# Managed Servers ASA Extract FY14

## 1.0 Service Summary

<table>
<thead>
<tr>
<th>1.1 Name</th>
<th>Managed Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7 Mission/Vision</td>
<td>UW-IT currently manages over 900 managed servers for various owners and functions. There are 2 primary types of Managed Servers being offered today:</td>
</tr>
<tr>
<td></td>
<td>1. The Standard Hosted Server (SHS) service is designed to allow UW departments to leverage UW-IT’s virtualization infrastructure while retaining full administrative control.</td>
</tr>
<tr>
<td></td>
<td>2. The Standard Managed Server service is designed for UW departments, leveraging UW-IT’s expertise to match your needs with our current and most common choices for hardware, software, and system management.</td>
</tr>
<tr>
<td></td>
<td>Standard Managed Server offers a simple, efficient solution when you need servers deployed and managed. The service includes a 1 hour consultation to gather requirements and provide a cost estimate. Upon approval UW-IT will purchase, configure, install and manage your server in a physically secure, environmentally controlled data center facility. For more complex or customized computing needs beyond the scope of UW-IT’s Standard Managed Server service, our <a href="#">Consulting service</a> can often help develop a custom solution.</td>
</tr>
<tr>
<td></td>
<td>Service Options: The list below contains common technology options that can be deployed as part of a ‘standard’ server. Please ask if there are other items of interest.</td>
</tr>
<tr>
<td></td>
<td>● Server environment:</td>
</tr>
<tr>
<td></td>
<td>○ Virtual systems are our preferred solution, but</td>
</tr>
</tbody>
</table>
physical systems also available

- Located on-premise (UW-IT Data Center), in the cloud.
- If a physical is required, Dell is the preferred manufacturer. Systems are typically ordered with a 5 year warranty.
- Server support options:
  - Nightly backups
  - Off-site backups and vaulting
  - High availability clusters
  - System monitoring
  - 24x7, business hours on-call system support
  - Security - confidential, restricted, or public data
  - Geographical redundancy (costs are customized)

- **Operating Systems:**
  - RHEL6 64bit, Windows 2008 R2, Windows 2012 R2
  - Level of support: none, patches only, scheduled maintenance

- **Application Software:**
  - Account management: Local, UW NetID
  - Authentication: UWWI, Pubcookie, Shibboleth, Kerberos
  - Web servers:
    - IIS
    - Apache
  - Databases:
    - Microsoft SQL Server
    - MySQL
<table>
<thead>
<tr>
<th>Applications and Languages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
</tr>
<tr>
<td>PostgreSQL</td>
</tr>
<tr>
<td>PHP</td>
</tr>
<tr>
<td>Tomcat</td>
</tr>
<tr>
<td>Samba</td>
</tr>
<tr>
<td>Request Tracker (RT)</td>
</tr>
<tr>
<td>Java</td>
</tr>
<tr>
<td>Python/Django</td>
</tr>
<tr>
<td>Ruby/Rails</td>
</tr>
<tr>
<td>node.js</td>
</tr>
<tr>
<td>Git</td>
</tr>
<tr>
<td>Mercurial</td>
</tr>
<tr>
<td>Subversion</td>
</tr>
</tbody>
</table>

- Level of support: UW-IT manages, customer manages

<table>
<thead>
<tr>
<th>1.8 Statistics: quantity</th>
</tr>
</thead>
</table>

| Service has been offered for 3 years, but updated each year with different options. |

Stats from 11/18/2013
- Managed Servers: 922 (315 windows, 603 windows)
- Standard Managed Servers: 906
- Standard Hosted Servers: 16

Stats from 2011:
- Standard Managed Servers - 28 billed / 5 not-billed
- MOU (custom servers) - 58

<table>
<thead>
<tr>
<th>1.13 Financial</th>
</tr>
</thead>
</table>

Costs are pooled and rates set based on average use per server. Exact time and material billing is used only for custom / 1-off server deployments (MOUs and consulting engagements).
### Rates:

**Standard Hosted Servers:**
- $22.00 per month for each "unit" or "slice" in a virtual server.
- A slice is 1 vCPU*, 2GB RAM, 50GB disk.
- A single virtual server is defined by combining 1 or more slices.

**Standard Managed Server:** (server + setup labor + monthly mgmt labor)
- Full cost for physical system or SHS rates for virtual system.
- Setup 5-20 hours
- Monthly 0.5-10 hours / month
- extra charges for additional storage and backups

### 1.15 Funding Source
Primarily Self-Sustaining

### 2.0 Change History
- **2013** - standard hosted servers (customer manages OS, SW)
- **2012** - standard managed servers (pooled costs, stnd configs)
- **2010** - defined as service. owner/manager assigned.
- **2009** - virtualization initiative (on-going)
  physical custom servers built as-requested.

### 2.0 Annual Plan for the Next Year

#### 3.1 Key Initiatives
- Refine business model
  - verify pooled costs == estimated costs
  - monthly reporting of statistics, rate calc, revenue
  - Transparently integrate cloud IaaS for appropriate systems
| 3.2 Pressing Needs | Increase utilization to help with data center density  
| | Geographic redundancy  
| | Portal that provides server management information to server owner  
| 3.3 Key Risks | Too much customization / lack of standardization  
| | Lack of detailed security compliance information  

### 3.0 Three Year Business Assessment

| 4.1 Key Service Opportunities | Become Trusted Broker of this server IaaS, so customers can focus on server operation, and not procurement, installation, refresh, and cloud vendor / technology migrations.  
| | Assist Departmental IT with migration onto the service to achieve consolidation of campus resources (equipment and knowledge). This will also result in more efficient operations of UW Data Centers.  
| | Share Management tools, VM images, and GR configurations with other IT departments.  
| | Add more optional features that help others manage their servers:  
| | ● 24x7 monitoring  
| | ● logging service that includes analytics  
| | ● security audits / compliance  
| | ● showback of costs for non-billed servers  
| | ● expose server operational metrics to server owner  

| 4.5 Alternative Approaches | Promote PaaS and SaaS whenever possible to minimize need for standalone servers.  

| 4.6 Value of UW-IT providing service | Need to be in this business for UW-IT server deployments. systems to operate, and we can enable collaboration, sharing, standardization as central IT organization.  

| 4.7 Missed Opportunities | Not focusing efforts on reducing the barriers for adoption - assuming it would just happen by publishing services in the catalog.  
| | Might be better to plan and fund "large infrastructure" changes instead of replacing server hardware 1 at a time. We could
<table>
<thead>
<tr>
<th>4.8 Funding Stability</th>
<th>Good.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.9 Lifecycle Considerations</td>
<td>Expect the service to change its underlying technology as part of continual improvements, and to grow in features &amp; options as they become more standardized.</td>
</tr>
</tbody>
</table>