

Section 3: Implement Advanced Virtual Networking  
Preparation Course for Exam AZ-101  
Microsoft Azure Integration and Security

## Implement Advanced Virtual Networking (30-35%)

### **Implement application load balancing**

Configure application gateway and load balancing rules; implement front end IP configurations; manage application load balancing

- [Quickstart: Direct web traffic with Azure Application Gateway – Azure portal](#)
- [Manage web traffic with an application gateway using Azure PowerShell](#)
- [Create and configure an application gateway to host multiple web sites using the Azure portal](#)

### **Implement Azure load balancer**

Configure internal load balancer, load balancing rules, and public load balancer; manage Azure load balancing

- [Create an internal load balancer by using the Azure PowerShell module](#)
- [Configure the distribution mode for Azure Load Balancer](#)
- [Troubleshoot Azure Load Balancer](#)

### **Monitor and manage networking**

Monitor on-premises connectivity; use network resource monitoring and Network Watcher; manage external networking and virtual network connectivity

- [Tutorial: Monitor network communications between two virtual machines using the Azure portal](#)
- [Tutorial: Diagnose a communication problem between networks using the Azure portal](#)

### **Integrate on premises network with Azure virtual network**

Create and configure Azure VPN Gateway; create and configure site to site VPN; configure Express Route; verify on premises connectivity; manage on-premise connectivity with Azure

- [Create and modify an ExpressRoute circuit](#)
- [Tutorial: Connect virtual networks with virtual network peering using the Azure portal](#)

- [What is a VPN Gateway?](#)
- [Verify a VPN Gateway connection](#)
- [Configure a VNet-to-VNet VPN gateway connection using the Azure portal](#)