Cloud for Enterprise Software – Feature Comparison Matrix

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Feature Comparison Matrix

Sr. No	Feature	AWS	Azure
Service Offerings - Compute		**EC2**	**VMs**
1	**Instance Types**	54	52
2	**OS's supported**	11	9
3	**Max CPUs**	40	32
4	**Max Memory**	244 GB	448 GB
Service Offerings- Hot Storage		**S3**	**Hot Blob Storage**
5	**REST API**	Yes	Yes
6	**Batch Import**	Yes	Yes
7	**Auto Delete/Archive**	Yes	No
8	**Requester Pay**	Yes	No
9	**Encrypt Data Server Side**	Yes	In Progress
10	**Reduced Redundancy**	File Level Storage	Account Level
11	**Max Size of Blob**	5 TB	1 TB
12	**Security Granularity**	File-level	Bucket Level

Service Offerings- Cold Storage		Glacier	Cold Blob Storage
13	**Availability**	100%	99%
14	**First Byte Latency**	minutes or hours	milliseconds
15	**Minimum Storage Duration**	90 days	N/A
16	**Minimum object size**	N/A	N/A
Service Offerings - Databases		**AWS**	**Azure**
17	**Relational DB Engines as a Service**	6	2
18	**NOSQL Engines**	2	2
19	**Use SSMS**	Yes	Yes
20	**Ease of managing SQL Server as a service**	Moderate	Easy
21	**Ease of backup**	Moderate	Easy
22	**Data Warehouse as a Service**	Yes	Yes
Service Offering- Networking		**VPC**	**VNets**
23	**Public IPs**	Yes	Yes
24	**Private IPs**	Yes	Yes
25	**Subnet Creation**	Yes	Yes
26	**Control panel**	Yes	Yes

27	Custom Rules	Partially Supported	Yes, Extra Cost
28	Purge All	No	Unknown
29	Instant Purge	No	Yes
30	Custom SSL Certificates	Partially Supported	No
31	Custom CNAMEs	Yes	Yes
32	Multiple CDNs	No	No
33	Storage Integration	Yes	Yes
Service Offerings – Queue Services		**Simple Queue Service**	**Queue Service**
34	Create Queue	Yes	Yes
35	Delete Queue	Yes	Yes
36	Get Queue Metadata/Get Queue Attributes	Yes	Yes
37	Set Queue Metadata/Set Queue Attributes	Yes	Yes
38	Get Queue URL	Yes	No
39	Put Message/Send Message	Yes	Yes
40	Send Message Batch	Yes	No
41	Get Messages/Receive Message	Yes	Yes
42	Delete Message/Delete Message	Yes	Yes

43	Delete Message Batch	Yes	No
44	Change Message Visibility Batch	Yes	No
45	Add Permission	Yes	No
46	Remove Permission	Yes	No
Notification Services		**SNS**	**Notification Hub**
47	Broadcast Limit	10k	>10k
48	Pre-Create Topic	Yes	No
49	Templates	No	Yes
Security -Authentication		**IAM**	**Active Directory**
50	Integrate with on-prem Active Directory	Yes	Yes
51	Control who can add/remove users	Yes	Yes
52	Control who can create/destroy edit resources	Yes	Yes
53	Fine-grained control over resource access	Yes	Partially
54	Government-Friendly Cloud Region	Yes	Yes
Security – Resource Protection		**AWS Inspector**	**Azure Security Center**
55	Agent Installation	Manual	Automated
56	Security Assessments	Predefined + Customizable	Predefined

57	**Duration of Assessments**	User can define	Azure claims they do all the time
58	**Inspection**	Tag based – not by default	Resource based – by default
59	**Resources that can be inspected**	Only EC2	VMs, Firewalls, SQL databases, Storage Disks
60	**Focus OS**	Linux	Windows proprietary resources
61	**Malicious IP tracking**	Not available	Available
Cost Software and Instance		**AWS (EspoCRM)**	**Azure (EspoCRM)**
62	**EC2 (t1.micro)**	$0.02	$0.02
63	**A1**	$0.06	$0.06
Cost- Storage		**AWS S3**	**Blob Hot Storage**
64	**First 50 TB / month**	$0.023	$0.0589
65	**Next 450 TB/ month**	$0.022	$0.5655
66	**Over 500 TB/ month**	$0.021	$0.5419
Cost- Network		**AWS Route 53**	**Azure DNS**
67	**First 25 hosted zones**	$0.50 per zone/month	$0.50 per zone/month
68	**Additional hosted zones**	$0.10 per zone/month	$0.10 per zone/month
69	**First billion queries/ month**	$0.40 per million queries	$0.40 per million queries
70	**Over billion queries/ month**	$0.20 per million queries	$0.20 per million queries

Management Tools		Amazon Cloud Watch	Azure Monitor
71	Activity Log	Yes	Yes
72	Resource Metrics and Diagnostics	Yes	Yes
73	Archive	Retained till 2 weeks	Retained till deleted
74	Real time Monitoring	Yes	Yes
75	Statistics and Graphs	Can access up-to-the minute	Route data to visualization tool
76	Alarms	Yes	Yes
77	Notifications	Yes	No
Management Tools		Cloud Formation	Resource Manager
78	Create Templates	Yes	Yes
79	Re-use Templates	Yes	Yes
80	Resource Manager	Managed as a stack	Through resource groups
81	Tagging Feature	No	Yes
82	Customization	Yes	Yes
83	Access Control	No	Yes
84	Activity Log	No	Yes
Availability		AWS Zones	Azure Regions

Scalability	Depends on request	Free
Fault Tolerance	Load Balancer	Fabric Controller

Recommendation:

Based on the points discussed above, we assigned binary values to each AWS and Azure for deciding section wise winner. Total of all the sections will clearly state final winner

	AWS	Microsoft Azure
Service Offerings	1	0
Security	0	1
Cost	1	0
Management Tools	0	1
Availability	1	0
Scalability	0	1
Fault Tolerance	1	0
Extra Benefits	1	1
Total	5	4

Conclusion:

Based on above binary grading scale for comparisons, for this particular enterprise software – EspoCRM, we came up with winner which is **Amazon Web Services**!

References:

[1] https://www.espocrm.com/

[2] https://aws.amazon.com/

[3] https://azure.microsoft.com/en-us/

[4] https://www.channele2e.com/2017/02/09/cloud-market-share-2017-amazon-microsoft-ibm-google/