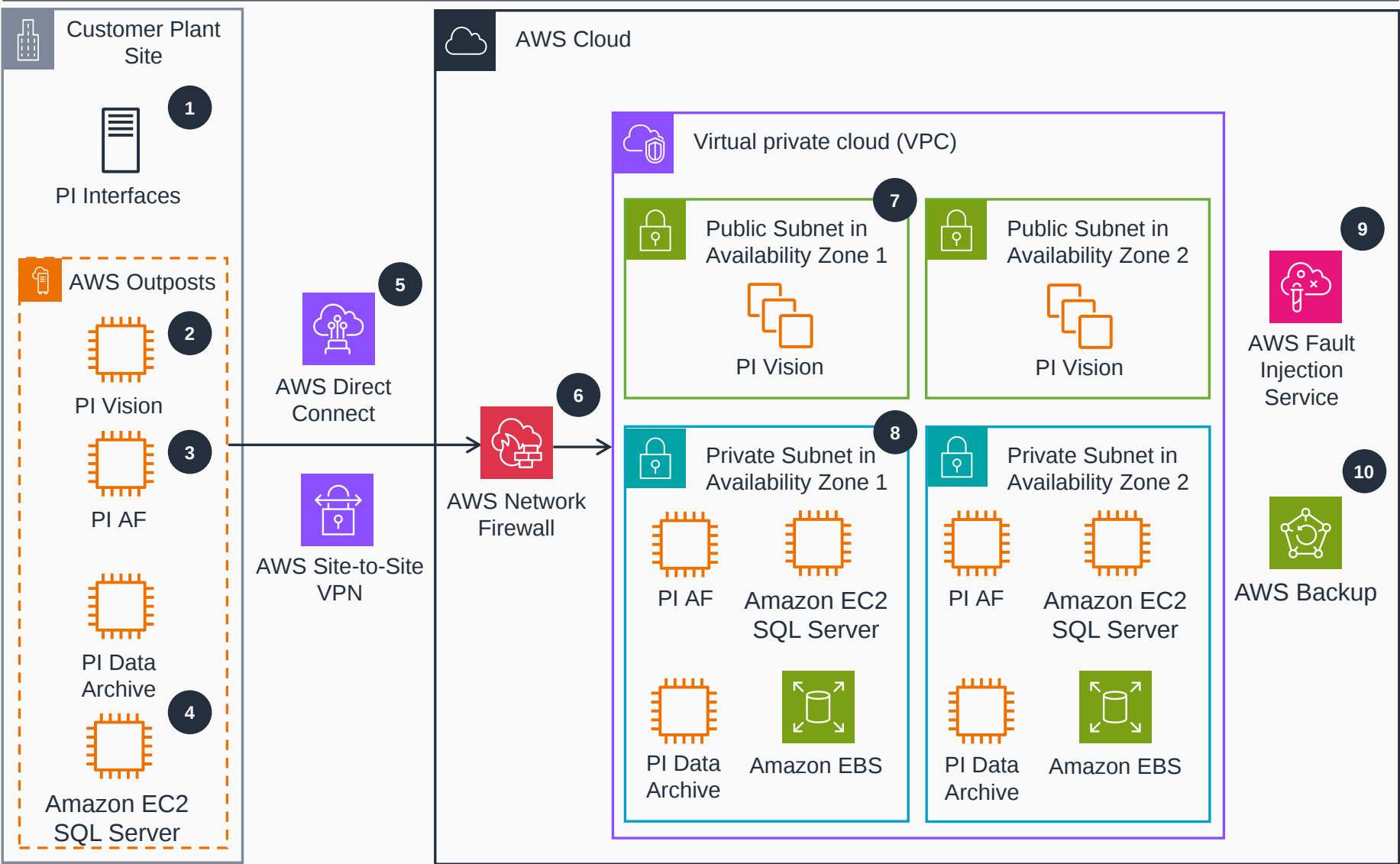


Guidance for Hosting AVEVA PI System on AWS

This architecture diagram shows how to improve resiliency and unify access to data by hosting an AVEVA PI System on AWS.



1. PI Interfaces collect data from sensors, programmable logic controllers (PLCs), Supervisory Control And Data Acquisition (SCADA), and human machine interfaces (HMIs) and send this data into PI System components running on **Amazon Elastic Compute Cloud (Amazon EC2)** in **AWS Outposts**.
2. PI Vision is a visualization tool to access, organize, and visualize PI System data and share data visualizations.
3. PI Asset Framework (AF) and PI Data Archive store PI System data.
4. **Amazon EC2** hosts SQL Server on **Outposts** to store the metadata used by PI Vision and PI AF.
5. **Outposts** connects to an **Amazon Virtual Private Cloud (Amazon VPC)** through a private, secure, and encrypted tunnel using **AWS Direct Connect** and **AWS Site-to-Site VPN**.
6. **AWS Network Firewall** provides fine-grained control over network traffic entering the **VPC**.
7. Host PI Vision in an **Amazon EC2 Auto Scaling** group to unify access across plants with visualizations and asset data. Scale the number of PI Vision nodes based on user demand.
8. Serve PI components with high availability by distributing nodes and **Amazon Elastic Block Store (Amazon EBS)** volumes across Availability Zones. Stream data from **Outposts** into all nodes in the PI Collective.
9. Test system resiliency using **AWS Fault Injection Service**.
10. Centrally manage and automate data protection by storing PI Vision, PI AF, PI Data Archives and OS level backups on **AWS Backup** from the AWS Cloud and **Outposts**.