Virtualization as a Service (VaaS)

Benefits

It’s Green! Save on power, space, and cooling
With VaaS, units no longer utilize their physical location, which also saves hardware costs and reduces the university’s carbon footprint.

Enterprise solutions at a low cost
VaaS offers servers, and storage at a much lower cost to units than if purchased separately.

Scalable and flexible
Add resources to your virtual servers in hours rather than weeks. Buy only what you need.

No lengthy waiting to get a server
Standard virtual server requests are usually fulfilled within one business day (except for new customers).

No upgrades to configure or equipment to buy
It all happens on the VaaS side. Plus, there’s no more hardware vendor support or corresponding contracts to maintain.

Better utilize staffing
VaaS will save time so units can refocus staff to supporting other areas.

Technology refresh at no additional cost
Because units no longer manage the physical hardware, technology upgrades occur behind the scenes at no additional cost.

Hardware fault tolerance
VaaS offers protection from lengthy outages from hardware failures through utilization of hardware redundancy within a datacenter.

Increased security
VaaS uses enterprise datacenters which incorporate 24/7 staffing, restricted physical access, and 24/7 video monitoring.

Disaster recovery of virtual servers
VaaS offers protection of all virtual servers, allowing for recovery through SAN based data replication to an alternate datacenter.

Offsite encrypted tape backups
Backups are stored onsite and offsite; offsite tapes are encrypted and sent to a third party remote facility. Unit system administrators can perform secure offsite backups of files and servers.

Features

Virtual servers utilize multi-node VMWare ESX clusters for virtual servers with the following Operating Systems:
  - Microsoft Windows
  - Linux
  - Netware
  - Solaris Operating Systems.

Remote access to virtual servers allows mounting of local CDs eliminating requirements for physical server access in most every case.

Fault tolerance within the datacenter to automatically move virtual servers to other hardware in the event of a hardware failure.

Security is covered with staff monitoring the technical infrastructure in a secured data center at all times.

24/7 support from the Help Desk, ready to answer your questions or involve the right people to address any VaaS issues.

Pricing Details

<table>
<thead>
<tr>
<th>Server Size</th>
<th>Specification</th>
<th>Cost per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>1 CPU, 1GB Memory, 30GB Disk</td>
<td>$39.91</td>
</tr>
<tr>
<td>Medium</td>
<td>2 CPU, 1GB Memory, 30GB Disk</td>
<td>$51.99</td>
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<tr>
<td>Large</td>
<td>4 CPU, 1GB Memory, 30GB Disk</td>
<td>$76.15</td>
</tr>
<tr>
<td>Additional</td>
<td>1 GB (maximum of 8GB / Server)</td>
<td>$1.26</td>
</tr>
<tr>
<td>Additional</td>
<td>1 GB (purchased in 10 GB increments up to a total of 1 TB / Server)</td>
<td>$0.21 / GB</td>
</tr>
</tbody>
</table>

For more information, visit: vaas.umich.edu
Computer Power & Patch Management (CPPM) offers...

Prepackaged patches and updates
There is no longer a need to develop them. It's just a matter of testing in your environment before releasing them to all of your managed computers.

Customization
Codes can be easily copied and wizards are available to simplify the process of creating custom software updates that may be needed during deployments, configurations, scheduling, and rollback operations.

Target patches and power management by customizable attributes
Use machine model, subnet, Active Directory OU, or operating system to push specific fixlets.

Manage your computers in multiple ways
The operator's console allows you to organize and view computers by Active Directory, your groups, and/or machine properties (e.g., missing patches, OS, hardware manufacturer model number, etc.).

Compatible with both Windows PCs and Macs
- Connect in one console
- Easily deploy power management policies to fit specific users' needs
- Remotely control startup, hibernate, and shutdown
- Deploy wake-on-LAN commands
- View charts and graphs of power state statistics

Web reports service for non-IT managers
View a high level summary view of workstation status for an area, with drill down details for: power utilization and savings; deployment of security and other patches; basic inventory data; etc. Managers don't need to access the full operator's console. Web reports can be automated to run on a scheduled basis, delivered via e-mail or stored in an archive
- Manage machines through the campus network or the Internet
- Manage servers for the same price
- Configuration changes can be silent or communicated to end users

Configure results....

Configuring CSCI @ U-M sleep/hibernate recommendations on 10 computers (on nine hours a day) saves the equivalent of carbon sequestered annually by one acre of pine or fir forests.

For more information, visit: cppm.umich.edu