

Data Protection

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There is a cupcake shop which started in California. Other branches are in New York and Las Vegas. The managers have backed up all the files to a USB drive and send it to trade data. However, they lost the USB stick so that they put one on-premises server in Vegas. They do not have a current method of replication backup or disaster recovery for California and New York. One of the secured ways is to share file to make it visible to everyone only. Also, the data should be in three places with data redundancy so that they no longer lose data. The goal is to draw a durable recovery solution to show the difference between replication, backup, and availability, load balance, and explain the reason.

The diagram has three sites: Las Vegas, New York, and California. The first location in Las Vegas, with an on-premises server to connect to Azure by using ExpressRoute. The traffic manager with load balancers will control the traffic of VMs. Inside of VMs, there are VM agents and backup extensions connected to Azure Backup Service. The backup extension will have the VM snapshot. The Azure Backup Service has OS, Temp, and Data disks to store while connecting to the vault with disk snapshot. In the vault, the user can choose whether restoring from a new or existing VM, restoring a file from VM-mount disk, or restoring a file or folder from the on-premises server.

Other sites are similar to Las Vegas, but there are significant differences. Since other sites do not have an on-premises server, the users or administrators will connect to Azure with third-party providers to authenticate the users with SAML trust. Each site will share and store files to build replication, backup, and disaster recovery. Also, all the VMs will have the load balances with the traffic managers.

