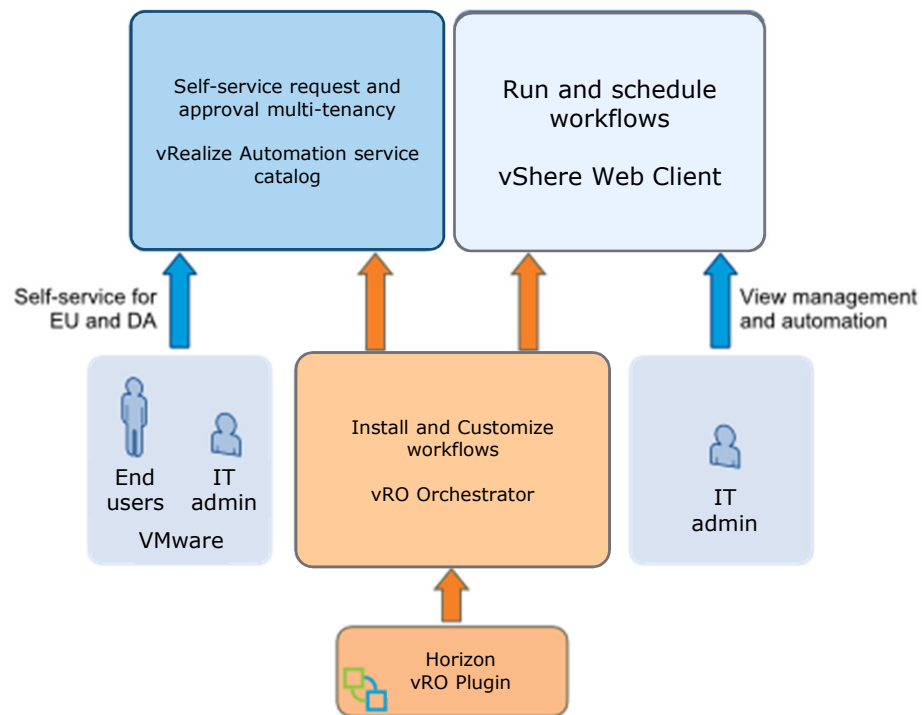
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# SELF-SERVICE

With VMware vRealize Orchestrator and VMware vRealize Automation



- vRealize Orchestrator plug-ins allow seamless automation
- Workflows can be used with the:
  - vSphere Web Client
  - vRealize Automation service catalog

vmware®

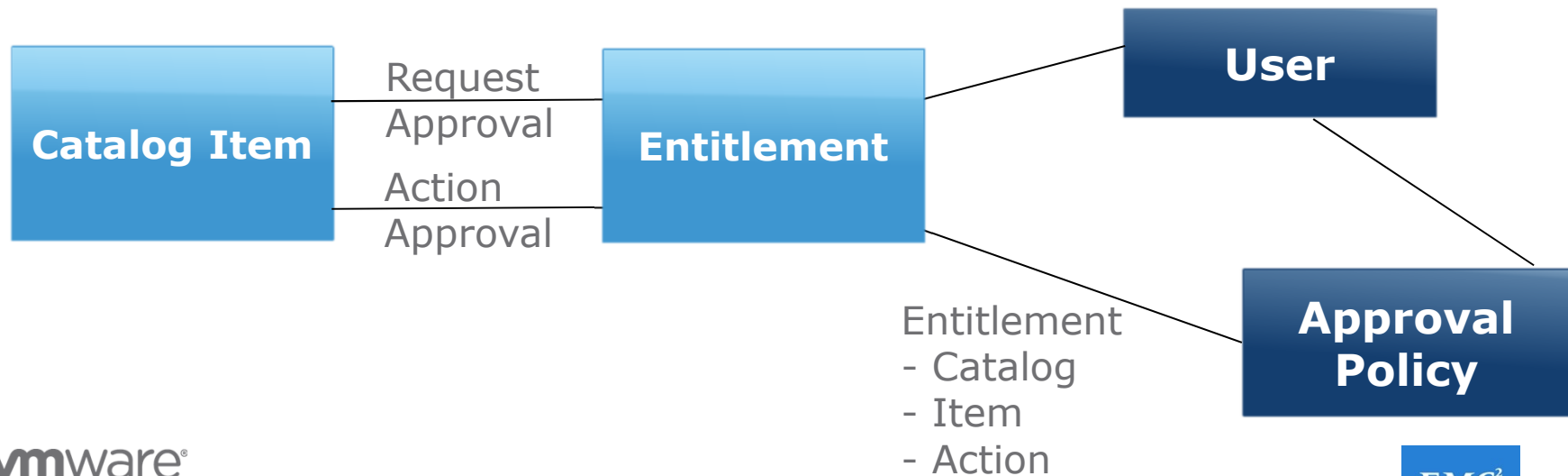
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# CATALOG SECURITY

- Any catalog request, whether it is a request for a catalog item or to perform an action can be subject to approval.
- Approval policies are linked via a item or action entitlement to users.



# END POINT AND OPTIMIZATIONS

- Physical Data Center Controls
- Move Anti-Virus to the Hypervisor
- Disable Removable Storage Devices
  - <http://1drnrd.me/usbredirect>
- PCoIP Settings
  - <http://1drnrd.me/pcoipsettings>
- QOS for congested networks
  - <http://1drnrd.me/netopguide>



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**User Search**

**Object Metrics**

**Object alerts from infrastructure.**

**Issue Located**

1

2

3

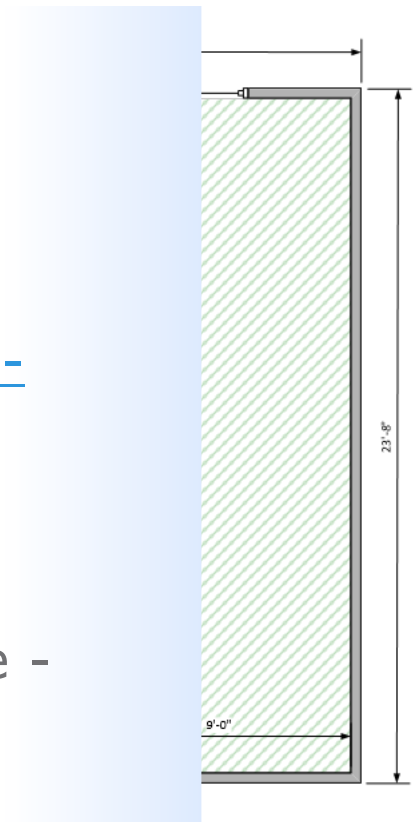
4

Status	Criticality Level	Object Name	Alert Info	Alert Impact	Object Type	Type	Sub-Type	Duration	Severity
Warning	Warning	P1-W7x32-G-...	Virtual machi...	Health	Virtual Machine	Virtualization/...	Performance	03m:59s	9
Warning	Warning	P1-W7x32-G-...	Virtual machi...	Risk	Virtual Machine	Virtualization/...	Performance	1d:44m:23s	7

Metric	Value
VM Health	50 %
VM Overall Workload	93 %
VM CPU Workload	93 %
VM Memory Workload	65 %
VM Disk Workload	0 %
VM Network Workload	81 %
VM Anomaly Count	No Data
Badge   Capacity Remaining	No Data

# SIZING

- Application Documentation
  - Esri - <http://1drnrd.me/esrisysreqs>
  - Revit - <http://1drnrd.me/revitsysreqs>
  - NVIDIA Documentation
  - <http://www.nvidia.com/object/grid-enterprise-resources.html> (< Application Guides)
- VMware Documentation
  - Best Practices - <http://1drnrd.me/3Dbestpractices>
  - Engineering Workloads Reference Architecture - <http://1drnrd.me/engineeringRA>
- Assessment



# NEXT STEPS

- Gather Requirements
- Leverage Reference Architectures
  - <http://ra.federationeuc.com>
- Plan Sizing
  - GPU
  - Compute
  - Storage
- Proof of Concept (POC)



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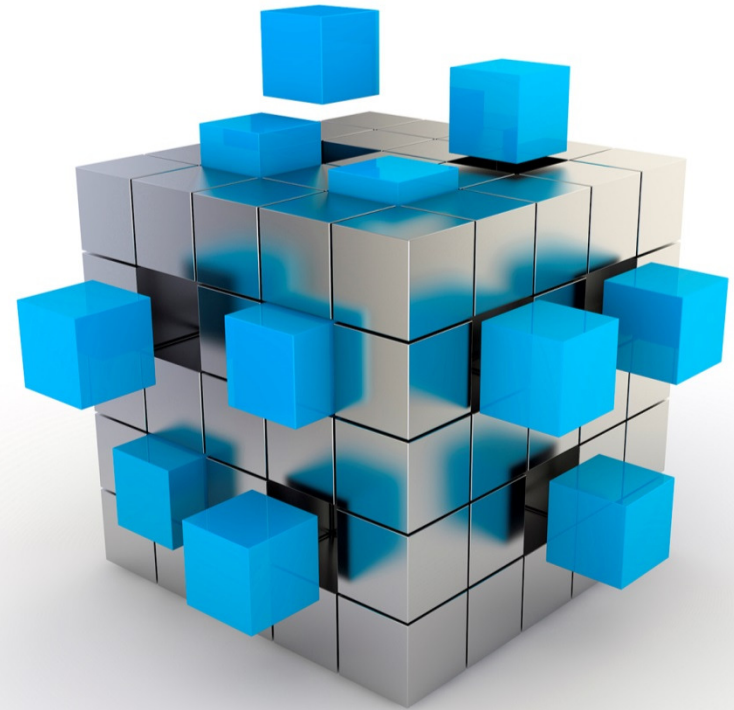
# DEPLOY PREDICTABLY

- Find Compute Capacity
- Find Storage Capacity
- Find Compute and Storage Intersection
- Build in a block like approach

## Example:\*

8 Desktops per host / 1600 Desktops per storage

Intersection: For every 200 hosts increase storage...



\* For illustrative purposes only

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# Questions?

# THANK YOU FOR ATTENDING

- Complete the Session Survey in the Mobile App
- Join the NVIDIA & VMware Community  
[www.nvidia.com/nvc](http://www.nvidia.com/nvc)
- Additional Questions
  - Email: [anthony.foster@emc.com](mailto:anthony.foster@emc.com) or [euc.solutions@emc.com](mailto:euc.solutions@emc.com)
  - Twitter: @wonder\_nerd
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  - Personal Website: <http://wondernerd.net>

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