

PORTRANGE

The PORTRANGE command allows you to control the range of local ports that will be used for dynamic assignment.

Syntax: `PORTRange LOW=port,HIGH=port`

Arguments: **LOW=** - The lowest port number that will be dynamically allocated. The value must be at least 1024 lower than the one specified by **HIGH=** and also must be in the range of 1024 through 65535.

HIGH= - The highest port number that will be dynamically allocated. The value must be at least 1024 higher than the one specified by **LOW=** and also must be in the range of 4096 through 65535.

Example:

```
IPN237I portrange low=32768,high=65535
IPN127I Port range changed to 32,768 65,535
```

Exposition: Server applications generally issue a passive OPEN (listen) on a “well-known port” and then wait for an external client to connect. Since they need to be easily found, they explicitly specify the local port to be used. In the case of FTP, local port assignment for a data connection is different.

Once an FTP client has established a control connection with each of two Daemons, it must issue instructions to each Daemon to enable them to open a “data connection”. [Data connections are always between two FTP Daemons. The FTP client is not involved in the actual data transfer.]

For a data connection to be established, the client instructs one Daemon to issue a passive OPEN and then to return the port number to the client. The client next instructs the other Daemon to issue an active OPEN to that port number.

A problem can occur based on the choice of port number when the connection request must pass through a firewall.

Typically, the passive FTP Daemon will ask the local stack to provide the next available port number. This allows the stack to ensure that proper time intervals elapse between port re-use and to also ensure that the address and port combination is unique. Using PORTRANGE can also ensure that the port number assigned will be acceptable to any firewall requirements.

Related Commands: `DEFINE FTPD` - Create a File Transfer Protocol Daemon.
`QUERY CONNECTIONS` - Displays the status of one or more connections.
