| Questions | AWS | Azure | Google Cloud Platform | SysEleven Stack |
|--|---|---|---|---|
| Which kinds of storage are available? - Object / Blob Storage - File Storage - Block Storage | yes (S3 / Glacier) yes (EFS) yes (EBS) | yes (Azure Blob Storage) yes (Azure Disk Storage) yes (Azure Files) | yes (Google Cloud Storage) yes (Google Drive / Persistent Disk) yes (Google Persistent Disk) | yes (S3) yes (Manila) yes (Cinder/Nova) |
| Block - Different tier-classes? SATA, SSD, SAS | yes | yes | yes | No (Local SSD is planed) |
| Object - S3 and/or Swift? | S3 | Azure Blob Storage | Buckets (as S3) | Object S3 |
| File - Accessing file storage via (cluster) file system. | EFS | GlusterFS; BeeGFS; Luster | Google Cloud Storage FUSE; Beta: Google Cloud Filestore | not provided as a service |
| Storage limits | Overall size: Unlimited 5 TB per S3 object | Overall size: 500 TB per Storage Account 200 Storage Accounts per Subscriptions | Overall size: Unlimited 5 TB per individual object | Overall size: 15TB+ |
| Duration of provisioning? | 1.18 min | 1.32 min | | |
| | - Random read test: bw=12311KB/s, iops=3077 - Random write test: bw=158779KB/s, iops=39694 - Random Read and write test: read: bw=9205.6KB/s, iops=2301; write: bw=3069.9KB/s, iops=767 - sequential read test: bw=3537.2MB/s, iops=452753 - sequential write test: bw=62963KB/s, iops=1967 | - Random read test: bw=40234KB/s, iops=502 Random write test: bw=16646KB/s, iops=260, - Random Read and write test: read: bw=25120KB/s, iops=1570; write: bw=2862. 7KB/s, iops=178 - sequential read test: bw=29365KB/s, iops=3670 - sequential write test: bw=16971KB/s, iops=530 dstat: Read:59k, Write:7124k Automation Test Result: - Random read test: bw=19565KB/s, iops=2445 - Random write test: bw=5685.7KB/s, iops=710 - Random Read and write test: read: bw=13835KB/s, iops=1729; write: bw=1576. 3KB/s, iops=197 - sequential read test: bw=19551KB/s, iops=2443 - sequential write test: bw=11801KB/s, | iops=1436 - Random Read and write: Read: bw=5086.4KB/s, iops=635; Write: bw=598117B/s, iops=73 - Sequential Read: bw=30820KB/s, iops=3852 - Sequential Write: bw=30820KB/s, | - Random Read: bw=54415KB/s, iops=6801 - Random Write: bw=26869KB/s, iops=3358 - Random Read & Write: Read:bw=74580KB/s, iops=9322; write: bw=8497.8KB/s, iops=1062 - Sequential Read: bw=74621KB/s, iops=9327 - Sequential Write: bw=23565KB/s, iops=2945 Fio test on 50 Gb vol.: - Random Read: bw=111019KB/s, iops=13877 - Random Write: bw=30406KB/s, iops=3800 - Random Read & Write: Read: bw=74293KB/s, iops=9286; write: bw=8464.4KB/s, iops=1058 - Sequential Read: bw=96140KB/s, iops=12017 - Sequential Write: bw=32778KB/s, |
| Throughput IOPS (only Block- and File-Storage) | dstat: read: 1498k, write: 4880k | iops=1475 | iops=3852 | iops=4097 |