

# Managed Internet Router

Networks have become more complex in the age of digital transformation, making reliable and secure connectivity critical for your organization. Our Managed Internet Router solution combines an Internet Access or Dedicated Internet Access connection with a router device—managing network traffic and providing cyber security protection for your connected devices. And since our team of dedicated experts is managing your router for you, you're able to maximize your IT resources while optimizing the management of your network.

## Key Benefits

### Simplified network management

With this fully managed solution, device installation, software configuration and provisioning are handled by our team of experts. Our Managed Internet Router solution provides internet access, routing capabilities and security, as well as monitoring, visibility, maintenance and support for your internet connection.

### Cost efficient

Reduce operational expenses as our team of experts manages your router for you at a predictable monthly price—with no upfront cost for the equipment.

### Security

Experience a highly secure solution without needing to invest in additional resources or equipment, providing protection from intruders and cybercrime.

### Scalability

We provide enterprise-grade, high speed dedicated fiber optic connections to your site with symmetric upload and download speeds. Our bandwidth ranges up to 100Gbps and spans nationwide with multiple, geographically diverse interconnection sites.

### Service

Our Network Operations Center monitors network status around-the-clock, and our locally based service teams ensure that your network is always in good hands.

**30 Years  
of Expertise**

**NYSE  
S&P 500**

## Our Solutions

- › Towers
- › Small cells
- › Dark Fiber
- › Ethernet
- › Wavelength
- › Managed SD-WAN
- › Internet Access
- › Private Networks
- › Colocation
- › Cloud Connect
- › Optical Encryption
- › DDoS Defense
- › Bandwidth on Demand
- › Fixed Wireless
- › Ultra-Low Latency
- › Video Transport

## Our solution

In addition to Managed Internet Router, we offer a variety of additional features that provide enhanced performance, reliability and security, so you can have peace of mind to focus on what's important.

- **High Availability (HA):** Minimizes disruptions by providing failover to a second router
- **Next Gen Firewall (NGFW):** Enhances your network security by providing IP filtering, URL content filtering, SSL inspection and DNS security and filtering
- **Unified Threat Management (UTM):** Provides additional security features, including anti-virus, intrusion detection system (IDS)/intrusion prevention system (IPS) and file filtering
- **DDoS Defense:** Protects the availability of your network connections, including monitoring, threat detection, notification and auto-mitigation of attacks

Managed Internet Router					
	Standard Features	Value Added Features			
		HA	NGFW	UTM	DDoS Defense
Crown Castle Dedicated Internet Access or Internet Access	•				
Static Routes	•				
Open Shortest Path First (OSPF)	•				
Internal and external Border Gateway Protocol (eBGP and iBGP)	•				
Policy Based Forwarding	•				
Dynamic Host Configuration Protocol (DHCP) - server or relay	•				
Network Address Translation (NAT) or Port Forwarding	•				
Mean Opinion Score (MOS) Identifying/Scoring	•				
Virtual Local Area Network (VLAN)	•				
Application Quality of Service (QoS) - outbound only	•				
3rd Party Internet Protocol Security (IPSec) Tunnels	•				
WAN Prioritization	•				
IP, Next Hop or Application SLA Monitoring	•				
LAN side - two IP handoffs	•				
Link Aggregation Group (LAG) LAN side only with Link Aggregation Control Protocol (LACP) support	•				
WAN Load Balancing via BGP	•				
Standard Layer 4 Stateful Firewall	•				
Bring your own bandwidth - must have Crown Castle DIA	•				
High Availability Virtual Routing Redundancy Protocol (VRRP)		•			
Director/Analytics Portal Access*			•	•	
IP Filtering			•		
URL/Content Filtering			•		
Secure Sockets Layer (SSL) Inspection			•		
Domain Name System (DNS) Security and Filtering			•		
Anti-virus				•	
Intrusion Detection System (IDS) and Intrusion Prevention System (IPS)				•	
File Filtering				•	
Distributed Denial of Service (DDoS) Defense					•

\* Access to the Portal will be provided upon request or when security features (NGFW and UTM) are requested



Crown Castle owns, operates and leases more than 40,000 cell towers and approximately 90,000 route miles of fiber supporting small cells and fiber solutions across every major US market. This nationwide portfolio of communications infrastructure connects cities and communities to essential data, technology and wireless service—bringing information, ideas and innovations to the people and businesses that need them.