Problem Statement: I have my datacenter in onprim where I am having database, and my frontend is hosting in azure cloud, how I can create communication

**🔗 Option 1: Site-to-Site VPN (IPsec VPN)**

* A **Site-to-Site VPN** creates a secure tunnel between your on-premises network and Azure Virtual Network (VNet).
* It's cost-effective and good for many use cases where performance isn't ultra-critical.

**How to set it up:**

1. Create an **Azure Virtual Network (VNet)**.
2. Set up a **Virtual Network Gateway** in Azure.
3. Configure a **VPN device (firewall or router)** on-prem to connect to Azure using IPsec.
4. Create a **Local Network Gateway** in Azure to define your on-prem settings.
5. Create a **connection** between both.

Your Azure frontend (like an App Service) will need to **integrate with the VNet** via **VNet Integration** (for outbound access to the on-prem DB).

**🚀 Option 2: Azure ExpressRoute**

* This is a **dedicated private connection** between your datacenter and Azure.
* Offers better **performance, reliability, and security** than VPN.
* More expensive, suitable for **mission-critical** workloads.