Bring Your Own Software License to the Cloud

Kieron Dean – Senior Solution Consultant, Flexera Software
What We Are Going to Talk About Today

• Cloud Basics
  – Types of Cloud
  – Cloud Models
  – Cloud Responsibilities
  – Cloud Budget Allocations

• Cloud Licencing Models, Trends and Challenges
  – BYOSL Rules for Microsoft
  – BYOSL Rules for IBM
  – BYOSL Rules for Oracle

• Top 5 Takeaways
Types of Cloud

- **Public cloud** - a public cloud is an offering of information technology (IT) that is made available to the public over the Internet.

- **Private cloud** - a cloud infrastructure operated solely for a single organization, whether managed internally or by a third-party, and hosted either internally or externally.

- **Hybrid cloud** - composition of two or more clouds that remain distinct entities but are bound together, offering the benefits of multiple deployment models.
Cloud Models

Consume it

Build on it

Migrate to it

Source: https://support.rackspace.com/white-paper/understanding-the-cloud-computing-stack-saas-paas-iaas/
Cloud Responsibilities

Cloud Trends - % of IT Environment in Cloud

Now

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>Cloud</td>
</tr>
<tr>
<td>23%</td>
<td>Private Cloud</td>
</tr>
<tr>
<td>15%</td>
<td>Public Cloud</td>
</tr>
<tr>
<td>7%</td>
<td>Hybrid Cloud</td>
</tr>
</tbody>
</table>

End of 2017

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>59%</td>
<td>Cloud</td>
</tr>
<tr>
<td>28%</td>
<td>Private Cloud</td>
</tr>
<tr>
<td>22%</td>
<td>Public Cloud</td>
</tr>
<tr>
<td>10%</td>
<td>Hybrid Cloud</td>
</tr>
</tbody>
</table>


Top Three Concerns

**Public Cloud**
- 43% Where data is stored
- 41% Security
- 21% Vendor lock-in

**Private Cloud**
- 24% Vendor lock-in
- 22% Lack of appropriate skills
- 21% Security concerns

**Hybrid Cloud**
- 24% Security
- 19% Where data is stored
- 18% Lack of appropriate skills
## Cloud Budget Allocations

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Service Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>Software-as-a-Service (SaaS)</td>
</tr>
<tr>
<td>30%</td>
<td>Infrastructure-as-a-Service (IaaS)</td>
</tr>
<tr>
<td>19%</td>
<td>Platform-as-a-Service (PaaS)</td>
</tr>
<tr>
<td>6%</td>
<td>Other as-a-service models*</td>
</tr>
</tbody>
</table>

*Such as Backup-as-a-Service, Storage-as-a-Service*

Cloud Licensing Trends

Bring Your Own License (BYOSL)
- Requires tracking of license movement in the Cloud
- Responsible for compliance
- Be careful of Product Use Rights

Licensing as a Service (LaaS)
- Simplifies Compliance
- Licensing Included in Service Costs
- Should do careful TCO
BYOSL Rules for Microsoft

• Can deploy to Azure or ‘Authorized Mobility Partners’ (57 page doc)
• Limited set of MS products with Software Assurance
  – Microsoft Azure Hybrid Use Benefit (HUB) for Windows Server
    2 x 8-core or 1 x 16-core VM
  – License Mobility Required for other server products: SQL
    Server, Exchange Server etc.
• Must submit a ‘License Verification Form’ within 10 days of deployment
• Beware of the rules / impacts on Non-Azure Cloud Providers
  (Media, SA etc.)
## AWS BYOSL Microsoft Licensing Scenarios

<table>
<thead>
<tr>
<th>License Type</th>
<th>EC2 Dedicated Hosts</th>
<th>EC2 Dedicated Instances</th>
<th>EC2 Multi-Tenant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Server</td>
<td>✓</td>
<td>✓</td>
<td>LI</td>
</tr>
<tr>
<td>SQL Server</td>
<td>✓</td>
<td>✓ Only on Windows Server license included EC2 Dedicated Instances</td>
<td>✓ Only if you have licenses with License Mobility and are running on license included Windows Server EC2 instances</td>
</tr>
<tr>
<td>MS Office</td>
<td>✓</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>Windows 7, 8, and 10</td>
<td>✓</td>
<td>✓</td>
<td>NA</td>
</tr>
<tr>
<td>MSDN</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Other</td>
<td>✓ Subject to Microsoft’s Terms</td>
<td>✓ Only on Windows Server license included EC2 Dedicated Instances</td>
<td>✓ Only if you have licenses with License Mobility and are running on Windows Server EC2 instances</td>
</tr>
</tbody>
</table>

- ✓ = scenario is supported
- LI = only offered as license included instances sold by AWS
- NA = not applicable
- X = not allowed
BYOSL Rules for IBM

- Eligible Public Clouds
  - IBM (SoftLayer / BlueMix, Cloud Managed Services)
  - Amazon EC2
  - Google Compute Engine
  - Microsoft Azure
  - May request approval from IBM for others
- Most PVU licensed software
- PVUs per Core vary depending upon the cloud provider and power/value of the instance
- Must use IBM’s designated tools for reporting usage
- Policy does not apply to zSeries software and IBM software sublicensed by a third party
# BYOSL Rules for IBM

<table>
<thead>
<tr>
<th>Provider</th>
<th>Offering</th>
<th>PVUs per vCPU or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>Softlayer Virtual Servers – Public Node &amp; Private Node</td>
<td>70 PVU per core</td>
</tr>
</tbody>
</table>
| IBM      | Bluemix | • 70 PVU (Pico/Nano/Micro/Tiny/Small/Medium)  
            • 140 PVU Large  
            • 280 PVU XLarge  
            • 560 PVU 2XLarge |
| Amazon   | EC2 Instances & Dedicated Instances | 70 PVU per vCPU |
| Google   | Google Compute Engine | 70 PVU per vCPU |
| Microsoft | Azure Virtual Machines | 70 PVU per core |
| IBM      | Cloud Managed Services – x86 Systems | 100 PVU per vCPU |
| IBM      | Cloud Managed Services – Power Systems | 120 PVU per vCPU |
| IBM      | Softlayer Bare Metal Servers | PVU requirements based on system configuration |
BYOSL Rules for Oracle

- Eligible Public Clouds
  - Amazon EC2, S3
  - Microsoft Azure
- All Oracle programs available on a processor metric
- Each virtual core counts as a physical core
- There are limits to the counting of sockets and the number of cores per instance for Standard Edition and Standard Edition One
  - Oracle Database Standard Edition (16 vCPUs)
  - Oracle Standard Edition One, Oracle Standard Edition 2 (8 vCPUs)
WRAP-UP
Top 5 Takeaways

• It’s complicated…but…
• Know the rules
• Inventory should be cloud agnostic:
  – Scan cloud assets
  – Reconcile Cloud usage reports
• SAM tooling should be able to cope with cloud scenarios
• Keep calm and remain compliant (and optimised)!
QUESTIONS
Thank You

www.flexerasoftware.com
REFERENCES

https://www.microsoft.com/en-gb/Licensing/licensing-programs/software-assurance-license-mobility.aspx#tab=2

https://azure.microsoft.com/en-us/overview/azure-for-microsoft-software/faq/

https://aws.amazon.com/windows/faq/#licensing

http://www-01.ibm.com/software/passportadvantage/eligible_public_cloud_BYOSL_policy.html#requirements


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