

Hybrid Cloud Connectivity IP Addressing Table

Device / Location	Interface / VLAN	IP Address	Subnet Mask	Gateway Notes	Purpose
On-Prem Router R1	GigabitEthernet0/0 (WAN)	1.0.0.2	255.0.0.0	WAN link to ISP	Internet-facing interface
On-Prem Router R1	GigabitEthernet0/1 (LAN)	192.168.1.1	255.255.255.0	Default gateway for On-Prem LAN	On-Premise LAN gateway
On-Prem PC0	FastEthernet0	192.168.1.2	255.255.255.0	192.168.1.1	On-Premise client / test device
(Additional On-Prem PCs)	FastEthernet0	192.168.1.3 –254	255.255.255.0	192.168.1.1	Additional On-Premise hosts
ISP Router R2	Serial0/0/0 (to On-Prem)	1.0.0.1	255.0.0.0	Link to On-Premise	Simulated Internet transit
ISP Router R2	Serial0/0/1 (to Cloud)	2.0.0.1	255.0.0.0	Link to Cloud Gateway	Simulated Internet transit
Cloud Router R3	Serial0/0/1 (WAN)	2.0.0.2	255.0.0.0	WAN link from ISP	Cloud VPN Gateway (AWS/Azure style)
Cloud Router R3	GigabitEthernet0/0 (VPC)	192.168.2.1	255.255.255.0	Default gateway for Cloud VPC	Cloud VPC LAN gateway
Cloud PC1 / Server	FastEthernet0	192.168.2.2	255.255.255.0	192.168.2.1	Cloud instance (e.g., EC2, VM)
(Additional Cloud Servers)	FastEthernet0	192.168.2.3 –254	255.255.255.0	192.168.2.1	Additional Cloud hosts