Voice of the Engineer Series
Selling a complete 5000 Seat Horizon VDI Solution

Mike Brennan, Product Manager, Virtual Client Computing and Graphics
Dave Werling, Cisco Partner Alliance Executive for VMware
Todd Gambill, DC Business Development Manager for VCC
17 July 2019
What we will cover

- VDI Market Opportunity
- VDI Architectures
- VDI Platforms
- VDI User Requirements
- VDI Sizing Tools (Demo)
- Ordering Horizon Licenses (Demo)
- VDI Resources to make you more valuable
- VDI Horizon Solution IDs
- Create your 5K Seat Estimate (Demo)
- Sample benchmark performance
- Q & A
What is the market opportunity for VDI?
Worldwide Virtual Client Computing Software Forecast, 2018-2022

2017–2022 Revenue ($M) with Growth (%)

Selected Segment Growth Rate

- Americas CAGR 9.3%
- APJ CAGR 10.5%
- EMEA CAGR 7.7%

Total Market CAGR 9.1%
Virtual Client Computing Solution Trends

**Market**

- WW virtual client computing software sales expected to reach $5.2B & drive $2.6B in infrastructure in 2020
- High graphic demands on OS & Apps is driving demand for GPU
- Drive to virtualizing professional apps is delivering results
- Forced Migration to Windows 10
- Customers looking to simplify with cloud & Hyperconverged

**Cisco Sales**

- Active refresh and expand program for aging VDI base is creating a compelling event to upgrade
- We continue momentum with GP Win 10 graphics acceleration
- Windows 7 End of Support is huge opportunity
- Deal sizes for VDI are very large
- VCC is key workload on HX and UCS at #1 or #2
Windows 7 Migration Completion Rates


- About 50% of Large >10k organizations will still need to migrate to Win 10.

- Over 80% of medium sized organizations > 1K users will still need to migrate to Win 10.

- Similar data also provided by ComputerWorld from February, 2019
Key Drivers for Virtual Client Computing
VCC Architectures
Lets get down to basics on what we are talking about

- **What does “VDI” mean exactly**
- **Microsoft Window 10 Virtual Machines**
- **Microsoft Server Hosted Desktop Sessions (RDSH)**
- **Microsoft Server Hosted Published Applications**
Citrix Virtual Apps and Desktops Architecture

Blue: Mgmt
Green: ICA/XML
Black: Auth/DB/App
Citrix Virtual Apps and Desktops Architecture

Blue: Mgmt
Green: ICA/XML
Black: Auth/DB/App
VMware Horizon Architecture
Cisco Virtual Client Computing Platform Choice

<table>
<thead>
<tr>
<th>Cisco Unified Computing System</th>
<th>Cisco HyperFlex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
<td>HyperConverged</td>
</tr>
<tr>
<td>Converged Infrastructure</td>
<td></td>
</tr>
</tbody>
</table>

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UCS and HX M5 Blade & Rack Server Details

Highest Performance UCS 5th Gen Platforms designed for Intensive Enterprise Workloads

M5 differentiators:
- Quad Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Up to 4 SFF + 2 x M.2/SD
- SATA/SAS HDD/SSD, PCIe NVMe
- Quad GPU support

M5 differentiators:
- Dual Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Up to 2 SFF + 2 M.2/SD (SATA/SAS HDD/SSD, PCIe NVMe)
- Dual GPU support

M5 differentiators:
- Dual Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Centralized mgmt for RAID for all drives
- Up to 6 PCI GPU*
- Up to 10 NVMe drive bays
- 10G LOM
- M.2 support

M5 differentiators:
- Quad Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Up to 24 front facing drives (24 can support NVMe*)
- Up to 8 top accessible drives (8 can support NVMe**) 
- Up to 6 PCIe GPUs
- Up to 12 PCIe slots
- M.2 support

M5 differentiators:
- Dual Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Up to 10 SFF drive bays
- Up to 10 NVMe drive bays
- Dual PCI GPU*
- M.2 support

M5 differentiators:
- Dual Intel® Xeon® Processor Scalable Family processors (up to 28 cores)
- Centralized mgmt for RAID for all drives
- Up to 6 PCI GPU*
- Up to 10 NVMe drive bays
- 10G LOM
- M.2 support

*using HHSW GPU
VCC User Requirements
Key performance requirements for Virtual Desktops

- User requirements
- CPU and memory performance
- Monitors
- Display resolution
- Software requirements
User requirements

- User role
- Complexity of graphic application
- Concurrent applications open
- Collaboration requirements
- Working hours
## User roles

<table>
<thead>
<tr>
<th>Task Worker</th>
<th>Knowledge Workers</th>
<th>Power User</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM Users, ERP Users, Payables, Receivables, Medical Records</td>
<td>Full MS Office Suite, High Res Web Sites, Online Videos</td>
<td>Full MS Office Suite, High Res Websites, Presentation designers with animation, High Res graphics apps</td>
</tr>
<tr>
<td>Users primarily work in a single application</td>
<td>Multiple applications open and active</td>
<td>Multiple high performance apps open and active</td>
</tr>
</tbody>
</table>
CPU and memory performance

**CPU selection criteria**
- Total frequency in MHz/CPU and server
- Core count
- Planned user count

**Memory selection criteria**
- Balance
- Frequency

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Software requirements

- Application minimum requirements
- Application support for virtualization
- Application hardware qualification
- Application delivery partners
- Application support model
Key Elements for Sizing

- Virtual CPUs (vCPUs) per Desktop/Server
- Number of Monitors per Desktop
- Virtual Memory per Desktop
- Total User Counts
- GPU Requirements
Cisco UCS Sizer for Enterprise Applications

My Projects

<table>
<thead>
<tr>
<th>Configuration Name</th>
<th>Type</th>
<th>Description</th>
<th>Info</th>
<th>Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice of the Engineer</td>
<td>VDI Estimator</td>
<td>1000 Seat Horizon...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCC PM Demo Configuration</td>
<td>VDI Estimator</td>
<td>Demo Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 2</td>
<td>VDI Estimator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>more...</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SAP

Create Configuration

Last Modified

- Type: VDI/VSI Tools
- Name: Voice of the Engineer
- Date: 5/13/2019, 3:34:06 PM

Whats New

1. SAP HANA sizing
   a. Support for SAP HANA S/4H or SoH and SAP HANA Datamart, BW/4H or BW/4H deployments.
   b. Scale-up and Scale-out architectures.
   c. Provision to size as TDI.
   d. Supports C880 M5 and C880 M4 servers
2. Exchange sizing
   a. Now available in improved, interactive and user friendly UI.
3. VDI/VSI Tools

HyperFlex Sizing Tool

https://hyperflexsizer.cloudapps.cisco.com/ui/index.html#/scenario

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Ordering Horizon Licenses
## Advantage+

| Program Consolidation | • Single registration program (**ADVANTAGE+**)  
|                       | • Applies on transactional and ELA for our partners |
| Auto-Validation        | • **First in Wins!** Net-New opportunity based on customer & product  
|                       | • Simplified registration form and submission process  
|                       | • Allows for submission earlier in the sales cycle |
| Registration Opportunity Management | • Registration valid for recurring 90-day cycles  
|                                    | • Sales stage and status updates simplifies extension process |
| Benefits                | • Significant **ADVANTAGE+** discount increases on advanced products  
|                       | • Predictable benefits across opportunity types – discounts & rebates  
|                       | • Protection on registered deals |
Program Discounting

Transactional & ELA
Minimum deal size = $10K
*Airwatch, Mobile WO STD & ADV only, minimum = $1K

Discount by Product
10% to 30%

Solution Rewards
5% Rebate
By Competency Required
+2% Solution Reward Premier Bonus

Eligible
- Solution Providers: Premier and Enterprise
- Corporate Resellers
- OEM Partners
- Solution Provider: Professional

10% Protection Up to 7% Rebate
Not eligible for Financial Benefits – Safeguard Benefit Only
VMware Discounting by Product
- Based on Strategic Focus

- vSphere
- vCloud Air
- Workstation
- vCloud Suite
- Horizon
- vSOM
- AirWatch
- Workspace One
- NSX
- vSAN
- vRealize

Low

High

ADVANTAGE DISCOUNT

$ $ $ $ $ $ $ $ $
Cisco Sales Desk for VMware Sales

- Virtual Sales (Lisbon & RTP)
  - Identify vSphere, Horizon, & vSAN opportunities
  - Register opportunities with VMware to lock-in Cisco’s lowest pricing
  - Interlock with Cisco AM’s to help facilitate addition of VMware software to order
  - SME for VMware products

10% better win rate when deal is registered and approved by VMware

<table>
<thead>
<tr>
<th>VMware Deal Registration</th>
<th>Win %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved</td>
<td>37%</td>
</tr>
<tr>
<td>Denied</td>
<td>27%</td>
</tr>
</tbody>
</table>

- Based on 3 months of data
- Deals not noted in SFDC as won or lost are not included in %

**North America**
Mathew Tavolacci
mtavolac@cisco.com
+1 919 744 1500

**EMEAR**
Nuno Tome
ntome@cisco.com
+351 21 454 1172

Total Deal Size:
- vSphere adds ~30%
- Horizon adds ~24%
Horizon Licenses in Cisco Commerce Workspace

Horizon License PID: VMW-HZ-LIC=
Cisco and NVIDIA’s Migration Acceleration Program: A Great VDI User Experience Is More Affordable Than Ever!

**NVIDIA GRID with 3 Year Support Contract**
More affordable option with a 3 year server amortization

**Requirements**
- Fully loaded UCS or HX reference server with Tesla M10, P6 or T4 GPUs
- 32, 64 or 96 GRID Virtual PC licenses
- 3 year Subscription (includes SUMs)

1 Year Free

**NVIDIA GRID with 5 Year Support Contract**
Most cost-effective option with a 5 year server amortization

**Requirements**
- Fully loaded UCS or HX reference server with M10, P6 or T4 GPUs
- 32, 64 or 96 GRID Virtual PC licenses
- 5 year Subscription (includes SUMs)

2 Years Free
Choose From new Solution Bundles That Support Your Needs

Enhanced experience blade form factor for VDI using NVIDIA P6
Includes 2 x NVIDIA P6 GPUs with GRID licenses for 32 users

Single purpose, lowest cost solution for VDI using NVIDIA M10
Includes 2 x NVIDIA M10 GPUs with GRID licenses for 64 users

Multi-workload, cost-effective solution for VDI NVIDIA T4
Includes 4 x NVIDIA T4 GPUs with GRID licenses for 64 users

Highest Density rack multi-workload solution for VDI using NVIDIA T4
Includes 6 x NVIDIA T4 GPUs with GRID licenses for 96 users

Highest Density blade multi-workload solution for VDI using NVIDIA T4
Includes 6 x NVIDIA T4 GPUs with GRID licenses for 96 users
# Available Solution IDs

<table>
<thead>
<tr>
<th>Solution ID Name</th>
<th>External Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10-C240M5-64vPC-3YR-Win10-Promo</td>
<td>Base Experience - Rack Form Factor; 2xM10, C240 M5, 64 vPC 3Yr</td>
</tr>
<tr>
<td>M10-C240M5-64vPC-5YR-Win10-Promo</td>
<td>Base Experience - Rack Form Factor; 2xM10, C240 M5, 64 vPC 5Yr</td>
</tr>
<tr>
<td>P62-B200M5-32vPC-3YR-Win10-Promo</td>
<td>Enhanced Experience – Blade Form Factor 2xP6, B200 M5, 32 vPC 3Yr</td>
</tr>
<tr>
<td>P62-B200M5-32vPC-5YR-Win10-Promo</td>
<td>Enhanced Experience – Blade Form Factor 2xP6, B200 M5, 32 vPC 5Yr</td>
</tr>
<tr>
<td>T44-C240M5-64vPC-3YR-Win10-Promo</td>
<td>Enhanced Experience – Rack Form Factor 4xT4, C240 M5 64 vPC 3Yr</td>
</tr>
<tr>
<td>T44-C240M5-64vPC-5YR-Win10-Promo</td>
<td>Enhanced Experience – Rack Form Factor 4xT4, C240 M5 64 vPC 5Yr</td>
</tr>
<tr>
<td>T46-C240M5-96vPC-3YR-Win10-Promo</td>
<td>High Density Enhanced Experience – Rack Form Factor 6xT4, C240 M5 96 vPC 3Yr</td>
</tr>
<tr>
<td>T46-C240M5-96vPC-5YR-Win10-Promo</td>
<td>High Density Enhanced Experience – Rack Form Factor 6xT4, C240 M5 96 vPC 5Yr</td>
</tr>
<tr>
<td>T44-HX-C240M5-ComputeOnly-64vPC-3YR-Win10-Promo</td>
<td>Enhanced Experience – Rack Form Factor 4xT4, HX240c M5 64 vPC 3Yr</td>
</tr>
<tr>
<td>T44-HX-C240M5-ComputeOnly-64vPC-5YR-Win10-Promo</td>
<td>Enhanced Experience – Rack Form Factor 4xT4, HX240c M5 64 vPC 5Yr</td>
</tr>
</tbody>
</table>

User can search for by the first three letters of the solution. Examples:

- P62 Idea is 2 x P6 cards. Search would produce the 3YR and 5YR solution IDs:
  - T44 4 x T4 same
  - T46 6 x T4
  - M10 2 x M10s same

**Caveats:**

- Cannot be combined with Smartplay bundles
- Program expires 1/17/2020
## NVIDIA DATA CENTER GPUs

**Empowering the Modern Digital Workplace**

<table>
<thead>
<tr>
<th></th>
<th>1 x NVIDIA P6</th>
<th>1 x NVIDIA M10</th>
<th>1 x NVIDIA T4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Density</strong></td>
<td>16 users</td>
<td>32 users</td>
<td>16 users</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>MXM (blade)</td>
<td>PCIe 3.0 dual slot</td>
<td>PCIe 3.0 single slot</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>90W</td>
<td>225W</td>
<td>70W</td>
</tr>
<tr>
<td><strong>CODECs</strong></td>
<td>H.264</td>
<td>H.264</td>
<td>VP9, H.265</td>
</tr>
<tr>
<td><strong>System Memory</strong></td>
<td>&gt; 1TB</td>
<td>&lt; 1TB</td>
<td>&gt; 1TB</td>
</tr>
<tr>
<td><strong>Use Case</strong></td>
<td>Blade form factor knowledge workers</td>
<td>Lowest TCO for knowledge workers</td>
<td>Universal GPU for virtual workstations, knowledge workers, rendering, inferencing, training</td>
</tr>
</tbody>
</table>

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Resources to make you more valuable

Virtual Client Computing Design Navigator
http://cisco.com/go/vdi-cvd

Cisco Virtual Client Computing Home Page
http://cisco.com/go/vdi

Cisco/Citrix Home Page
http://cisco.com/go/vdi/citrix

Cisco/VMware Home Page
http://cisco.com/go/vdi/vmware
<table>
<thead>
<tr>
<th>Platform</th>
<th>Hypervisor</th>
<th>Desktop Broker</th>
<th>Sizing</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>FlashStack (Pure)</td>
<td>Citrix Hypervisor</td>
<td>Citrix Desktops/Apps</td>
<td>2000 to 4999</td>
<td>GRID GPU</td>
</tr>
<tr>
<td>FlexPod (NetApp)</td>
<td>Microsoft Hyper-V</td>
<td>VMware Horizon</td>
<td>500 to 1999</td>
<td></td>
</tr>
<tr>
<td>HyperFlex</td>
<td>VMware vSphere</td>
<td>VMware Horizon</td>
<td>5000 or more</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td>Fewer than 500</td>
<td></td>
</tr>
<tr>
<td>VSAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VersaStack (IBM)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results (60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics</td>
</tr>
<tr>
<td>Platform</td>
</tr>
<tr>
<td>Hypervisor</td>
</tr>
<tr>
<td>Compute</td>
</tr>
<tr>
<td>Desktop Broker</td>
</tr>
<tr>
<td>Sizing</td>
</tr>
</tbody>
</table>

View Document:

http://cisco.com/go/vdi-cvd
Alright, I found what I was looking for, how do I order it?
VCC 5000 Seat Solution ID
Cisco Validated Design for 5000 Horizon Users

Design Objective

- 5000 Seat Mixed Workload – 1500 Instant Clones, 1500 Full Clones, 2000 RDSH Sessions
- VMware Horizon 7 on ESXi 6.5
- Windows 10 Virtual Desktops
- Server 2016 RDSH Virtual Servers

Compute Layer

- Cisco 5108A Blade Chassis with Cisco 2304 IOMs
- Cisco UCS B200 M5 Blade Servers with Intel Xeon 6140 CPUs and 768GB RAM
- Cisco VIC 1340

Storage Layer

- NetApp AFF 300 Dual Controller Storage Array
- DS2424 24SSD Disk Shelf
### Solution Hardware, Software & Firmware Version Detail

<table>
<thead>
<tr>
<th>Hardware/Software/Firmware</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cisco Unified Computing System (UCS) – B-Series blades</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cisco UCS 6300 Series Fabric Interconnects (FI) – unified access to storage and LAN networks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cisco MDS 9100 Series 16GB Fibre Channel SAN Switches – connectivity between the NetApp AFF A300 Storage system and the UCS Domain</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cisco Nexus 9300 series switches – connectivity to users, other LAN networks and Cisco UCS domains</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FlexPod AFF A300 (1 disk shelf DS224C) Storage provides storage layer for RDSH Server Sessions and VMware Horizon View VDI virtual machines</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cisco UCS 5108 Blade Chassis</strong> (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Infrastructure Hosts: Cisco UCS B200 M4 Blade Servers</strong> (2)</td>
<td></td>
</tr>
<tr>
<td><strong>Workload Hosts: Cisco UCS B200 M5 Blade Servers</strong> (25)</td>
<td></td>
</tr>
<tr>
<td><strong>Cisco VIC 1340 Converged Network Adapter</strong> (1 per blade)</td>
<td></td>
</tr>
<tr>
<td><strong>Cisco UCS Fabric Interconnect 6332 - 16 UP</strong> (2)</td>
<td></td>
</tr>
<tr>
<td><strong>Cisco Nexus 9372PX Ethernet Switch</strong> (2)</td>
<td></td>
</tr>
<tr>
<td><strong>Cisco MDS 9148S Fibre Channel Storage Switch</strong> (2)</td>
<td></td>
</tr>
<tr>
<td><strong>NetApp AFF A300 Storage Array</strong> (65 TB Usable Capacity)</td>
<td></td>
</tr>
<tr>
<td><strong>Cisco UCS Firmware Release 3.2(1d)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>NetApp AFF A300 storage system – OS Code 9.1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VMware ESXi 6.5 Update 1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Microsoft Windows Server 2016</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Microsoft Windows 10 64-bit</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Microsoft Office 2016</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VMware Horizon View 7.3 RDS Hosted Automatic Instant Pooled Server Sessions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VMware Horizon View 7.3 Instant Clones Virtual Desktops</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VMware Horizon View 7.3 View Composer Full Clones Virtual Desktops</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Login VSI workload Tool 4.1.25.6 (Workload Tool, Knowledge Worker WL)</strong></td>
<td></td>
</tr>
</tbody>
</table>
Using Solution ID in Cisco Commerce Workspace

Create a new estimate, click Find Products & Solutions
Viewing Solution ID in Cisco Commerce Workspace

1) Click the “Solutions” radio button
2) Click “View All Solutions”

Cisco Commerce Workspace URL:
https://apps.cisco.com/Commerce/guest
Selecting Solution ID in Cisco Commerce Workspace

Note: Must scroll down on Sub Category to see Virtual Client Computing
Solution ID in Cisco Commerce Workspace

<table>
<thead>
<tr>
<th>SKU</th>
<th>Estimated Lead Time</th>
<th>Unit List Price (USD)</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N9K-C93180YC-FX</td>
<td>14 days</td>
<td>27,500.00</td>
<td>2</td>
</tr>
<tr>
<td>Nexus 9300 with 48p 10/25G SFP+, 8p 100G QSFP, MACsec, UP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QSFP-H40G-CU1M=</td>
<td>14 days</td>
<td>250.00</td>
<td>4</td>
</tr>
<tr>
<td>40GBASE-CR4 Passive Copper Cable, 1m</td>
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<tr>
<td>QSFP-H40G-CU3M=</td>
<td>21 days</td>
<td>250.00</td>
<td>4</td>
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<tr>
<td>40GBASE-CR4 Passive Copper Cable, 3m</td>
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</tr>
<tr>
<td>UCS-SP-5108-AC3</td>
<td>14 days</td>
<td>21,575.00</td>
<td>4</td>
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<tr>
<td>UCS SP Select 5108 AC2 Chassis w/2304 IO, 4x SFP cable 3m</td>
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<tr>
<td>UCS-SP-B200M5-CA1</td>
<td>--</td>
<td>0.00</td>
<td>2</td>
</tr>
<tr>
<td>SP B200 M5 w/2xS118,6x16GB mem, VIC1340 + CWOM</td>
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<tr>
<td>UCS-SP-B200M5-CA4</td>
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<td>0.00</td>
<td>25</td>
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<tr>
<td>SP B200 M5 w/2xS118,6x32GB mem, VIC1340 + CWOM</td>
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<tr>
<td>UCS-SP-FI633216-2X</td>
<td>--</td>
<td>0.00</td>
<td>1</td>
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<tr>
<td>UCS SP Select 2 x 6332-16UP FI</td>
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</tr>
<tr>
<td>VMW-HZ-LIC=</td>
<td>7 days</td>
<td>0.00</td>
<td>50</td>
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<tr>
<td>VMware Horizon 7 License</td>
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</tr>
</tbody>
</table>

1) Click “Add Solution”
2) Then click Add to add the items to your estimate
Estimate from Solution ID in Cisco Commerce Workspace

https://apps.cisco.com/Commerce/guest
VCC 5000 Seat Benchmark Results
Testing & Validation: Full Scale Testing 6000 Mixed Users

LoginVSI Results
VSI Baseline: 665ms
VSI Average: 1028ms
VSI Threshold: 1666ms
Key takeaways
Keep these things in mind

Know your architectures, user requirements, hardware and software

CPU selection is critical
Do not oversubscribe memory
Use Cisco sales tools

Key Tools to Help with VDI Projects:
• UCS VDI Sizing Tool
• HyperFlex Sizing Tool
• VCC Design Navigator
• Cisco Citrix and VMware Home Pages

Leverage CVDs for design/scaling guidance
Follow Cisco guidelines for networking and QoS

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