

GTH Software Getting Started Guide

Part number 10-0002

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Setup

Once you have set up the GTH hardware as per the hardware *Getting Started Guide* (delivered on paper with every system, also available at <http://www.corelatus.se/>), this note shows how to get in contact with the system.

At this point, the GTH should be powered on (an LED in the leftmost RJ45 connector is lit) and the 10Mbit/s ethernet port should be connected to an ethernet hub or switch.

The GTH takes approximately 40s to cold boot.

Verify IP Connectivity

All GTH systems are initially delivered with the 10Mbit ethernet port configured to 172.16.1.10 with the network mask 255.255.0.0.

To access the GTH, plug a PC into the same ethernet switch as the GTH and set the PC's static IP address to 172.16.1.1 and the network mask to 255.255.0.0. If the GTH has completed its boot process and is plugged in to an ethernet switch with an ethernet cable, the ethernet LED will shine green. The GTH will now respond to ping:

```
guest@cors:~> ping 172.16.1.10
PING 172.16.1.10: 56 data bytes
64 bytes from 172.16.1.10: icmp_seq=0 ttl=255 time=0.6 ms
64 bytes from 172.16.1.10: icmp_seq=1 ttl=255 time=0.6 ms
64 bytes from 172.16.1.10: icmp_seq=2 ttl=255 time=0.6 ms
```

For ping to work, the PC must be using the correct IP address and correct network mask.

Webserver

The GTH has an on-board webserver. It can be found on port 8888, i.e. at the URL <http://172.16.1.10:8888/>. The default user name is `gth` and the default password is `hemlig`.

The webserver can be used to re-configure the GTH's IP address, examine logs and examine the state of layer 1 and layer 2.

Status Report (module IP: 172.16.1.10)



Power			
	Supply	B live	
	Consumption	4.3W	(+/- 0.5W)
	Temperature	39.4 °C	
Ethernet			
		10Mbit	10/100Mbit
	MAC address	00:50:c2:10:00:f0	00:50:c2:10:00:f1
	IP4 address	172.16.1.10	not configured
	Load	0%	0%
Operating System			
	CPU Load	0.14	(decaying average)

Figure 1: GTH onboard webserver

To be able to access the on-board webserver, the PC's browser must be configured to connect directly to the GTH, i.e. without going through a gateway or proxy. The browser must also be capable of using HTTP 1.1. Very old browsers, for instance Netscape 4.7, will not work since they do not support HTTP 1.1.

API Socket

The GTH is normally controlled by a customer-supplied external application. This application communicates with the GTH over TCP port 2089. There are several example programs available for download at <http://www.corelatus.se/> which demonstrate how to do this.