IPFW Cloud Service Task Force

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Possible IT Services to the Cloud

- ☐ Desktops to become Desktops as a Service (DaaS)
- □ Disaster Recovery and Business Continuity (backups)
- ☐ Print Management
- Office Applications
- ■Webservers / Websites
- ■SharePoint / Intranet
- ☐ Enterprise Applications
- ☐ Event and Room Management software
- □ Document and Record Management software
- ☐ Help Desk ticketing software



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Public Cloud Vendors

Provider	Platform	SLA
VMware	Infrastructure as a Service (IaaS)	Between 99.9% and 99.95%
Microsoft	Platform as a Service (PaaS)	99.9%
Bluelock	Production Hosting	99.99%
Citrix	Desktops-as-a-Service	
GoGrid	Dedicated Servers for computing projects	100%
Amazon	Infrastructure as a Service (IaaS), Platform as a Service (PaaS)	Between 99.0% and 99.95%
IBM	Infrastructure as a Service (laaS), Platform as a Service (PaaS), and Software as a Service (SaaS)	99.9%

Private Cloud Vendors

Provider	Platform	SLA
Amazon	IaaS, PaaS, SaaS	Between 99.0% and 99.95%
RackSpace	PaaS, SaaS	Varies based on plan
VMware	IaaS, PaaS, SaaS	99.9%
IBM	laas, PaaS, SaaS	99.9%
Microsoft	PaaS, SaaS	99.9%



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Vendor Evaluation Metrics [1]

- ■Financial Metrics
 - Return on Investment (ROI)
 - Total Cost of Ownership (TCO)
 - Cost-Benefit Analysis (CBA)
- □Cost Model (metered service or subscription)
- ■Vendor expertise in industry
- Data portability
- Reliability and uptime for mean time between failure

- Availability of the service based on 24x7x365
- ☐ Response time for service issues
- Security protocols available and the number of security vulnerabilities and past events
- ☐ End user satisfaction with the service
- ☐ Effectiveness of the service to meet the business need



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Cloud Service Monitoring

- ☐Microsoft Azure Management Portal
- ☐ScienceLogic's Hyper Cloud
- Monitis
- ■Amazon Cloud Watch
- ■IBM Smart Cloud
- ■Citrix AppDynamic
- ☐ Rackspace Cloud Monitoring
- ☐Zenoss cloud monitoring



Security & Regulatory Compliance

■ ECPA (Electronic Communications Privacy Act)

• Protects electronic communications while in transit or held in storage from disclosure.

■PCI Compliance

 Security standards set for all merchants accepting and processing credit cards and payment information.

☐ HIPAA (Health Insurance Portability and Accountability Act)

Privacy standards to protect health information

FERPA (Family Educational Rights and Privacy Act)

 Policies protecting educational records for institutions receiving funding from the U.S. Department of Education

■FISMA (Federal Information Security Management Act)

Outlines responsibilities to Federal agencies in order to strengthen information sequentity systems. Contains best practices for private companies.

IPFW Policies [3]

- Administrative Access to LAN User's Information
- Data Handling Information
- ☐ Electronic Data Protection Policy
- ☐ Employee Privacy Policy
- Ethical Guidelines for IPFW Information Technology Users
- ☐IT Related Incident Response Policy
- Mobile Data Sync Policy
- ☐ Privacy for Electronic Information
- ■Student Privacy Policy



References

- [1] M. Klubeck (2010, June 24). *Measuring the Cloud* [Online]. Available: http://www.educause.edu/ero/article/measuring-cloud. (Accessed: 13 Feb. 2015).
- [2] L. Hogan, "Cloud Computing: A Primer on Legal Issues, Including Privacy and Data Security Concerns." [Online]. Available: https://www.cisco.com/web/about/doing-business/legal/privacy-c-ompliance/docs/CloudPrimer.pdf. (Accessed: 16 Feb. 2015).
- [3] Technology Policies and Procedures, IPFW, [Online] 2015, http://www.ipfw.edu/offices/its/policies/ (Accessed: 17 Feb. 2015).

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