Cloud Initiatives Update

Information Item

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Cloud Driving Factors

- Federal disallowed expenditures
- Acute shortage of IT personnel with skills
- Regulatory compliance
  - FedRAMP, NIST, FISMA, PCI DSS, HIPAA
- Layered Security
  - Encryption, monitoring, key management, strong access controls, security intelligence
- Business Agility
- Legacy Systems
- Infrastructure costs

Some interesting statistics

- 350 instances in AWS
  - AWS supports 600+ government agencies
- 353 zones & 6,292 DNS records in AWS Route 53
- $168 million financial transactions
  - $70 million on AESP (Total US = 23.8 billion/year)
- 1,500 public facing websites - Stats from Oct 2014
  - 100+ websites on AESP
  - 8 million page views
  - 1.3 million users (50.3% desktop; 49.7% mobile)
  - 150 million DNS requests
  - 116 million web requests
  - 3 TB CDN data transfer to users (6 MB to the origin)

Cloud – Cost Analysis

- 61 agencies operate 2,567 servers
- Cost to maintain servers is ~$26M
- Average yearly cost is $10K/server
- 1,354 servers (53%) are 5+ years old

Service	On Premise	Cloud
Email (50GB storage)	$152 / month	$4 / month
DNS	$87K / year	$18K / year
Document Management	$26K / year	$6K / year
Virtual Server (4GB RAM + 100GB storage)	$300 / month	$111 / month

Security Projects

No.	Service	PIJ Ask	Spent	Forecasted	Difference	Notes
1	Credential Storage (RDMS)	$11,400.00	$3,799.00	$0.00	$7,601.00	Complete
2	Secure FTP	$9,731.00	$2,092.00	$0.00	$7,639.00	Complete
3	Internal DNS	$0.00	$0.00	$0.00	$0.00	Complete
4	Active Directory Domain Controller	$78,000.00	$72,107.00	$0.00	$5,893.00	Complete
5	LDAP	$2,400.00	$0.00	$0.00	$2,400.00	Complete
6	DHCP	$0.00	$0.00	$0.00	$0.00	Complete
7	Microsoft System Center	$50,000.00	$83,689.00	$0.00	-$33,689.00	Complete
8	Miscellaneous costs (AWS, Lan, AZNet, etc…)	$56,557.00	$37,609.39	$0.00	$18,947.61	Complete
		$208,088.00	**$199,296.39**		**$8,791.61**	

Infrastructure Projects

No.	Service	PIJ Ask	Spent	Forecasted	Difference	Notes
1	Microsoft Exchange (800+ mailboxes)	$269,643.60	$173,300.00	$0.00	$96,343.60	Estimated 02/28/2015
2	MS Dynamics CRM	$21,600.00	$169,041.00	$0.00	-$147,441.00	Complete
3	Document Management System (Dedicated)	$48,000.00	$13,750.00	$22,000.00	$12,250.00	Estimated 12/11/2014
4	Document Management System (Shared)	$19,200.00	$4,448.00	$0.00	$14,752.00	Complete
5	Email Newsletter (SES)	$1,429.68	$199.00	$0.00	$1,230.68	Complete
6	CMS (Drupal)	$62,339.40	$0.00	$0.00	$62,339.40	Complete
7	MySQL Databases	$7,121.04	$0.00	$0.00	$7,121.04	Complete
8	Clarity Project & Portfolio Mgmt.	$157,246.68	$0.00	$41,039.00	$116,207.68	Complete
9	Windows SharePoint Services	$714.80	$0.00	$0.00	$714.80	Complete
10	Service Desk Mgmt.	$60,000.00	$0.00	$50,000.00	$10,000.00	Estimated 03/31/2015
11	Windows Web Hosting (WWH)	$9,357.12	$0.00	$78,000.00	-$68,642.88	Estimated 06/30/2015
12	Microsoft SQL Server Databases	$143,347.68	$0.00		$143,347.68	Estimated 06/30/2015
13	Miscellaneous costs (AWS, Lan, AZNet, etc...)	$0.00	$42,962.00	$120,000.00	-$162,962.00	N/A
	Totals :	$800,000	$403,700	$311,039	$85,261	

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14	Microsoft Exchange (600+ mailboxes)	$100,000.00		$185,261.00		Estimated 06/30/2015
15	VMWare Infrastructure	$50,000.00		$50,000.00		Estimated 06/30/2015
	Totals :	$950,000	$403,700	$546,300	$0.00	

Questions?