

IP_Ping

IP_Ping allows you to 'ping' up to 10 QL emulators that support the IP Device driver, that are running on a PC with the Ping Server, **PSERVE**.

This may be the PC you are currently using, or one connected to the PC's network.

Ping will display the response string sent from the Ping Server on the QL emulators running on that PC. This string can be almost anything you want, up to 128 characters.

The Ping Server uses the PC's network ports 53760 to 53769 (\$D200 - \$D209)

Note: IP_PING is not the same as the PING command found in the PC's Operating system, It does not test to see if a PC exists on the network. It just looks for QL emulators running PSERVE.

Installing IP Ping

Just load the program into memory, and call it.

example: i. **LRESPR flp1_Ping_cde**
ii. **x=RESPR(1046)** {if you don't have Toolkit 2, or equivalent}
LBYTES flp1_Ping_cde,x
CALL x

An installation message, and a version number will be displayed in #0

Requirements

IP Ping requires the IP Device Drives, and has been developed and tested in QPC2. It should work in the latest version of SMSQemulator, that supports the IP Device Drives. Qemulator may have problems with **PSERVE**, but I would expect **IP_PING** to work.

Using IP_Ping

Before you use **IP_PING** you need to have one or more Ping Servers running in a QL emulator.

You start the Ping Server with the **PSERVE** command, followed by the required response string.

e.g. **PSERVE "Hello There"**

To 'ping' a PC, enter the **IP_PING** command followed by the IP Address of the computer you want to ping as a string.

e.g. **IP_PING "192.168.0.6"**

A list of 10 responses will be displayed on channel #1, something like

Hello There

```
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
** No server found **
```

This shows that there is one Ping Server running on that PC. And it replied with the string 'Hello There'.

IP_PING

The **IP_PING** command is used to send a number of ping requests, to up to ten network ports on a PC. Looking for QL emulators that are running the **PSERVE** command. The results of the number of pings requested, by default 10, are displayed in channel #1 by default, but may be sent to any BASIC channel with the optional channel number.

Any of the ping requests that do not receive a response string from a Ping Server, will display **** No server found ****.

syntax: *IP_Address := string_expression*
 num_pings := numeric_expression Range 1 to 10, default 10

IP_PING[#ch,] *IP_Address* [,*num_pings*]

example: i. **IP_PING** "192.168.0.6"
 ii. **IP_PING**#4,"192.168.0.6",5

comment: If you use the IP Address of '127.0.0.1' You will ping the PC you are using.

PSERVE

The **PSERVE** command is used to start a background job, that waits for Ping requests. When a request is received, it then sends the supplied string to the QL emulator that sent the Ping request. The length of the supplied string is limited to 128 bytes, and can contain almost any characters. Character 26 (CTRL-Z) is used by **IP_PING** to sense the end of the response. So if you use character 26, then the rest of the string will be lost.

If the supplied string is an empty string, then **PSERVE** will reply when pinged, with a string of the systems current date and time, in the standard QL **DATE\$** format.

An optional parameter may be supplied to limit the number of the PC's ports that this **PSERVE** job will attempt to use. Each **PSERVE** job may have it's own separate limit.

For example, If you have three **PSERVE** jobs running, then try to start a fourth with a number of ports parameter of 3. You will receive a 'value out of range' error. But a fourth with a number of ports parameter of 4 or more, would succeed.

syntax: *num_ports := numeric_expression* Range 1 to 10, default 10

PSERVE *string_expression* [,*num_ports*]

example: i. **PSERVE** "This is QPCII v4.05"
 ii. **PSERVE** "File Server 1",3
 iii. **PSERVE** "" Replies with date and time

note: You can have a maximum of 10 ping servers running on a single PC. If you try to start more you will receive a 'value out of range' error.