

# VMUG User/con

St. Louis / Cincinnati

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# *“Use VMUG Advantage licensing to build a diverse lab environment”*

- What is VMUG Advantage
- Software Licenses
- Home Lab Examples
- Demo
- Resources

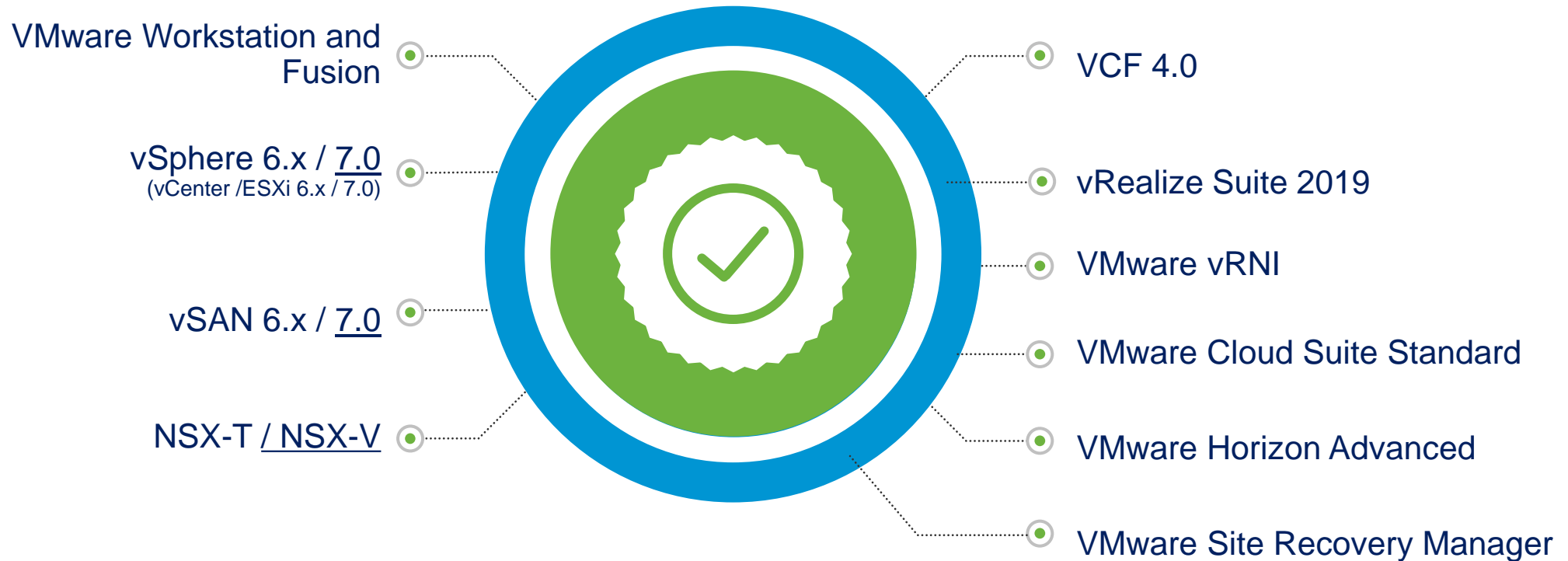
# About me

- Originally from Baltimore, MD
- Lived in CA, WI, KY
- Currently live in Carmel, IN
- Have had a home lab since mid 1990s
- Geek my entire life
- IT work since 1991
- Have had a love/hate relationship with VMware since 2005
- VCP-DCV, VCP-NV
- VMUG Advantage member since 2015

# VMUG Advantage

- VMUG and VMware have teamed up to provide VMUG Advantage, exclusively available to VMUG members.
- VMUG Advantage provides
  - 20-35% Discounts on Training and Certification Tests
  - Access to VMware Software 365-day Eval Licenses
  - Discounts for VMworld
  - The ability to stay up-to-date with VMware

# VMware Advantage BoM



# Home Lab Examples

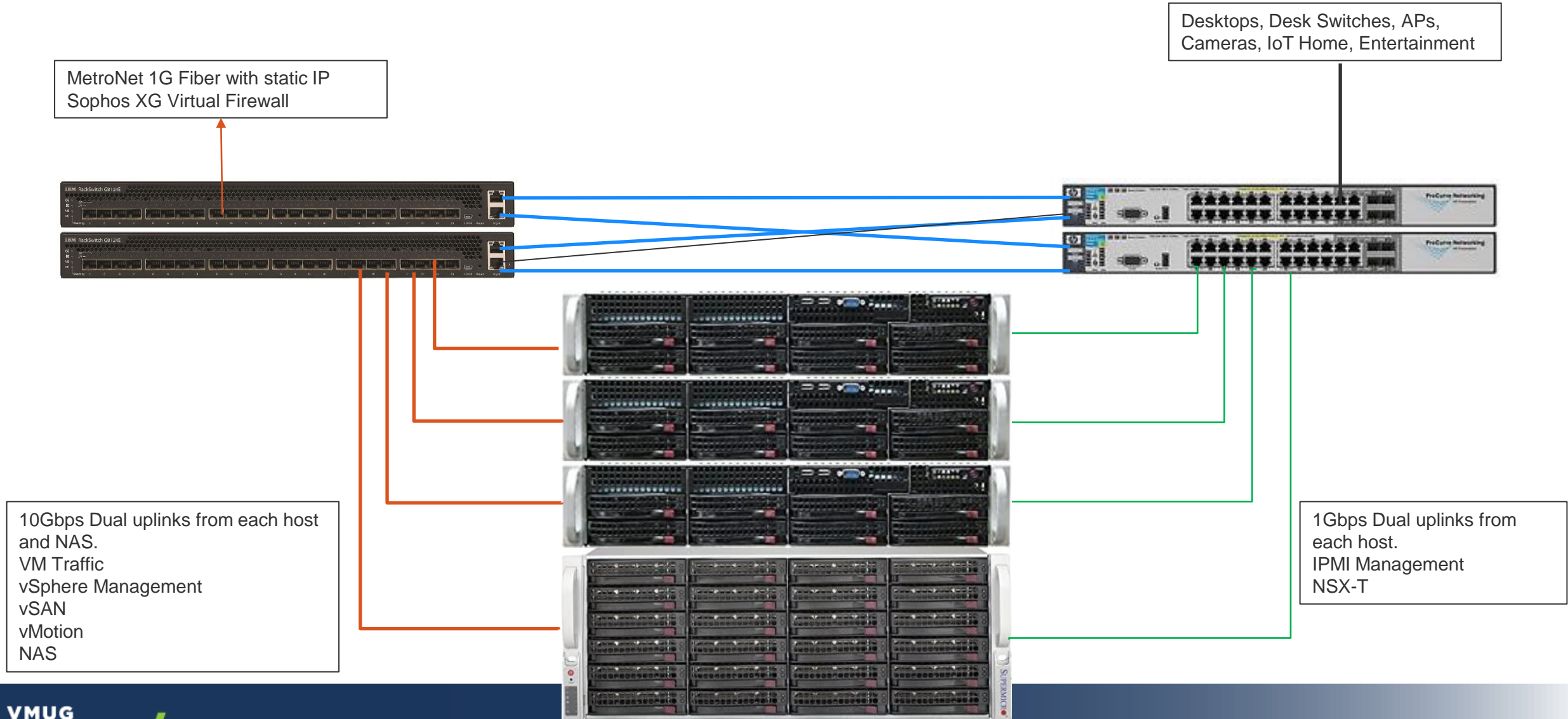
- Single Workstation / Server (under \$3000)
  - Newer generation Intel or AMD processor, 4 or more cores, > 2 GHz
  - 32GB RAM or more
  - 1TB SSD drive or larger
  - VMware Workstation / VMware ESXi
- Multiple Servers (\$3000+)
  - Newer generation Intel or AMD processor, 4 or more cores
  - 64GB RAM or more
  - Local storage for vSAN – 1x 128GB NVMe cache and 1x 1TB or greater capacity drive
  - Shared storage (NAS with SSDs, FreeNAS, StarWind Free, Software from storage vendors)
  - 10G Switch



# My Home Lab

- 6x Supermicro Servers
  - Supermicro X9DR3-F with IPMI
  - Dual E5-2650L v1 and v2
  - 128GB per host
  - vSAN with 128GB NVMe Cache, 1TB, 500GB, 400GB capacity drives, 20TB Capacity
  - ESXi 6.7
  - 10G and 1G NIC
- Supermicro NAS server
  - Supermicro X8DTH-F with IPMI
  - Single Intel L5630
  - 48GB RAM
  - 4TB, 3TB, 2TB 7200 RPM disks, 50TB Capacity
  - 10G NIC
  - FreeNAS 11.3
- 10 Gbps IBM G8124 switches
- HP 3500yl-24 1G PoE, 10G switches
- IBM/APC 3000 UPS
- 42U open rack
- vSphere 6.7
- vSAN 6.7
- NSX-T 3.0
- vRealize Automation 7.5 / 8.1
- vRealize Operations 8.1
- vRealize Log Insight 8.1
- Ubiquiti Controller – 4 APs
- Sophos XG Virtual Edition
- FreeNAS 11.3
- Unitrends Virtual Edition 2 TB free license
- Veeam Backup and Replication v10

# Architecture



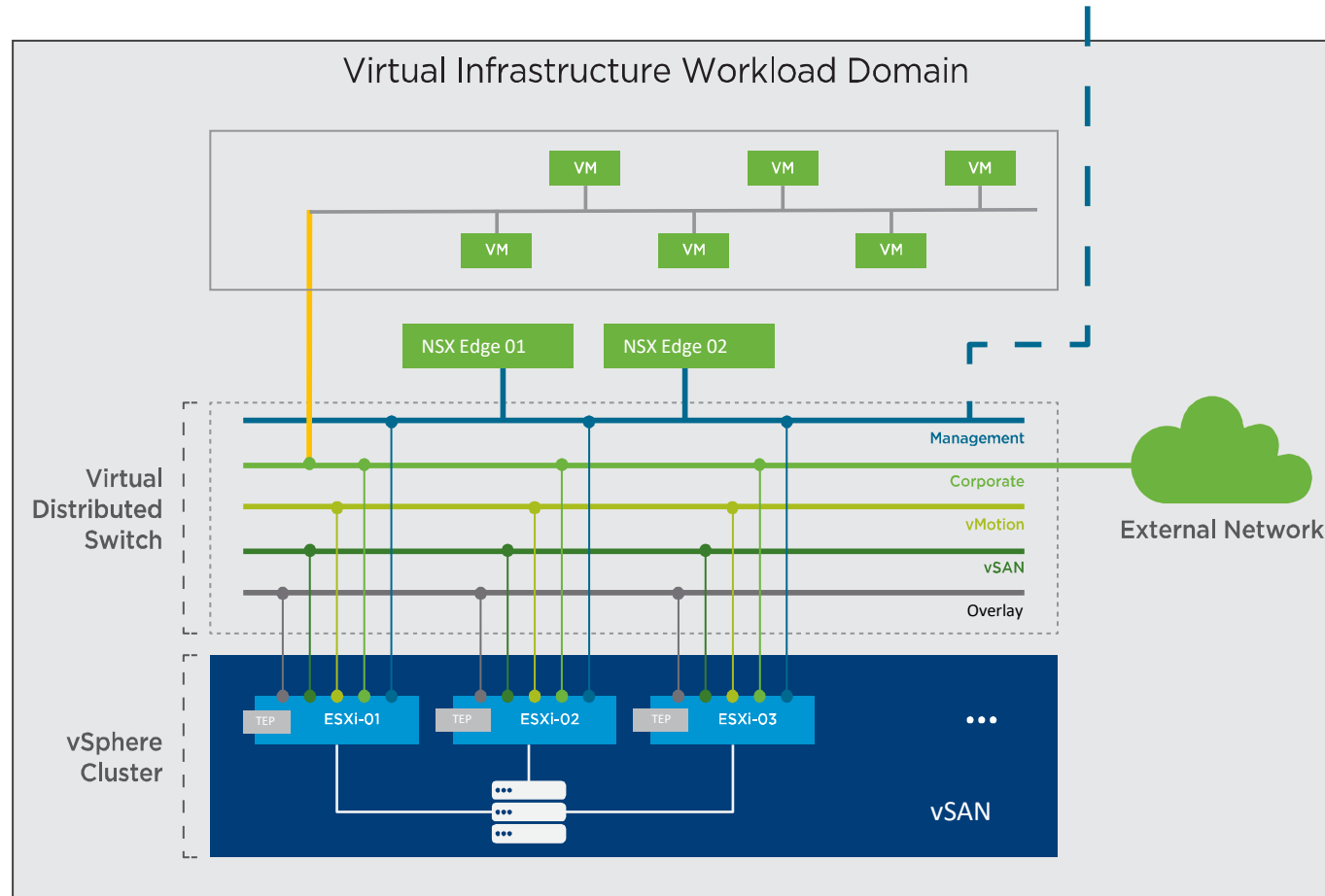


# Things you can do with a Home Lab built on VMware

- Learn VMware software and solutions
- Learn other new technologies
- Prepare for certification tests
- Develop your own software
- Evaluate and test software solutions
- Setup a Plex home multimedia server
- Evaluate and learn other hypervisor solutions
- Leverage isolated networks
- Test theories and ideas
- Provide Demos



# Example Virtual Architecture



# Demo

# To reach me

- crageherring at google
- @SirGeekness
- <https://blog.virtualbean.org/>
- Content available at:
  - <https://github.com/craieherring/>
- HomeLab Links
  - <https://www.servethehome.com/>
  - <https://www.virtuallyghetto.com/home-lab>
  - <https://github.com/lamw/homelab>
  - <https://www.labgopher.com/>
  - <https://pcpartpicker.com/>
  - <https://vmugcollective.com/>



