If you need low-latency access to your entire dataset, first configure your on-premises gateway to store all your data locally. Then, asynchronously back up point-in-time snapshots of this data to Amazon S3. This configuration provides durable and inexpensive offsite backups that you can recover to your local data center or Amazon EC2.

S3 and Glacier are not used for this purpose. Volume gateway provides an iSCSI target, which enables you to create volumes and mount them as iSCSI devices from your on-premises or EC2 application servers. The volume gateway runs in either a cached or stored mode. In the cached mode, your primary data is written to S3, while retaining your frequently accessed data locally in a cache for low-latency access. In the stored mode, your primary data is stored locally and your entire dataset is available for low-latency access while asynchronously backed up to AWS.

AWS Snowball has 80TB and 50TB models.

AWS Storage Gateway connects an on-premises software appliance with cloud-based storage to provide seamless integration with data security features between your on-premises IT environment and the AWS storage infrastructure. You can use the service to store data in the AWS Cloud for scalable and cost-effective storage that helps to maintain data security. It has two types of configuration, cached and stored volumes. Our requirement is to start storing backups of the on-premises data to AWS. In cached volumes, you store your data in S3 and retain a copy of frequently accessed data subsets locally. It means that we are not storing the backups on S3 but the actual primary data itself. In the stored mode, your primary data is stored locally and your entire dataset is available for low-latency access while asynchronously backed up to AWS S3.