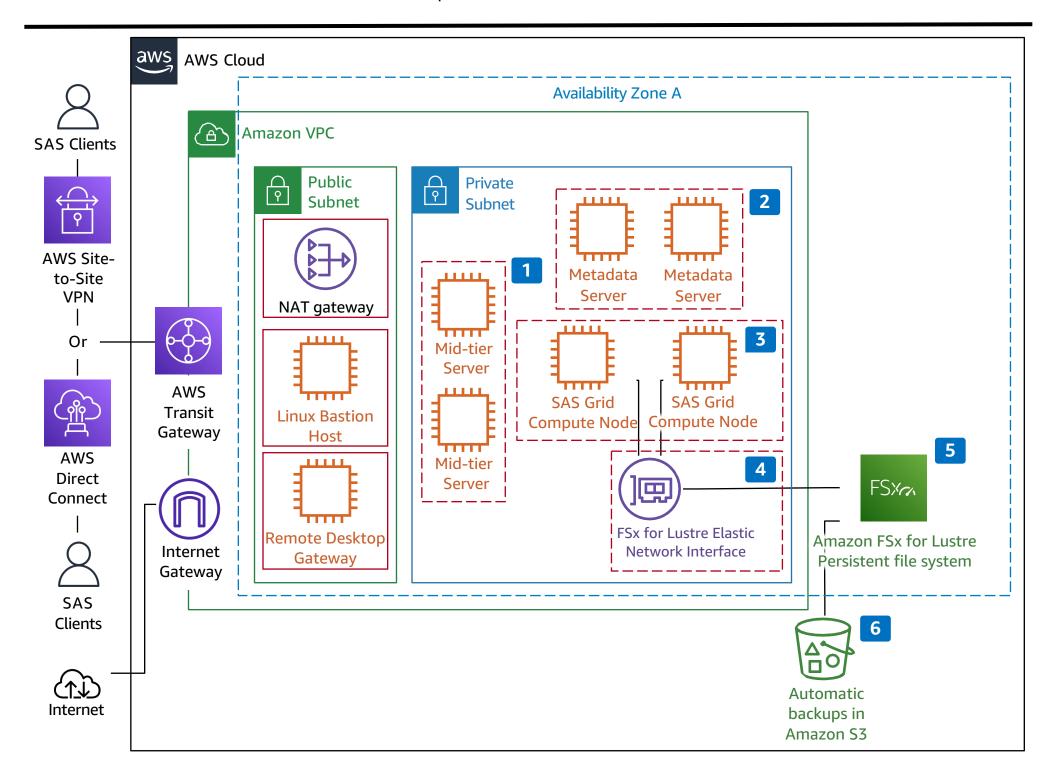
Running SAS Grid on AWS

Reference architecture for deploying high-performing Amazon FSx for Lustre file system storage and guidance for the types of Amazon EC2 instances best suited for the SAS Grid compute tier.





- For mid-tier servers, select Amazon Elastic Compute Cloud (Amazon EC2) r5 instance types to run Platform Web Services (PWS) and the Load Sharing Facility (LSF) client. Using two or more instances is not a SAS requirement unless you require High Availability (HA).
- For metadata servers, select **Amazon EC2** r5 instance types that meet or exceed minimum recommendations from SAS. Memory: the larger of 8 GB per physical core or 24 GB. Using three or more is not a SAS requirement (unless you require HA).
- For SAS Grid compute nodes running the LSF platform, select Amazon EC2 instance types that meet or exceed minimum recommendations from SAS. Memory: 8 GB per physical core. File system performance (network for Amazon FSx for Lustre): 100-125 MB/s per physical core. We recommend the Amazon EC2 m5n and r5n instance types if hosting /SASDATA, /SASWORK, and /UTILLOC on Amazon FSx for Lustre. Use i3en instance types if offloading /SASWORK to local instance store volumes.
- The Amazon FSx for Lustre file system is accessible through an elastic network interface that resides in your virtual private cloud (VPC). Use standard Amazon VPC security groups to control network access to your Amazon FSx for Lustre file system.
- Use Amazon FSx for Lustre persistent file systems for all SAS Grid libraries, including /SASDATA, /SASWORK, and /UTILLOC.

 Amazon FSx for Lustre is a fully managed Lustre file system capable of hundreds of gigabytes per second throughput, millions of IOPS, submillisecond latencies, and supports encryption of data at rest and in-transit.
- Amazon FSx for Lustre stand-alone file systems provides automatic, highly-durable, file-system-consistent, incremental backups stored in Amazon Simple Storage Service (Amazon S3).