

PathTrak 4.x port requirements

HCU – inbound destination ports

- From PathTrak Server
 - FTP (21) – for firmware upgrades
 - FTP Data Connection - port range depends on the HCU model
 - Files are transferred on dynamically allocated data ports using PASV mode
 - Data port range 32768-61000 on HCU200s (Linux ephemeral range as defined in /proc/sys/net/ipv4/ip_local_port_range)
 - Data port range 1024-5000 on HCU 400/1500s (VxWorks ephemeral range as defined in in.h)
 - ONC RPC Port Mapper (111:UDP/TCP, only TCP used by PathTrak server) - for configuration, data collection, etc.
 - ONC RPC HCU Services (600-1023) – for configuration, data collection, etc.

PathTrak Server - inbound destination ports

- From HCUs
 - RPC Portmapper (111:UDP/TCP, only TCP used by newer HCUs)
 - RPC Boot Event Listener (5808, fixed)
 - Other RPC Communication Links (49152-65535, dynamically allocated)
 - A port is dynamically allocated from the ephemeral range for each of the following:
 - Event port, 1 for each HCU
 - Live session port, 1 for each active live session
- From Clients
 - HTTP (80 by default, configurable)
 - HTTPS (443 by default, configurable)
- From Proxy (optional)
 - AJP (8009 by default, configurable)
- From other servers (optional)
 - HTTP (80 by default, configurable) - if utilizing Data Access API
 - HTTPS (443 by default, configurable) - if utilizing Data Access API
 - SNMP (161:UDP by default, configurable) - if utilizing OSS access
 - MySQL (3306 by default, configurable) - if utilizing MySQL replication server for data backup

PathTrak Server - outbound destination ports

- To HCUs

- FTP (21) – for firmware upgrades
- FTP Data Connection - port range depends on the HCU model
 - Files are transferred on dynamically allocated data ports using PASV mode
 - Data port range 32768-61000 on HCU200s (Linux ephemeral range as defined in /proc/sys/net/ipv4/ip_local_port_range)
 - Data port range 1024-5000 on HCU 400/1500s (VxWorks ephemeral range as defined in in.h)
- ONC RPC Port Mapper (111:UDP/TCP, only TCP used by PathTrak server)
- ONC RPC HCU Services (600-1023) – for configuration, data collection, etc.
- To HCU firmware download server
 - HTTP (80, configurable)
- To email server (optional)
 - SMTP (25, configurable)
- To OSS server (optional)
 - SNMP Traps (162 by default, configurable)

Informational Links

- [Active vs. Passive FTP](#)
- [ONC RPC](#)
- [Ephemeral ports](#)
- [SNMP](#)
- [SMTP](#)
- [AJP](#)
- [RPC Portmapper](#)
- [PathTrak Reverse Proxy Setup Recommendation](#)